आईएसएसएन / ISSN : 0970-4906

सेरिडॉक
Seridoc

खंड/Vol. 33(1): 2017

केंद्रीय रेशम उत्पादन अनुसन्धान एवं प्रशिक्षण संस्थान

CENTRAL SERICULTURAL RESEARCH AND TRAINING INSTITUTE

केंद्रीय रेशम बोर्ड (वस्त्र मंत्रालय-भारत सरकार)

Central Silk Board, (Ministry of Textile, Govt. of India)

श्रीरामपुर, मानंदवाडी रोड, मैसूर-570008

SRIRAMPURA, MANANDAVADI ROAD, MYSORE - 570 008

2017

खंड/Vol. 33(1): 2017 आई एस एस एन/ISSN:0970-4906

सेरिडॉक

Seridoc

(Half - Yearly)

प्रकाशन/Published by
Dr. V. Sivaprasad
DIRECTOR

केंद्रीय रेशम उत्पादन अनुसन्धान एवं प्रशिक्षण संस्थान
CENTRAL SERICULTURAL RESEARCH AND TRAINING INSTITUTE
केंद्रीय रेशम बोर्ड (वस्त्र मंत्रालय-भारत सरकार)
Central Silk Board, (Ministry of Textile, Govt. of India)
श्रीरामपुर, मानंदवाडी रोड, मैसूर-570008
SRIRAMPURA, MANANDAVADI ROAD, MYSORE - 570 008
2017

मुख्या सं□ादक
डॉ. वी शिवप्रसाद
Editor in Chief
Dr. V Sivaprasad

सं□ादक
डॉ. विनीत कुमार
Editor
Dr. Vineet Kumar

संकलन, अक्षर योजन एवं सं□ादन
मंजुनाथ एन के
Compiled, Composed and Editing
Manjunath NK

IN THIS ISSUE

SUBJECT	PAGE NO
1. HOST PLANT	
1.1. Soil Science and Cultivation	001
1.2. Physiology and Biochemistry	004
1.3. Cytology, Breeding and Genetics	008
1.4. Diseases	011
2. SILKWORM	
2.1. Rearing Technology	014
2.2. Physiology and Biochemistry	016
2.3. Cytology, Breeding and genetics	034
2.4. Molecular Biology	037
2.5. Diseases	045
2.6. Seed Technology	058
3. PEST MANAGEMENT	060
4. NUTRITIONAL STUDIES	062
5. POST COCOON TECHNOLOGY	064
6. SERICULTURE	
6.1. Economics and Statistics	072
6.2. Extension Management	072
6.3. Value Added Products	075
6.4. Engineering and Miscellaneous	094
7. AUTHOR INDEX	099
8. SUBJECT INDEX	120

Journals Covered in the issue

1. XIII Agricultural Science Congress-2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru

A

2. Acta Biomaterialia
3. Acta Entomologica Sinica
4. Advances in Medical Sciences
5. Agrobios Newsletter
6. American Journal of Translational Research
7. Applied Microbiology and Biotechnology
8. Applied Spectroscopy
9. Archives of Insect Biochemistry and Physiology
10. Archives of Pharmacal Research
11. Arthropod Structure and Development
12. Artificial Cells, Nanomedicine, and Biotechnology
13. Asian Textile Journal

B

14. Biochemical and Biophysical Research Communications
15. Biochemistry and Cell Biology
16. Biofabrication
17. Biomacromolecules
18. BioMed Research International
19. Bioscience, Biotechnology, and Biochemistry
20. Biotechnology and Applied Biochemistry
21. Biotechnology Letters
22. BMC Complementary and Alternative Medicine
23. BMC Genomics
24. BMC Microbiology
25. Bulletin of Entomological Research
26. Bulletin of Indian Academy of Sericulture

C

27. Canye Kexue
28. Cell and Tissue Research
29. Cell Cycle (Georgetown, Tex.)
30. Chemosphere
31. Chinese Journal of Biotechnology
32. Colloids and Surfaces. B, Biointerfaces
33. Colourage
34. Comparative Biochemistry and Physiology. Part B, Biochemistry & Molecular Biology
35. Complementary Therapies in Medicine
36. Cryobiology

D

37. Database (Oxford)
38. Developmental and Comparative Immunology
39. Drug Discoveries and Therapeutics

E

40. Environmental Science and Pollution Research International
41. European Review for Medical and Pharmacological Sciences
42. Evidence-based Complementary and Alternative Medicine : ECAM

F

43. Fitoterapia
44. Food Chemistry
45. Free Radical Biology and Medicine
46. Frontiers in Microbiology
47. Frontiers in Plant Science

G

48. Gene
49. Genetics and Molecular Research
50. Genome

H

51. Heliyon
52. Heredity

I

53. Imperial Journal of Interdisciplinary Research
54. Indian Journal of Entomology
55. Indian Journal of Animal Nntrition
56. Insect Biochemistry and Molecular Biology
57. Insect Molecular Biology
58. International Journal of Biological Macromolecules
59. International Journal of Industrial Entomology
60. International Journal of Molecular Sciences

J

61. Journal of Agricultural and Food Chemistry
62. Journal of Asian Natural Products Research
63. Journal of Biomolecular Structure and Dynamics
64. Journal of Economic Entomology
65. Journal of Ethnopharmacology
66. Journal of Food Science
67. Journal of Genetics
68. Journal of Insect Biotechnology and Sericology
69. Journal of Insect Physiology
70. Journal of Insect Science
71. Journal of Invertebrate Pathology
72. Journal of Investigational Allergology and Clinical Immunology

73. Journal of Molecular Epidemiology and Evolutionary Genetics in Infectious Diseases
74. Journal of Photochemistry and Photobiology. B, Biology
75. Journal of Proteome Research
76. Journal of Proteomics
77. Journal of Silk

L

78. Letters in Applied Microbiology

M

79. Materials (Basel, Switzerland)
80. Materials Science and Engineering. C, Materials for Biological Applications
81. Methods in Molecular Biology
82. Molecular Biotechnology
83. Molecular Genetics and Genomics
84. Molecular Immunology
85. Molecular Medicine Reports
86. Molecules (Basel, Switzerland)
87. Munis Entomology and Zoology
88. Mycobiology

N

89. Natural Product Research

O

90. Oncotarget

P

91. Peer Journal
92. Photosynthesis Research
93. Physiology and Molecular Biology of Plants
94. Phytochemical Analysis
95. Plant Physiology and Biochemistry
96. PLoS Genetics
97. PloS one
98. Proceedings of the Japan Academy. Series B, Physical and Biological Sciences
99. Proceedings of the National Academy of Sciences, USA
100. Proteomics

R

101. Royal Society Open Science
102. RSC Advances

S

103. Scientific Reports
104. Sericologia
105. Southwest China Journal of Agricultural Sciences

T

106. The American Journal of Chinese Medicine
107. The Journal of Biological Chemistry
108. The Journal of Antibiotics
109. The Proceedings of the National Academy of Sciences, India, Section B: Biological Sciences
110. The Science of the Total Environment
111. The Scientific World Journal
112. Tree Physiology

V

113. Virology Journal
114. Virus Genes

Y

115. Yojana

1. 1 Soil Science and Cultivation

001

Bhagas NV, Nalwandikar PK, Dongarja RP and Sawant CG (2017)

(Department of Entomology, College of Agriculture, Latur 413512)

Effect of biofertilizers on mulberry silkworm

Indian Journal of Entomology, 79(2): 208-213 (English)

002

Cao M, Yu M, Lu M, Jiang YY, Huang XZ andYang XH (2017)

(Key Laboratory of Horticulture Science for Southern Mountainous Regions, Ministry of Education, College of Horticulture and Landscape Architecture, Southwest University, Chongqing 400715, China)

Ecological adaptability of mulberry saplings inoculated with *Gigaspora rosea* under stress conditions in rocky desertification areas and riparian zones

Canye Kexue, 43(2):189-195 (Chinese)

003

Dai JH, Chen WG, Qian QJ, Yang YP, Dong RH and Sun HY (2017)

(Haining Sericulture Technology Extension Station of Zhejiang Province, Haining Zhejiang, China)

Control efficacy of glufosinate on weeds in mulberry field and testing of its toxicity to silkworm

Canye Kexue, 43(2):268-274 (Chinese)

004

Huang QX, Shi JH, Li YL, Xu XH and Li XG (2016)

(Agricultural University of Hebei, Baoding Hebei 071000, China)

Accumulation and distribution of heavy metals in *Hippophae rhamaides* and *Morus* L mixed plantation in Iron Tailing region

Canye Kexue, 42(5):783-792 (Chinese)

005

Mahesh R, Hirom Premjit M, Monica Chaudhuri and Kanika Tirivedy (2017)

(Central Sericultural Research and Training Institute, Central Silk Board, Berhampore West Bengal)

Effect of fertilizer dose and split appllcatlon of fertilizer on nutrient use efficiency in mulberry

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:288 (English)

007

Ranjit Kar and Kanika Trivedi (2017)

(Regional Sericultural Research Station Kalimpong, West Bengal)

Assessment of carbon sequestration potential of mulberry a soil organic carbon stock under different farming practices

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:494 (English)

008

Shanthanu K, Muthuraju R, Vidyashree DN, Mahesh DS, Narayanaswamy TK and Subbarayappa CT (2017)

(Department of Sericulture, UAS, GKVK, Bengaluru)

Isolation and characterization of silkworm pupal residue degrading microorganisms

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:34 (English)

009

Shwetha NV, Vishaka GV, Pallavi K and Bharath HR (2017)

(UAS, GKVK, Bengaluru)

Integrated crop-livestock-sericulture farming systems: A strategy for resource conservation and environmental sustainabillty

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:63 (English)

010

Sowmya P, Narayanaswamy TK, Subbarayappa CT and Chikkalingaia H (2017)

(Dept. of Sericulture and Department of Sericulture Science and AC, UAS, GKVK, Bengaluru)

Impact of micronutrients in organic based nitrogen application on leaf yield and quality of mulberry (*Morus* sp.)

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:41 (English)

011

Sowmya P, Narayanaswamy TK, Subbarayappa CT and Chikkalingaia H (2017)

(Dept of Sericulture and Department of Sericulture Science and AC, UAS, GKVK, Bengaluru)

Impact of micronutrients on larval and cocoon parameters of mulberry silkworm (*Bombyx mori* L)

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:42 (English)

012

Wan X, Lei M, Chen T, Tan Y and Yang J (2017)

(Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, China)

Safe utilization of heavy-metal-contaminated farmland by mulberry tree cultivation and silk production

The Science of the Total Environment, 599-600:1867-1873 (English)

013

Yang Q, Li L, Xing D X, Li QR, Xiao Y, Ye MQ and Liao S (2016)

(Sericulture & Agri-faad Research Institute, Guangdang Academy of Agricultural Sciences, Guangzhau 510610, China)

Influence of adding silkworm excrement organic fertilizer in mulberry field on soil enzyme activity and mulberry leaf yield and quality

Canye Kexue, 42(6):968-972 (Chinese)

014

Yu C, Xiong SW, Li Y, Deng W, Mo RL, Xiong C and Hu XM (2017)

(Industrial Crops Institute, Hubei Academic of Agricultural Sciences, Wuhan 430064, China)

Impact of fertilization on soil ammonia-oxidizing microbial community structure in mulberry field

Canye Kexue, 43(1):25-31 (Chinese)

015

Yu C, Hu X, Deng W, Li Y, Han G and Xiong C (2017)

(Industrial Crops Institute of Hubei Academy of Agricultural Sciences, Wuhan, China)

Response of bacteria community to long-term inorganic nitrogen application in mulberry field soil

PloS one, 11(12):e0168152 (English)

1. 2 Host Plant Physiology and Biochemistry

016

Baranwal VK and Khurana P (2017)

(Department of Plant Molecular Biology, University of Delhi, South Campus, Benito Juarez Road, New Delhi, 110021, India)

Major intrinsic proteins repertoire of *Morus notabilis* and their expression profiles in different species

Plant Physiology and Biochemistry, 111:304-317 (English)

017

Datta D and Swamy MJ (2017)

(School of Chemistry, University of Hyderabad, Hyderabad 5000 46, India)

Fluorescence and circular dichroism studies on the accessibility of tryptophan residues and unfolding of a jacalin-related α-d-galactose-specific lectin from mulberry (*Morus indica*)

Journal of Photochemistry and Photobiology B, Biology, 170:108-117 (English)

018

Jin C, Chen C, Li SH, Chen HI, Jia JQ and Gui ZZ (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

Determination of main bioactive substance contents in leaves of five mulberry varieties cultivated in sericultural areas of east China

Canye Kexue, 43(2):288-295 (Chinese)

019

Li M, Wu X, Wang X, Shen T and Ren D (2017)

(Department of Natural Product Chemistry, Key Laboratory of Chemical Biology (Ministry of Education), School of Pharmaceutical Sciences, Shandong University, Jinan, P R China)

Two novel compounds from the root bark of *Morus alba* L

Natural Product Research, May 2017:1-7 (English)

020

Pi Z, Zhao ML, Peng XJ and Shen SH (2017)

(University of Chinese Academy of Sciences, Beijing 100049, China)

Phosphoproteomic analysis of paper mulberry reveals phosphorylation functions in chilling tolerance

Journal of Proteome Research, 16(5):1944-1961 (English)

021

Reddy KS, Sekhar KM and Reddy AR (2017)

(Department of Plant Sciences, University of Hyderabad, Hyderabad 500046, India)

Genotypic variation in tolerance to drought stress is highly coordinated with hydraulic conductivity-photosynthesis interplay and aquaporin expression in field-grown mulberry (*Morus* sp.)

Tree Physiology, 37(7):926-937 (English)

022

Saeed B and Khurana P (2017)

(Department of Plant Molecular Biology, University of Delhi, South Campus, New Delhi 110021, India)

Transcription activation activity of ERD15 protein from *Morus indica*

Plant Physiology and Biochemistry, 111:174-178 (English)

023

Sajeevan RS, Nataraja KN, Shivashankara KS, Pallavi N, Gurumurthy DS and Shivanna MB (2017)

(Department of Studies in Applied Botany, Kuvempu University, Shimoga, India)

Expression of *Arabidopsis* SHN1 in Indian mulberry (*Morus indica* L) increases leaf surface wax content and reduces post-harvest water loss

Frontiers in Plant Science, 8: 418 (English)

024

Tran HNK, Nguyen VT, Kim JA, Rho SS, Woo MH, Choi JS, Lee JH and Min BS (2017)

(College of Pharmacy, Catholic University of Daegu, Gyeongbuk 38430, Republic of Korea)

Anti-inflammatory activities of compounds from twigs of *Morus alba*

Fitoterapia, 120:17-24 (English)

025

Wang C, Zhi S, Liu C, Xu F, Zhao A, Wang X, Tang X, Li Z, Huang P and Yu M (2017)

(College of Biotechnology, Southwest University, NO2 Tiansheng Road, BeiBei District, Chongqing 400716, China)

Isolation and characterization of a novel chalcone synthase gene family from mulberry

Plant Physiology and Biochemistry, 115:107-118 (English)

026

Wang W, Li JQ, Wang SX, Zhang J, Dong X, Tang Z and Tian HY (2016)

(College of Forestry, Agricultural University of Hebei, Baoding, Hebei 071000, China)

Attractiveness of jasmonic acid-treated *Morus alba* branches to *Aprostocetus prolixus* (Hymenoptera: Eulophidae) and analysis of their volatile compounds

Acta Entomologica Sinica, 59(9): 997-1003 (Chinese)

027

Wang W, Zhang HM, Li JQ, Feng HC, Li H and Bai XQ (2017)

(College of Forestry, Agricultural University of Hebei, Baoding Hebei 071000, China)

Effects of exogenous jasmonic acid on feeding area of *Apriona germari* adult, content of anti-insect secondary metabolite and activity of defense enzymes in mulberry branches

Canye Kexue, 43(2):202-208 (Chinese)

028

Wang Z, Zhang Y, Dai F, Luo G, Xiao G and Tang C (2017)

(Sericulture and Agri-Food Research Institute, Guangdong Academy of Agricultural Sciences, Guangzhou, 510610 China)

Genetic diversity among mulberry genotypes from seven countries

Physiology and Molecular Biology of Plants, 23(2):421-427 (English)

029

Yang J, Ou X, Zhang X, Zhou Z and Ma L (2017)

(College of Food Science and Nutritional Engineering, China Agricultural University, P O Box 301, Beijing, 100083, China)

Effect of different solvents on the measurement of phenolics and the antioxidant activity of mulberry (*Morus atropurpurea* Roxb) with accelerated solvent extraction

Journal of Food Science, 82(3):605-612 (English)

030

Zhang Y, Liu ZY, Li L and Wu GH (2016)

(Jiangsu University of Science and Technology, Laboratory of Quality & Safety Risk Assessment for Sericultural Products and Edible Insects, Ministry of Agriculture, Zhenjiang Jiangsu 212018, China)

Content and primary speciation analysis of 12 metal elements in mulberry leaves

Canye Kexue, 42(5): 793-798 (Chinese)

1. 3 Host Plant Cytology, Breeding and Genetics

031

Ban YY, Fang RJ, Du W, Yin CR, Cao X, Liu L and Cheng JL (2016)

(The Sericulture Research Institute, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

Variations in germination rate and biochemical property of mulberry seeds from three different geological regions under salt stress

Canye Kexue, 42(6):960-967 (Chinese)

032

Du W, Cao X, Yin CR, Fang RJ, Guo XJ, Liu U and Cheng JL (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu, China)

Physiological properties of mulberry hardwood cuttings with different rooting types

Canye Kexue, 43(1):18-24 (Chinese)

033

Husen A, Iqbal M, Siddiqui SN, Sohrab SS and Masresha G (2017)

(Department of Biology, College of Natural and Computational Sciences, University of Gondar, PO Box 196, Gondar, Ethiopia)

Effect of Indole-3- butyric acid on clonal propagation of mulberry (*Morus alba* L) stem cuttings: Rooting and associated biochemical changes

The Proceedings of the National Academy of Sciences, India, Section B: Biological Sciences, 87(1):161-166 (English)

034

Jyoti Biradar, Preethi NV, Fakrudin B and Sheshshayee MS (2017)

(Dartment of Biotechnology and Crop Improvement, College of Horticulture, UAHS Campus, GKVK, Bengaluru 560065)

Genetic variability studies in selected mulberry (*Morus* sp) accessions

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:201 (English)

035

Kong WQ and Yang JH (2017)

(Shaanxi Key Laboratory of Sericulture, Ankang University, Ankang, Shaanxi, China)

The complete chloroplast genome sequence of *Morus cathayana* and *Morus multicaulis*, and comparative analysis within genus *Morus* L

Peer Journal, 5:e3037 (English)

036

Li R, Chen D, Wang T, Wan Y, Li R, Fang R, Wang Y, Hu F, Zhou H, Li L and Zhao W (2017)

(The Sericultural Research Institute, Anhui Academy of Agricultural Sciences, Hefei, Anhui, P R China)

High throughput deep degradome sequencing reveals microRNAs and their targets in response to drought stress in mulberry (*Morus alba*)

PloS one, 12(2):e0172883 (English)

037

Nooruddin S, Mir GM, Baqual MF and Malik MA (2017)

(Temperate Sericulture Research Institute, Mirgund, SKUAST- Kashmir)

Influence of growth regulators on rooting parameters of some mulberry genotypes under Kashmir climatic conditions

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:530 (English)

038

Pallavi N, Sajeevan RS, Dhanyalakshmi KH, Karaba N Nataraja (2017)

(University of Agricultural Sciences, Bengaluru)

Expression of transcription factor atshine1 to improve abiotic stress tolerance in mulberry (*Morus alba* L)

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:351 (English)

039

Rohith LS, Shobha N, Devaraju S and Girish KS (2017)

(Yuvaraja's College, University of Mysore, Mysuru-570 005 Karnataka,)

Review on the molecular mechanism to overcome disease susceptibility in mulberry crop

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:247 (English)

040

Sekhar KM, Reddy KS and Reddy AR (2017)

(Department of Plant Sciences, University of Hyderabad, Gachibowli, Hyderabad, 500046, Andhra Pradesh, India)

Amelioration of drought-induced negative responses by elevated CO_2 in field grown short rotation coppice mulberry (*Morus* sp), a potential bio-energy tree crop

Photosynthesis Research, 132(2):151-164 (English)

041

Shabnam AA, Shamim Baksh, Anil Dhar, Fotadar RK, Rajeev Lochan, Chauhan SS and Rathore MS (2017)

(Central Sericultural Research & Training Institute, Central Silk Board (CSB), Kashmir)

Evolution of mulberry (*Morus* sp) variety (PPR-1) for propagation under temperate climatic conditions of Jammu and Kashmir

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:294 (English)

042

Shang YJ, Qian J, Ni HM, Fang RJ, Pan G, Zhao WG, Zhang L and Liu L (2016)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu, China)

Cloning of mulberry flavanone-3-hydroxylase gene and its differential expression in mulberry leaves of 35 germplasm resources

Canye Kexue, 42(5): 775-782 (Chinese)

043

Yang J, Song QX, Ning JQ, Sun ZY, Qian YH and Jiao F (2017)

(College of Animal Science and Technology, Northwest A & F University, Yangling Shaanxi, China)

Establishment of *Morus* L chromosome ploidy identification method using flow cytometry

Canye Kexue, 43(1):8-17 (Chinese)

044

Yang J, Zhang X, Jin Q, Gu L, Liu X, Li J and Ni Y (2017)

(College of Food Science and Nutritional Engineering, China Agricultural University, Beijing, China)

Effect of meteorological parameters and regions on accumulation pattern of phenolic compounds in different mulberry cultivars grown in China

Natural Product Research, 31(9):1091-1096 (English)

1. 4 Host Plant Diseaeses

045

Arora V, Ghosh MK, Pal S and Gangopadhyay G (2017)

(Division of Plant Biology, Bose Institute (Main Campus), Kolkata, India)

Allele specific CAPS marker development and characterization of chalcone synthase gene in Indian mulberry (*Morus* sp., family Moraceae)

PloS one, 12(6):e0179189 (English)

046

Chen J, Bai WW, Chen J, Wan JY, Yang YP, Xie ZL, Yang JR, Lai, XD, Chen G, Zhu HS and Wan YJ (2016)

(College of Biotechnology, Southwest University, Chongqing 400716, China)

Isolation and identification of microorganisms on mulberry leaf surface with shot-hole disease and investigation of the tiny pests

Canye Kexue, 42(6):979-987 (Chinese)

047

Huang W, Zhang H, Xu J, Wang S, Kong X, Ding W, Xu J and Feng J (2017)

(State Key Laboratory for Biology of Plant Diseases and Insect Pests, Institute of Plant Protection, Chinese Academy of Agricultural SciencesBeijing, China,)

Loop-mediated isothermal amplification method for the rapid detection of *Ralstonia solanacearum* phylotype I mulberry strains in China

Frontiers in Plant Science, 76-8:560 (English)

049

Jin Q, Wang DW, Lyu ZQ, Wei J, Wang YH and Su XL (2017)

(School of Forestry and Biotechnology, Zhejiang Agriculture and Forestry University, Unan Zhejiang 311300, China)

Molecular identification of phytoplasma strain isolated from mulberry trees infected by mulberry mosaic leaf roll disease in Zhejiang province

Canye Kexue, 43(2):196-201 (Chinese)

050

Su ZG, Jiang XJ, Lu PF, Da A, Yang ZG and Luo YJ (2017)

(Institute of Sericulture and Apiculture, Yunnan Academy of Agricultural Sciences, Mengzi Yunnan 661101, China)

Spatial distribution patterns and sampling technique of mulberry brown spot disease in mulberry field

Canye Kexue, 43(1):163-166 (Chinese)

051

Zhang SJ, Li WQ, Mu ZM, Wang YW and Gao HJ (2017)

(College of Forestry, Shandong Agricultural University, Taian Shandong 271018, China)

Construction of lipid-producing fungi with cellulose degradability by protoplast fusion technology

Canye Kexue, 43(2):296-303 (Chinese)

052

Zhao HN, Zhang HL, Wang H, Liu Q, Zhao YN, Gai YI P and Ji XL (2016)

(College of Forestry, Shandong Agricultural University, Taian Shandong 271018, China)

Cloning and induced activity analysis of the promoter of pathogenesis related protein gene MuPR1-2 from mulberry

Canye Kexue, 42(5): 766-774 (Chinese)

2.1. REARING TECHNOLOGY

053

Balavenkatasubbaiah M, Mary Josepha AV, Narasimha Nayaka AR and Sivaprasad V (2016)

(Central Sericultural Research and Training Institute, Central Silk Board, Mysuru 570008, India)

Serifit- A disinfectant for effective sanitation in Indian sericulture

Sericologia, 56(4): 253-261, (English)

054

Latpate CB, Zanwar PR, Tukaram AN and Vasantrao Naik (2017)

(Vasantrao Naik Marthwada Agriculture University, Parbhani-431402, Maharashtra)

Evaluation of performance of bivoltine CSR mulberry silkworm hybrids under Marathwada condition

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:84 (English)

055

Pandit IK, Dey DG and Satpathy SK (2016)

(Department of Zoology, PS College, Barasahi-757026, Mayurbhanj, Odisha, India)

Reproductive behaviour of modal ecorace of wild tasar silkworm, *Antheraea mylitta* D under *ex-situ* condition

Bulletin of Indian Academy of Sericulture, 20(1&2):17-20 (English)

056

Subharani S, Debaraj Y, Bidyapati L and Sinha AK (2017)

(Regional Tasar Research Station, Central Silk Board, Ministry of Textiles, Govt. of India, Imphal-795002, Manipur, India)

Rearing performances of Indian temperate tasar silkworm, *Antheraea proylei* Jolly fed on *Quercus serrata* (Carruther), *Quercus griffithii* (Hook Thomson) and *Lithocarpus dealbata* (Hook Thomson) during autumn crop

Munis Entomology and Zoology, 12 (2): 612-617 (English)

057

Sun Z, Kumar D, Cao G, Zhu L, Liu B, Zhu M, Liang Z, Kuang S, Chen F, Feng Y, Hu X, Xue R and Gong C (2017)

(School of Biology and Basic Medical Science, Soochow University, Suzhou, 215123, China)

Effects of transient high temperature treatment on the intestinal flora of the silkworm *Bombyx mori*

Scientific Reports, 7(1):3349 (English)

058

Swathi HC, Banuprakash KG, Anusha HG and Bhaskar RN (2017)

(Department of Sericulture, University of Agricultural Sciences, GKVK Bengaluru, 560065)

Influensce of microenvironment on silkworm (*Bombyx mori*) rearing and cocoon yield

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:37 (English)

059

Umer B, Waktole Sod and Getachew M (2016)

(Gambella University College of Agriculture and Natural Resources Management, Department of Plant Science, Gambella, Ethiopia)

Evaluation of castor (*Ricinus communis* L) accessions as feed for eri silkworm (*Samia cynthia ricini* Boisduval) at Jimma, South West Ethiopia

Sericologia, 56(4): 219-228, (English)

060

Yuri K and Sahara K (2017)

(Faculty of Agriculture, Iwate University, 020-8550, Morioka, Japan)

Relative humidity and maintenance of p5O silkworms reared on artificial diet

Journal of Insect Biotechnology and Sericology, 86(2):43-47 (English)

2.2. PHYSIOLOGY AND BIOCHEMISTRY

061

Abbas MN, Kausar S, Sun YX, Sun Y, Wang L, Qian C, Wei GQ, Zhu BJ and Liu CL (2017)

(College of Life Sciences, Anhui Agricultural University, Hefei 230036, China)

Molecular cloning, expression, and characterization of E2F transcription factor 4 from *Antheraea pernyi*

Bulletin of Entomological Research, 107(6):839-846 (English)

062

Asano UM, Kayukawa T, Tezutsu H, Shinoda T and Daimon T (2017)

(Institute of Agrobiological Sciences, National Agriculture and Food Research Organization, Owashi 1-2, Tsukuba, Ibaraki, 305-8634, Japan)

Severe developmental timing defects in the prothoracicotropic hormone (PTTH)-deficient silkworm, *Bombyx mori*

Insect Biochemistry and Molecular Biology, 87:14-25 (English)

063

Asma M, Dar HU, Malik GN, Malik F, Zaffar G and Mir SA (2017)

(Temperate Sericulture Research Institute, Mirgund, Jammu and Kashmir)

Biochemical parameters vs yield in silkworm (*Bombyx mori* L)

Indian Journal of Entomology, 79(3): 248-252 (English)

064

Bao XY, Chen P, Liu TH, Wang L, Liu WB, Pan MH and Lu C (2017)

(State Key Laboratory of Silkworm Genome Biology, Key Laboratory of Sericultural Biology and Genetic Breeding, Ministry of Agriculture, Chongqing 400716, China)

Advances in apoptosis-related genes in the silkworm, *Bombyx mori*

Acta Entomologica Sinica, 60(4): 487-498 (Chinese)

065

Chen RT, Jiao P, Liu Z, Lu Y, Xin HH, Zhang DP and Miao YG (2017)

(Institute of Sericulture and Apiculture, College of Animal Sciences, Zhejiang University, Hangzhou, People's Republic of China)

Role of BmDredd during apoptosis of silk gland in silkworm, *Bombyx mori*

PloS one, 12(1):e0169404 (English)

066

Mai T, Chen S, Lin X, Zhang X, Zou X, Feng Q and Zheng S (2017)

(Guangzhou Key Laboratory of Insect Development Regulation & Application Research, School of Life Sciences, South China Normal University, China)

20-hydroxyecdysone positively regulates the transcription of the antimicrobial peptide, lebocin, via BmEts and BmBR-C Z4 in the midgut of *Bombyx mori* during metamorphosis

Developmental and Comparative Immunology, 74:10-18 (English)

067

Fujinaga D, Kohmura Y, Okamoto N, Kataoka H and Mizoguchi A (2017)

(Department of Integrated Biosciences, Graduate School of Frontier Sciences, The University of Tokyo, Kashiwa, Chiba 277-8562, Japan)

Insulin-like growth factor (IGF)-like peptide and 20-hydroxyecdysone regulate the growth and development of the male genital disk through different mechanisms in the silkmoth, *Bombyx mori*

Insect Biochemistry and Molecular Biology, 87:35-44 (English)

068

Fukumori H, Lee J, Fujii T, Kajiura Z and Banno Y (2017)

(Silkworm Resource Division, Institute of Genetic Resources, Kyushu University Graduate School of Bio Resources and Bioenvironmental Science, 6-10-1 Hakozaki, Higashi-ku, Fukuoka 812-8581, Japan)

Long-term preservation of eri and ailanthus silkworms using frozen gonads

Cryobiology, 77:71-74 (English)

069

Han C, Chen E, Shen G, Peng Z, Xu Y, Zhang H, Liu H, Zhang Y, Wu J, Lin Y and Xia Q (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing, China)

Vitellogenin receptor selectively endocytoses female-specific and highly-expressed hemolymph proteins in the silkworm, *Bombyx mori*

Biochemistry and Cell Biology, 95(4):510-516 (English)

070

Hu B, Li C, Zhang Z, Zhao Q, Zhu Y, Su Z and Chen Y (2017)

(College of Food Science, Sichuan Agricultural University, Yaan 625014, Sichuan, China)

Microwave-assisted extraction of silkworm pupal oil and evaluation of its fatty acid composition, physicochemical properties and antioxidant activities

Food Chemistry, 231:348-355 (English)

071

Hu J, Zhu W, Li Y, Guan Q, Yan H, Yu J, Fu Z, Lu X and Tian J (2017)

(College of Biomedical Engineering and Instrument Science, Zhejiang University, Hangzhou, P R. China)

SWATH-based quantitative proteomics reveals the mechanism of enhanced *Bombyx mori* nucleopolyhedrovirus-resistance in silkworm reared on UV-B treated mulberry leaves

Proteomics, 17(13-14):1600383 (English)

072

Hu J, Tian J, Li F, Xue B, Hu J, Cheng X, Li J, Shen W and Li B (2017)

(School of Basic Medicine and Biological Sciences, Soochow University, Suzhou, Jiangsu 215123, PR. China)

Clone and functional analysis of Seryl-tRNA synthetase and Tyrosyl-tRNA synthetase from silkworm, *Bombyx mori*

Scientific Reports, 7:41563 (English)

073

Hu X, Zhu M, Liang Z, Kumar D, Chen F, Zhu L, Kuang S, Xue R, Cao G and Gong C (2017)

(Institute of Agricultural Biotechnology and Ecological Research, Soochow University, Suzhou, 215123, China)

Proteomic analysis of BmN cell lipid rafts reveals roles in *Bombyx mori* nucleopolyhedrovirus infection

Molecular Genetics and Genomics, 292(2):465-474 (English)

074

Huang S, Han C, Ma Z, Zhou J, Zhang J and Huang L (2017)

(School of Tea and Food Science and Technology, Anhui Agricultural University, Hefei 230036, People's Republic of China)

Identification and characterization of a pyridoxal 5'-phosphate phosphatase in the silkworm (*Bombyx mori*)

Comparative Biochemistry and Physiology Part B, Biochemistry & Molecular Biology, 205:39-45 (English)

075

Inui T and Daimon T (2017)

(Department of Applied Biosciences, Graduate School of Agriculture, Kyoto University, Kitashirakawa Oiwakecho, Sakyo-ku, Kyoto 606-8502, Japan)

Implantation assays using the integument of early stage *Bombyx* larvae: Insights into the mechanisms underlying the acquisition of competence for metamorphosis

Journal of Insect Physiology, 100:35-42 (Engish)

076

Kalita MK, Haloi K and Devi D (2017)

(Seri-Biotech Unit, Life Science Division, Institute of Advanced Study in Science and Technology, Guwahati-781035, India)

Cypermethrin formulation (Ustad-10 EC) induces genotoxicity via apoptosis, affects nutritional physiology, and modulates immune response in silkworm *Philosamia ricini* (Lepidoptera: Saturniidae).

Journal of Economic Entomology, 110(3):1010-1024 (English)

077

Kamoto N (2017)

(Institute of Agrobiological Sciences, National Agriculture and Food Research Organization, I-2 Owashi, Tsukuba, Ibaraki 3058634, Japan)

Behavior of the larvae of wild mulberry silkworm *Bombyx mandarina*, domesticated silkworm *B mori* and their hybrid

Journal of Insect Biotechnology and Sericology, 86(1):17-20 (English)

078

Kato T, Kako N, Kikuta K, Miyazaki T, Kondo S, Yagi H, Kato K, Park EY , (2017)

(Laboratory of Biotechnology, Research Institute of Green Science and Technology, Shizuoka University, 836 Ohya, Suruga-ku, Shizuoka, 422-8529, Japan)

N-glycan modification of a recombinant protein via coexpression of human glycosyltransferases in silkworm pupae

Scientific Reports, 7(1):1409 (English)

079

Kausar S, Abbas MN, Qian C, Zhu B, Sun Y, Sun Y, Wang L, Wei G, Maqsood I and Liu CL (2017)

(College of Life Sciences, Anhui Agricultural University, Hefei, 230036, China)

Serpin-14 negatively regulates prophenoloxidase activation and expression of antimicrobial peptides in Chinese oak silkworm *Antheraea pernyi*

Developmental and Comparative Immunology, 76:45-55 (English)

080

Kumar R, Chutia P, Ahmed M, Rajkhowa G and Singh NI (2016)

(Central Muga Eri Research and Training Institute, Central Silk Board, Ministry of Textiles, Govt. of India, Central Silk Board, Lahdoigarh 785700, Assam, India)

Checklist of wild silk moths of North East India (Lepidoptera: Saturniidae, Bombycidae).

Munis Entomology and Zoology, 11 (2): 508-514 (English)

081

Kuramochi KM, Tatematsu KI, Kameyama OM, Yamamoto MM, Kobori T, Sezutsu H and Machida S (2017)

(Food Research Institute, NARO, 2-1-12 Kannondai, Tsukuba, Ibaraki, 305-8642, Japan)

Co-expression of BirA with biotin bait achieves *in vivo* biotinylation of overexpressed stable N-glycosylated sRAGE in transgenic silkworms

Scientific Reports, 7(1):356 (English)

082

Li B, Yu HZ, Ye CJ, Ma Y, Li X, Fan T, Chen FS and Xu JP (2017)

(School of life sciences, Anhui Agricultural University, 130 West Changjiang Road, Hefei 230036, People's Republic of China)

Bombyx mori Serpin6 regulates prophenoloxidase activity and the expression of antimicrobial proteins

Gene, 610:64-70 (English)

083

Li JY, Cai F, Ye XG, Liang JS, Li JK, Wu MY, Zhao D, Jiang ZD, You ZY and Zhong BX (2017)

(Institute of Life Sciences, College of Life and Environmental Sciences, Hangzhou Normal University , Hangzhou 310036, China)

Comparative proteomic analysis of posterior silk glands of wild and domesticated silkworms reveals functional evolution during domestication

Journal of Proteome Research, 16(7):2495-2507 (English)

084

Li XT and Shi LG (2016)

(College of Animal Sciences, Zhejiang University, Hangzhou 310058, China)

Progress in functions and underlying signal transduction mechanisms of neuropeptides and their receptors in the silkworm *Bombyx mori*

Acta Entomologica Sinica, 59(7): 759-766 (Chinese)

085

LI QR, Xiao Y, Xing DX, Ye MJ, Liao S, Luo GQ and Yang Q (2017)

(Sericulture and Agri-food Research Institute, Guangdong Academy of Agriculture Sciences, Guangzhou 510610, China)

Expression analysis of chemosensory protein family genes in epidermis of the 5th instar silkworm larvae

Canye Kexue, 43(1):39-44 (Chinese)

086

Liao WL, Bu XL, Jiang WY and Liu JS (2017)

(School of Life Sciences, Guangzhou University, Guangzhou 510006, China)

Influence of lipopolysaccharide on the expression of the Toll-like receptor gene BmToll9-2 in larval *Bombyx mori*

Acta Entomologica Sinica, 60(4): 372-378 (Chinese)

087

Liu Q, Liu W, Zeng B, Wang G, Hao D and Huang Y (2017)

(Co-Innovation Center for the Sustainable Forestry in Southern China, Nanjing Forestry University, Nanjing 210037, China)

Deletion of the *Bombyx mori* odorant receptor co-receptor (BmOrco) impairs olfactory sensitivity in silkworms

Insect Biochemistry and Molecular Biology, 86:58-67 (English)

088

Liu XS, Hu QH, Zheng SC, Feng QL and Deng HM (2016)

(Guangzhou Key Laboratory of Development Regulation and Application Research of Insects, School of Life Sciences, South China Normal University, Guangzhou 510631, China)

Analysis of apoptosis and autophagy in wing discs of the silkworm, *Bombyx mori*

Acta Entomologica Sinica, 59(12):1317-1324 (Chinese)

089

Mamatha, Bela Zutshi and Jayaprakash (2016)

(University Department of Zoology Vijaya College, Jayanagar, Bangalore -560011)

Cytochrome c reductase in the eggs of silkworm, *Bombyx mori* L

Bulletin of Indian Academy of Sericulture, 20(1&2):7-10 (English)

090

Montali A, Romanelli D, Cappellozza S, Grimaldi A, de Eguileor M and Tettamanti G (2017)

(Department of Biotechnology and Life Sciences, University of Insubria, 21100 Varese, Italy)

Timing of autophagy and apoptosis during posterior silk gland degeneration in *Bombyx mori*

Arthropod Structure & Development, 46(4):518-528 (English)

091

Mori K (2017)

(Photosensitive Materials Research Center, Toyo Gosei CO- Ltd., Japan)

New synthesis of a stereoisomeric mixture of methyl 12-trishomofarnesoate, a juvenile hormone mimic useful in sericulture by increasing silk production

Proceedings of the Japan Academy Series B, Physical and Biological Sciences, 93(8):648-655 (English)

092

Nishida S, Ishii M, Nishiyama Y, Abe S, Ono Y and Sekimizu K (2017)

(Genome Pharmaceuticals Institute CO-Ltd. Tokyo, Japan)

Lactobacillus paraplantarum 11-1 isolated from rice bran pickles activated innate immunity and improved survival in a silkworm bacterial infection model

Frontiers in Microbiology, 8:436 (English)

093

Pan Y, Lü P, Wang Q, Zhu F, Li C, He Y and Chen K (2017)

(School of Food and Biological Engineering, Jiangsu University, Zhenjiang, China)

Comparative transcriptomic analysis of *Bombyx mori* fat body tissue following dietary restriction

Archives of Insect Biochemistry and Physiology, 95(1).doi:10.1002/arcH21388 (English)

094

Patra GC, Dey DG and Mohanty N (2016)

(Department of Zoology, North Orissa University, Takatpur, Baripada -757003, Mayurbhanj, Odisha)

Sex specific antioxidant in diapausing pupa of *Antheraea paphid*

Bulletin of Indian Academy of Sericulture, 20(1&2):21-24 (English)

095

Phillips DR and Clark KD (2017)

(Department of Chemistry, University of Georgia, Athens, Georgia, United States of America)

Bombyx mori and *Aedes aegypti* form multi-functional immune complexes that integrate pattern recognition, melanization, coagulants, and hemocyte recruitment

PloS one, 12(2):e0171447 (English)

096

Pratheep T, Rameshkumar N, Kayalvizhi N, Suganya T, Karthikeyan S and Krishnan M (2017)

(Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli-620024, India)

Changes in lipophorin composition during late larval, pupal and adult stages of *Bombyx mori*

Acta Entomologica Sinica, 60(3): 247-253 (Chinese)

097

Qian W, Gang X, Zhang T, Wei L, Yang X, Li Z, Yang Y, Song L, Wang P, Peng J, Cheng D and Xia Q (2017)

(The State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing 400715, China)

Protein kinase A-mediated phosphorylation of the broad-complex transcription factor in silkworm suppresses its transcriptional activity

The Journal of Biological Chemistry, 292(30):12460-12470 (English)

098

Rahmathulla VK and Nayak P (2017)

(Regional office, Central Silk Board, Bhuvaneshwar, 751 001, INDIA)

Effect of antibiotic administration on growth and development of silk gland in mulberry silkworm (*Bombyx mori* L)

Munis Entomology and Zoology, 12 (1): 41-49 (English)

099

Rahul K, Roy G, Zakir Hossain and Kanika Trivedy (2017)

(Central Sericultural Research and Training Institute, Central Silk Board, Ministry of Textiles, Govt. of India, Berhampore, Murshidabad - 742 101)

Impact of probiotics *Lactobacillus rhamnosus* ATCC 9595 and *Lactobacillus acidophilus* ATCC 4356 on the economic traits of silkworm *Bombyx mori* L

Imperial Journal of Interdisciplinary Research, 3(3):1115-1117 (English)

100

Rashmi Kumari, Suman and Roy SP (2016)

(Post-Graduate Department of Zoology/Biotechnology, T M Bhagalpur University Bhagalpur-812007, India)

Studies on the level of trehalose in haemolymph in developmental instars of tasar silkworm, *Antheraea mylitta* D (Lepidoptera: Saturniidae)

Bulletin of Indian Academy of Sericulture, 20(1&2):25-29 (English)

101

Rashmi Kumari, Suman and Roy SP (2016)

(Post-Graduate Department of Zoology/Biotechnology, T M Bhagalpur University Bhagalpur-812007, India)

Electrophoretic evaluation of cocoon silk protein of tasar silkworm, *Antheraea mylitta* Drury

Bulletin of Indian Academy of Sericulture, 20(1&2):51-53 (English)

102

Romoli O, Saviane A, Bozzato A, D'Antona P, Tettamanti G, Squartini A, Cappellozza S and Sandrelli F (2017)

(Department of Biology, University of Padova, Padova, Italy)

Differential sensitivity to infections and antimicrobial peptide-mediated immune response in four silkworm strains with different geographical origin

Scientific Reports, 7(1):1048 (English)

103

Shahzad T, Zhan MY, Yang PJ, Yu XQ and Rao XJ (2017)

(School of Plant Protection, Anhui Agricultural University, Hefei, China)

Molecular cloning and analysis of a C-type lectin from silkworm *Bombyx mori*

Archives of Insect Biochemistry and Physiology, 95(3):e21391 (English)

104

Siripuk S and Chandasekar R (2016)

(Department of Biology, Faculty of Science, Mahasarakham University, Maha Sarakham, Thailand)

Mycelium production of cordyceps militaris thai strains on thai rice varieties mixed with yolk and pupal powder of thai silkworm, *Bombyx mori*

Sericologia, 56(4): 266-270, (English)

105

Sunil Kumar T, Ramakrishna Naika, Muralimohan K and Manjunatha KL (2017)

(University of Agricultural Sciences, Bangalore)

Effect of insecticidal application in mulberry on rearing performance of silkworm, *Bombyx mori* L

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:546 (English)

106

Tian JH, Xue B, Hu JH, Li JX, Cheng XY, Hu JS, Li FC, Chen YH and Li B (2016)

(School of Basic Medicine and Biological Sciences, Soochow University, Suzhou, Jiangsu 215123, PR China)

Exogenous substances regulate silkworm fat body protein synthesis through MAPK and PI3K/Akt signaling pathways

Chemosphere, 171:202-207 (English)

107

Tong XL, Fu MY, Chen P, Chen L, Xiang ZH, Lu C and Dai FY (2017)

(Key Laboratory of Sericultural Biology and Genetic Breeding, Ministry of Agriculture, Southwest University, Chongqing, China)

Ultrabithorax and abdominal-A specify the abdominal appendage in a dosage-dependent manner in silkworm, *Bombyx mori*

Heredity 118(6):578-584 (English)

108

Vidhathri BS, Ramakrishna Parama VR, Mahesh DS, Vidyashree DN, Narayanaswamy TK and Muthuraju R (2017)

(Department of Sericulture, UAS, GKVK, Bengaluru)

Isolation and analysis of alpha linolenic acid from mulberry silkworm pupal oil

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:35 (English)

109

Wang H, Hu W, Liang Z, Zeng L, Li J, Yan H, Yang P, Liu Z and Wang L (2016)

(Otolaryngology Institutes, Allergy and Immunology Research Center, Shenzhen University, Shenzhen 518060, China)

Thiol peroxiredoxin, a novel allergen from *Bombyx mori*, modulates functions of macrophages and dendritic cella

American Journal of Translational Research, 8(12):5320-5329 (English)

110

Wang D, Dong Z, Zhang Y, Guo K, Guo P, Zhao P and Xia Q (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, 2 Tiansheng Road, Beibei, Chongqing 400716, China)

Proteomics provides insight into the interaction between mulberry and silkworm

Journal of Proteome Research, 16(7):2472-2480 (English)

111

Wang F, Dong S, Song L and Xia Q (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing 400716, China)

Identification and characterization of epidermal growth factor receptor ligands in *Bombyx mori*

Chinese Journal of Biotechnology, 33(2):261-271 (English)

112

Wang NH, Geng P and Li WL (2017)

(School of Life Science and Medicine, oalian University of Technology, Panjin Liaoning 124221, China)

Expression, purification and enzymatic activity analysis of *Antheraea pernyi* Iflavirus 2e protein

Canye Kexue, 43(2):253-259 (Chinese)

113

Wang P, Bi S, Wu F, Xu P, Shen X and Zhao Q (2017)

(The Sericulture Research Institute, Chinese Academy of Agricultural Sciences, Zhenjiang Jiangsu, China)

Differentially expressed genes in the head of the 2nd instar pre-molting larvae of the nm2 mutant of the silkworm, *Bombyx mori*

PloS one, 12(7):e0180160 (English)

114

Wang P, Qiu Z, Xia D, Tang S, Shen X and Zhao Q (2017)

(The Sericulture Research Institute, Chinese Academy of Agricultural Sciences, Zhenjiang, Jiangsu, China)

Transcriptome analysis of the epidermis of the purple quail-like (q-lp) mutant of silkworm, *Bombyx mori*

PLoS one, 12(4):e0175994 (English)

115

Wang X, Li Y, Liu Q, Xia Q and Zhao P (2017)

(Chongqing Engineering and Technology Research Center for Novel Silk Materials, Southwest University, Chongqing, P R China)

Proteome profile of spinneret from the silkworm, *Bombyx mori*

Proteomics, 17(12):1600301 (English)

116

Wang X, Wang K, He Y, Lu X, Wen D, Wu C, Zhang J and Zhang R (2017)

(School of Medical Devices, Shenyang Pharmaceutical University, China)

The functions of serpin-3, a negative-regulator involved in prophenoloxidase activation and antimicrobial peptides expression of Chinese oak silkworm, *Antheraea pernyi*

Developmental and Comparative Immunology, 69:1-11 (English)

117

Wu X, Wu X, Shao M and Yang B (2017)

(College of Materials and Textile, Zhejiang Sci-Tech University, Hangzhou 310018, China)

Structural changes of *Bombyx mori* fibroin from silk gland to fiber as evidenced by Terahertz spectroscopy and other methods

International Journal of Biological Macromolecules, 102:1202-1210 (English)

118

Xia H, Shao D, Liu X, Wang Q, Zhou Y and Chen K (2017)

(Institute of Life Sciences, Jiangsu University, 301 Xuefu RD, Zhenjiang, P R China)

Identification and characterization of BmVta1, a *Bombyx mori* (Lepidoptera: Bombycidae) homologue for Vta1 that is up-regulated in development

Journal of Insect Science, 17(3): 79 (English)

119

Xiao W, Chen P, Xiao J, Wang L, Liu T , Wu Y, Dong F, Jiang Y, Pan M, Zhang Y and Lu C (2017)

(Sericultural Research Institute Sichuan Academy of Agricultural Sciences, Sichuan Nanchong, China)

Comparative transcriptome profiling of a thermal resistant v/s sensitive silkworm strain in response to high temperature under stressful humidity condition

PLoS one, 12(5):e0177641 (English)

120

Xu G, Zhang J, Lyu H, Liu J, Ding Y, Feng Q, Song Q and Zheng S (2017)

(Guangzhou Key Laboratory of Insect Development Regulation & Applied Research, Institute of Insect Science and Technology, Guangzhou 510631, China)

BmCHSA-2b, a Lepidoptera specific alternative splicing variant of epidermal chitin synthase, is required for pupal wing development in *Bombyx mori*

Insect Biochemistry and Molecular Biology, 87:117-126 (English)

121

Xu J, Chen S, Zeng B, James AA, Tan A and Huang Y (2017)

(University of Chinese Academy of Sciences, Beijing, China)

Bombyx mori P-element somatic inhibitor (BmPSI) is a key auxiliary factor for silkworm male sex determination

PLoS Genetics, 13(1):e1006576 (English)

122

Xue B, Li F, Hu J, Tian J, Li J, Cheng X, Hu J and Li B (2017)

(School of Basic Medicine and Biological Sciences, Soochow University, Suzhou, Jiangsu 215123, PR China)

Differentially expressed genes in the silk gland of silkworm (*Bombyx mori*) treated with TiO2 NPS

Gene, 611:21-26 (English)

123

Yamamoto K and Nagaoka S (2017)

(Departrnent of Bioscience and Biotechnology, Kyushu Um'versity Graduate School, Fukuoka 812-8581, Japan)

Identification and localization of a novel ecdysone oxidase in the silkworm, *Bombyx mori*

Journal of Insect Biotechnology and Sericology, 86(2):49-53 (English)

124

Yang JG, Peng LN, Liu TH, Wu YF, Du GY, Zhang Q, Wang W and Pan MH (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing 400716, China)

Cloning and expression analysis of the Sox family gene *BmDichaete* in the silkworm, *Bombyx mori*

Acta Entomologica Sinica, 60(5): 513-522 (Chinese)

125

Yang Y, Wu YQ, Lan FJ, Chen YB, Cui HB, Liu QX, Mu ZM, Cui WZ and Meng FZ (2016)

(College of Forestry, Shandong Agricultural University, Taian Shandong 271018, China)

Variation of ascorbic acid content at different developmental stages of the silkworm, *Bombyx mori*

Canye Kexue, 42(5):840-849 (Chinese)

126

Yu H, Wang X, Xu J, Ma Y, Zhang S, Yu D, Fei D and Muhammad A (2017)

(School of Life Sciences, Anhui Agricultural University, Hefei, People's Republic of China)

iTRAQ-based quantitative proteomics analysis of molecular mechanisms associated with *Bombyx mori* (Lepidoptera) larval midgut response to BmNPV in susceptible and near-isogenic strains

Journal of Proteomics, 165:35-50 (English)

127

Zang YL, Gao HJ, Wang YW and Mu ZM (2016)

(College of Forestry, Shandong Agricultural University, Taian Shandong 271018, China)

Effect of N-acetyl-cysteine on preventing *Bombyx mori* larvae from toxification caused by phoxim

Canye Kexue, 42(5): 870-877 (Chinese)

128

Zeng B, Huang Y, Xu J, Shiotsuki T, Bai H, Palli SR, Huang Y and Tan A (2017)

(Laboratory of Biotechnology, Department of Applied Biological Chemistry, Faculty of Agriculture, Shizuoka University, 836 Ohya, Suruga-Ku, Shizuoka, 422-8529, Japan)

The FOXO transcription factor controls insect growth and development by regulating juvenile hormone degradation in the silkworm, *Bombyx mori*

The Journal of Biological Chemistry, 292(28):11659-11669 (English)

129

Zhang J, Blessing D, Wu C, Liu N, Li J, Qin S and Li M (2017)

(School of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang, Jiangsu, China)

Comparative transcriptomes analysis of the wing disc between two silkworm strains with different size of wings

PLoS one, 12(6):e0179560 (English)

130

Zhang K, Pan G, Zhao Y, Hao X, Li C, Shen L, Zhang R, Su J and Cui H (2017)

(State Key Laboratory of Silkworm Genome Biology, The Institute of Sericulture and Systems Biology, Southwest University, Chongqing 400716, China)

A novel immune-related gene HDD1 of silkworm *Bombyx mori* is involved in bacterial response

Molecular Immunology, 88:106-115 (English)

131

Zhang L, Liu C, Tan X, Jiang L, Hu WB, Li W, Peng ZQ and Xia QY (2016)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing 400715, China)

Preparation and application of polyclonal antibody against silkworm fibroin protein P25

Canye Kexue, 42(5):820-825 (Chinese)

132

Zhang X and Zheng S (2016)

(Guangzhou Key Laboratory of Insect Development Regulation and Application Research, School of Life Sciences, South China Normal University, Guangzhou, China)

20-hydroxyecdysone enhances the expression of the chitinase 5 via Broad-Complex Zinc-Finger 4 during metamorphosis in silkworm, *Bombyx mori*

Insect Molecular Biology, 26(2):243-253 (English)

133

Zhang Z, Liu X, Shiotsuki T, Wang Z, Xu X, Huang Y, Li M, Li K and Tan A (2017)

(School of Life Science, East China Normal University, Shanghai 200062, China)

Depletion of juvenile hormone esterase extends larval growth in *Bombyx mori*

Insect Biochemistry and Molecular Biology, 81:72-79 (English)

134

Zhu ZD, Zhang JL, Feng QL and Deng HM (2016)

(School of Life Sciences, South China Normal University, Guangdong Key Laboratory of Insect Development Regulation and Application Research, Guangzhou 510631, China))

Bioinformatics analysis and ecdysone-induced expression of wing cuticle protein genes BmWCPs in the silkworm, *Bombyx mori*

Canye Kexue, 42(5): 805-813 (Chinese)

2.3. CYTOLOGY, BREEDING AND GENETICS

135

Ai JW, Sima YH, Xue H, He XJ, Liu CW, Xu SQ, Zheng Y and Liu Y (2017)

(The Sericultural Research Institute of Hunan Province, Changsha 410127, China)

Breeding of a natural yellow cocoon quaternary hybrid combination Xiangcaihuang 1 for summer and autumn rearing

Canye Kexue, 43(1):45-55 (Chinese)

136

Bednár B, Roller L, Cizmár D, Mitrová D and Zitnan D (2017)

(Institute of Zoology, Slovak Academy of Sciences, Dúbravská cesta 9, 84506, Bratislava, Slovakia)

Developmental and sex-specific differences in expression of neuropeptides derived from allatotropin gene in the silkmoth *Bombyx mori*

Cell and Tissue Research, 368(2):259-275 (English)

137

Cui L, Cheng R and Jiang N (2017)

(Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, China)

Lemoniidae are not distributed in China: The moth identified as *Lemonia taraxaci* (Lepidoptera: Leomoniidae) in China is actually a *bombycid* species (Lepidoptera: Bombycidae)

Acta Entomologica Sinica, 60(6): 731- 734 (Chinese)

138

Hou Y, Tian S, Guo C, Zhou X, Chen S, Yang H, Zhao P and Xia Q (2017)

(State Key Laboratory of Silkworm Genome Biology, College of Biotechnology, Southwest University, Chongqing 400716, China)

Analysis of molting fluid in silkworm (*Bombyx mori*) by two-dimensional electrophoresis and mass spectrometry

Chinese Journal of Biotechnology, 33(1):99-110 (Chinese)

139

Iyao, FG, Shang BQ, Huang QH, Liao HZ, Yu X, Shi LF, Liao GS, Li M and Chen LJ (2016)

(Sericulture Technology Extension Station of Yulin City, Yulin Guangxi 537000, China)

Breeding of a new silkworm variety Yucan 1 for summer-autumn rearing

Canye Kexue, 42(5):926-930 (Chinese)

140

Kim SR, Kim KY, Jeong JS, Kim MJ, Kim KH, Choi KH and Kim I (2017)

(Department of Agricultural Biology, National Academy of Agricultural Science, Rural Development Administration, Wanju-gun, Republic of Korea)

Population genetic characterization of the Japanese oak silkmoth, *Antheraea yamamai* (Lepidoptera: Saturniidae) using novel microsatellite markers and mitochondrial DNA gene sequences

Genetics and Molecular Research, 16(2):gmr16029608 (English)

141

Renuka G and Shamitha G (2016)

(Department of Zoology, Kakatiya University, Warangal 506009, India)

Genetic variation in ecoraces of tropical tasar silkworm, *Antheraea mylitta* using SSR markers

Journal of Genetics, 95(4):777-785 (English)

142

Tripathi PM, Pankaj Tewary, Aslam M, Bhatia NK, Maurya KR and Babu Lal (2017)

(Sericultural Research Station, Central Silk Board, Sahaspur, Dehradun)

Evaluatlon and utilization of mulberry silkworm, *Bombyx mori* L germplasm under subtropical conditions of Uttarakhand

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:93 (English)

143

Wang H, Tong X, Liu M, Hu H, Li Z, Xiang Z, Dai F and Lu C (2017)

(State Key Laboratory of Silkworm Genome Biology, Key Laboratory for Sericulture Functional Genomics and Biotechnology of Agricultural Ministry, Southwest University, Chongqing, China)

Fine mapping of a degenerated abdominal legs mutant (Edl) in silkworm, *Bombyx mori*

PloS one, 12(1):e0169224 (English)

144

Xu L, Meng XM, Li PP, Qi L, Su GN, Jiao,Y, Zhong L, Wu Y, Zhao N, Li MT and Jiang DH (2016)

(The Sericultural Research Institute of Liaoning Province, Fengcheng Liaoning 118100, China)

Breeding of a new chinese oak silkworm variety Liaocan 582 with high productivity and superior quality

Canye Kexue, 42(6):1011-1018 (Chinese)

145

Yan HY, Mita K, Zhao X, Tanaka Y, Moriyama M, Wang H, Iwanaga M and Kawasaki H (2017)

(Faculty of Agriculture, Utsunomiya University, 350 Mine, Utsunomiya, Tochigi 3218505, Japan)

The angiotensin-converting enzyme (ACE) gene family of *Bombyx mori*

Gene, 608:58-65 (English)

146

Zhang N, Liu G, Zeng YC, Ding X, Wei L, Huang GQ and Zeng Z (2017)

(College of Life Science, China West Normal University, Nanchong Sichuan 627001, China)

Analysis of genetic relationship for 23 major mulberry cultivars in sericultural areas of Sichuan Province using ISSR molecular markers

Canye Kexue, 43(2):346-350 (Chinese)

147

Zhang P, Liu S, Song HS, Zhang G, Jia Q and Li S (2017)

(College of Life Sciences, Shanghai University, Shanghai 200444, China)

YorkieCA overexpression in the posterior silk gland improves silk yield in *Bombyx mori*

Journal of Insect Physiology, 100:93-99 (English)

2.4. MOLECULAR BIOLOGY

148

Bai XR, Chai JP, Tang FF, Zhang YH, Shao YL and Zhu F (2016)

(Institute of Sericulture and Apiculture, Yunnan Academy of Agricultural Sciences, Mengzi Yunnan 661101, China)

Molecular identification of a wild silk-spinning insect collected in Yunnan Province and investigation of its cocoon characters

Canye Kexue, 42(6):1004-1010 (Chinese)

149

Dong XL, Liu TH, Wang W, Pan CX, Du GY, Wu YF, Adur M, Zhang M J, Pan MH and Lu C (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing, China)

Transgenic RNAi of BmREEPa in silkworms can enhance the resistance of silkworm to *Bombyx mori* nucleopolyhedrovirus

Biochemical and Biophysical Research Communications, 483(2):855-859 (English)

150

Fan YY, Qian P, Shen XJ, Wang X, Jiang T and Tang SM (2016)

(Key Laboratory of Sericultural Bioscience and Biotechnology, School of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang, Jiangsu 212018, China)

Regulation of the expression of fibroin light chain gene BmFib-L by bmomiR-375-3p in *Bombyx mori*

Acta Entomologica Sinica, 59(10): 1043-1049 (Chinese)

151

Goo TW, Choi KH, Kim SR, Park SW and Kim SW (2017)

(Department of Biotechnology, Catholic University of Daegu, Daegu 38430, Republic of Korea)

Expression of the cyan fluorescent protein in fibroin H-chain of transgenic silkworm

International Journal of Industrial Entomology, 34(1) 11-15 (English)

152

Gopinath G, Srikeerthana K, Tomar A, Sekhar SMC and Arunkumar KP (2017)

(Centre of Excellence for Genetics and Genomics of Silkmoths, Laboratory of Molecular Genetics, Centre for DNA Fingerprinting and Diagnostics, Hyderabad 500001, India)

RNA sequencing reveals a complete but an unconventional type of dosage compensation in the domestic silkworm *Bombyx mori*

Royal Society Open Science, 4(7):170261 (English)

153

Guo H, Cheng T, Chen Z, Jiang L, Guo Y, Liu J, Li S, Taniai K, Asaoka K, Okuda KK, Arunkumar KP, Wu J, Kishino H, Zhang H, Seth R K, Gopinathan KP, Montagn N, Jacquin JE, Goldsmith MR, Xia Q and Mita K (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing 400715, PR China)

Expression map of a complete set of gustatory receptor genes in chemosensory organs of *Bombyx mori*

Insect Biochemistry and Molecular Biology, 82:74-82 (English)

154

Guo YX, Ma L, Li S and Li K (2017)

(School of Life Science, East China Normal University, Shanghai 200241, China)

Impact of signaling pathway P13K1 AKT ITORC1 on expression of transcription factor SGF1 involved in *Bombyx mori* fibroin protein synthesis

Canye Kexue 43(2):231-237 (Chinese)

155

Hirowataril A, Nagaoka S, Yamadal N and Yamamoto K (2017)

(Department of Bioscience and Biotechnology, Kyushu University Graduate School, Fukuoka 8I2-858I, Japan)

Identifying a sigma class glutathione S-transferase 2 from the silkworm *Bombyx mori*

Journal of Insect Biotechnology and Sericology, 86(1):1-7 (English)

156

Hu W, He G, Wang J and Hu Q (2016)

(Key Laboratory of Bio-Pesticide Innovation & Application of Guangdong Province, College of Agriculture, South China Agricultural University, Guangzhou China)

The effects of Destruxin A on relish and rel gene regulation to the suspected immune-related genes of silkworm

Molecules (Basel, Switzerland), 22(1):pp6 (English)

157

Kato T, Kikuta K, Kanematsu A, Kondo S, Yagi H, Kato K and Park EY (2017)

(Laboratory of Biotechnology, Research Institute of Green Science and Technology, Shizuoka University, 836 Ohya, Suruga-Ku, Shizuoka, 422-8529, Japan)

Alteration of a recombinant protein N-glycan structure in silkworms by partial suppression of N-acetyl glucosaminidase gene expression

Biotechnology Letters 39(9):1299-1308 (English)

158

Li QL, Yan N and Guo JH (2016)

(College of Forestry, Northwest A & F University, Shaanxi Yangling 712100, China)

High-throughput sequencing and structural analysis of chloroplast genome of *Morus afropurpurea*

Canye Kexue 42(6):953-959 (Chinese)

159

Lu D, Hou C, Qin G, Gao K, Chen T and Guo X (2017)

(School of Biotechnology and Sericultural Research Institute, Jiangsu University of Science and Technology, Zhenjiang 212018, China)

Molecular cloning, bioinformatic analysis, and expression of *Bombyx mori* Lebocin 5 gene related to *Beauveria bassiana* infection

BioMed Research International, 2017:9390803 (English)

160

Ma S, Liu Y, Liu Y, Chang J, Zhang T, Wang X, Shi R, Lu W, Xia X, Zhao P and Xia Q (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing, 400716 PR China)

An integrated CRISPR *Bombyx mori* genome editing system with improved efficiency and expanded target sites

Insect Biochemistry and Molecular Biology, 83:13-20 (English)

161

Makwana P, Pradeep AN, Hungund SP, Ponnuvel KM and Trivedy K (2017)

(Seribiotech Research Laboratory, CSB-Kodathi Campus, Bangalore, Karnataka)

The dipteran parasitoid *Exorista bombycis* induces pro and antioxidative reactions in the silkworm *Bombyx mori*: Enzymatic and genetic analysis

Archives of Insect Biochemistry and Physiology, 94(2):e21373 (English)

162

Mon H, Lee JM, Sato M and Kusakabe T (2017)

(Laboratory of Insect Genome Science, Kyushu University Graduate School of Bioresource and Bioenvironmental Sciences, Hakozaki 6-10-1, Higashi-ku, Fukuoka, Japan)

Identification and functional analysis of outer kinetochore genes in the holocentric insect *Bombyx mori*

Insect Biochemistry and Molecular Biology, 86:1-8 (English)

163

Patil AA, Tatsuke T, Mon H, Lee JM, Morokuma D, Hino M and Kusakabe T (2017)

(Laboratory of Insect Genome Science, Kyushu University, Graduate School of Bioresource and Bioenvironmental Sciences, 6-10-1 Hakozaki, Higashi-ku, Fukuoka 812-8581, Japan)

Characterization of Armitage and Yb containing granules and their relationship to nuage in ovary-derived cultured silkworm cell

Biochemical and Biophysical Research Communications, 490(2):134-140 (English)

164

Qian, P,Jiang, T,Wang, X,Song, F,Chen, C,Fan, Y Q,Tang, S M,Shen, X J , (2016)

(School of Biotechnology, Jiangsu University of Science and Technology, Jiangsu Key Laboratory of Sericutural Biology and Biotechnology, Zhenjiang Jiangsu 212018, China,)

Regulation of Bmo-miR-2771 on expression of *Bombyx mori* sericin gene BmSer-1

Canye Kexue, 42(5):826-831 (Chinese)

165

Qu M, Ren Y, Liu Y and Yang Q (2017)

(State Key Laboratory of Fine Chemical Engineering, School of Life Science and Biotechnology, Dalian University of Technology, Dalian, China)

Studies on the chitin/chitosan binding properties of six cuticular proteins analogous to peritrophin 3 from *Bombyx mori*

Insect Molecular Biology, 26(4):432-439 (English)

166

Si H, Cao Y, Zhu H, Li D, Lu Z, Sheng Q and Nie Z (2017)

(Zhejiang Provincial Key Laboratory of Silkworm Bioreactor and Biomedicine, Hangzhou, Zhejiang, China)

Transposable Element Bm1645 is a Source of BmAGO2-associated Small RNAs that affect its expression in *Bombyx mori*

BMC Genomics, 18(1):201 (English)

167

Sumitani M, Kondo M, Kasashima K, Endo H, Nakamura K, Misawa T, Tanaka H and Sezutsu H (2016)

(Transgenic Silkworm Research Unit, Division of Biotechnology, Institute of Agrobiological Sciences, National Agriculture and Food Research Organization, Owashi, Tsukuba 305-8634, Japan)

Characterization of *Bombyx mori* mitochondrial transcription factor A, a conserved regulator of mitochondrial DNA

Gene, 608:103-113 (English)

168

Tanaka H and Sagisaka A (2016)

(Insect-Microbe Research Unit, Institute of Agrobiological Sciences, National Agriculture and Food Research Organization, Tsukuba 305-8634, Japan)

Identification and functional analysis of pointed homologs in *Bombyx mori*

Gene, 604:22-32 (English)

169

Tang XF, Chen XY, Zhang CD, Li YF, Liu TH, Zhou XL, Wang, Zhang Q, Chen P, Lu C and Pan MH (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing, China)

Two Geminin homologs regulate DNA replication in silkworm, *Bombyx mori*

Cell Cycle (Georgetown, TeX), 16(9):830-840 (English)

170

Tsubota T, Takasu Y, Uchinol K, Kobayashi I and Sezutsu H (2017)

(Transgenic Silkworm Research Unit, National Agriculture and Food Research OrganizattOn, 1-2 Owashi, Tsukuba, Ibaraki 305-S634, Japa)

TALEN-mediated genome editing of the ku8O gene in the silkworm *Bombyx mori*

Journal of Insect Biotechnology and Sericology, 86(1):9-16 (English)

171

Tsubota T and Sezutsu H (2017)

(Transgenic Silkworm Research Unit, Institute of Agrobiological Sciences, National Agriculture and Food Research Organization, 1-2 Owashi, Tsukuba, Ibaraki, 305-8634, Japan)

Genome Editing of Silkworms

Methods in Molecular Biology, 1630:205-218 (English)

172

Tulsi Naik KS, Ponnuvel KM and Awasthi AK (2017)

(Seri Biotech Research Laboratory, Central Silk Board, Kodathi, Bengaluru 560035, India)

Transkingdom RNA interference approach to improve resistance against grasserie disease in *Bombyx mori* L – A review

Sericologia, 57(1): 1-9 (English)

173

Wang P, Qiu Z, Xia D, Tang S, Shen X and Zhao Q (2017)

(The Sericulture Research Institute, Chinese Academy of Agricultural Sciences, Zhenjiang, Jiangsu, China)

Transcriptome analysis of the epidermis of the purple quail-like (q-lp) mutant of silkworm, *Bombyx mori*

PloS one, 12(4):e0175994 (English)

174

Wen Y, Zou Z, Li H, Xiang Z and He N (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Tiansheng Road, Beibei, Chongqing 400715, China)

Analysis of codon usage patterns in *Morus notabilis* based on genome and transcriptome data

Genome, 60(6):473-484 (English)

175

Wu F, Li DC, Hao Y, Xiao SW and Chen DS (2017)

(Industrial Crops Institute of Hubei Academy of Agricultural Sciences, Wuhan 430064, China))

Research progress on cysteine protease of *Bombyx mori*

Canye Kexue, 43(2):336-340 (Chinese)

176

Wu MY, Wu Y, Yang GQ and Wang JN (2017)

(National Engineering Laboratory for Modern Silk, College of Textile and Clothing Engineering, Soochow University, Suzhou Jiangsu 215123, China)

Expression optimization of non-repetitive polypeptide derived from silk fibroin heavy chain in *Escherichia coli*

Canye Kexue, 43(2):238-244 (Chinese)

177

Wu SS, Xu Q, Yu JJ, Zhang YS, He XB, Qin GX, Xu AY and Zhang GH, (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

Linkage analysis and mapping of BmNPV resistant gene in AN strain of silkworm (*Bombyx mori*)

Canye Kexue, 43(2):209-216 (Chinese)

178

Yi HS, Ma XP, Pan MH and Lu C (2017)

(Department of Animal Medicine, Rongchang Campus of Southwest University, Rongchang, Chongqing 402460, China)

Eukaryotic expression and function analysis of *Bombyx mori* inhibitor of apoptosis protein (BmIAP) gene

Acta Entomologica Sinica, 60(1): 18-23 (Chinese)

179

Yu J, Xu L, Shen ZY and Tang XD (2016)

(School of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang, Jiangsu 212018, China)

cDNA cloning, expression anaylsis and subcellular localization of ubiquitin-like post modification protein NEDD8 in the silkworm, *Bombyx mori*

Acta Eentomologica Sinica, 59(9): 948-955 (Chinese)

180

Zhang MR, Xu PZ and Xia QY (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

Molecular cloning, sequence features and tissue expression analysis of ring gene in silkworm, *Bombyx mori*

Canye Kexue, 43(2):225-230 (Chinese)

181

Zhang YL, Su Q, Sun WL, Qian ZY and Jiao Feng YH (2016)

(Institute of Sericulture and Silk, Northwest A& F University, Yangling Shaanxi 712100, China)

Cloning and functional site analysis of the promoter of mulberry flowering locus T gene

Canye Kexue, 42(5): 758-765 (Chinese)

2.5. DISEASES

182

An HY, Wang Q, Li Z, Dang XQ, Zhou ZY and Wang LL (2017)

(School of Life Sciences, Chongqing Normal University, Chongqing 400047, China)

Interaction between *Nosema bombycis* and proteins BmECH1 and BmGAPDH in *Bombyx mori*

Acta Entomologica Sinica, 60(1): 45-52 (Chinese)

183

Balavenkatasubbaiah M, Mary Josepha AV, Vineet Kumar, Satish G and Sivaprasad V (2017)

(Central Sericultural Research and Training Institute, Central Silk Board, Mysuru 570008, India)

Morphology and pathogenicity of a new microsporidian isolated from silkworm (*Bombyx mori* L) crops of Pure Mysore seed area of Karnataka, India

Sericologia, 57(1): 32-38 (English)

184

Chen G, Wang W, Chen H, Dai W, Peng X, Li X, Tang X, Xu L and Shen Z (2017)

(Jiangsu University of Science and Technology, Zhenjiang, Jiangsu Province, China)

Functional characterization of an aquaporin from a microsporidium, *Nosema bombycis*

PloS one, 12(7):e0181703 (English)

185

Chen HQ, Chu C and Zhou YJ (2016)

(Institute of Life Sciences, Jiangsu University, Zhenjiang Jiangsu 212013, China)

Expression and activity determination of *Bombyx mori* nucleopolyhedrovirus DNA polymerase in bac-to-bac system

Canye Kexue, 42(6):1049-1052 (Chinese)

186

Chen J, Guo W, Dang X, Huang Y, Liu F, Meng X, An Y, Long M, Bao J, Zhou Z, Xiang Z and Pan G (2017)

(Key Laboratory of Sericultural Biology and Genetic Breeding, Ministry of Agriculture, Chongqing, PR China)

Easy labeling of proliferative phase and sporogonic phase of microsporidia *Nosema bombycis* in host cells

PloS one, 12(6):e0179618 (English)

187

Chen SL, Xiao SY, Pan QL, Li YM, Yang RG, Gao JH, Gao X and Xu JS (2017)

(Institute of Sericulture and Apiculture, Yunnan Academy of Agricultural Sciences, Mengzi, Yunnan 661101, China)

Infectivity and transmissibility of *Nosema* sPCP isolated from *Catopsilia pyranthe* (Lepidoptera: Pieridae) in the domestic silkworm (*Bombyx mori*)

Acta Entomologica Sinica, 60(2): 155-162 (Chinese)

188

Cheng TC, Lin P, Fu JF, Jiang L, Ma SY and Xia QY (2016)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing 400715, China)

Creation of *Bombyx mori* cadherin BtR-175 knockout mutant and investigation of its resistance against bacterial infection

Canye Kexue, 42(5):8134-819 (Chinese)

189

Dai WJ, Chen G, Peng XR, Li XL, Ma L, Tang XD, Xu L and Shen ZY (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu, China)

Staining and discrimination of *Nosema bombycis* spores with fluorescent brightener 28 and propidium iodide

Canye Kexue, 43(1):62-67 (Chinese)

190

Das R and Das K (2016.)

(Central Muga Eri research and Training Institute, Central Silk Board, Lahdoigarh, Jorhat, Assam, India)

Effect of abiotic factors on infestation of Uzifly (*Exorista sorbillans* Wiedemann) in different instar muga silkworm, *Antheraea assamensis*

Munis Entomology and Zoology, 11(1):87-89 (English)

191

Das R and Das K (2017)

(Central Muga Eri Research and Training Institute, Central Silk Board, Lahdoigarh ,-785700, Jorhat Assam, India)

Effect of fungal and bacterial diseases in different instar Muga Silkworm, *Antheraea assamensis* Helfer (Lepidoptera: Saturniidae) in different crop seasons

Munis Entomology and Zoology, 12(2): 578-582 (English)

192

Dong ZQ and Pan MH (2017)

(State Key Laboratory of Silkworm Genome Biology, Chongqing 400716, China)

Research strategy and progress on resistance of *Bombyx mori* to nucleopolyhedrovirus

Canye Kexue, 43(1):139-146 (Chinese)

193

Dong ZQ, Hu N, Dong FF, Chen TT, Jiang YM, Chen P, Lu C and Pan MH (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing 400716, China)

Baculovirus LEF-11 hijack host ATPase ATAD3A to promote virus multiplication in *Bombyx mori* cells

Scientific Reports 7:46187 (English)

194

Fu J, Lin P, Feng T, Cheng D, Zhang Q, Xia Q and Cheng T (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing 400715, China)

Interaction of aminopeptidase (BmAPN5) and parasporal crystal (PC) toxin isolated from *Bacillus bombysepticus*

Chinese Journal of Biotechnology, 33(1):90-98 (Chinese)

195

Hamajima R, Kobayashi M and Ikeda M (2017)

(Laboratory of Sericulture and Entomoresources, Graduate School of Bioagricultural Sciences, Nagoya University, Chikusa, Nagoya, 464-8601, Japan)

P143 proteins from heterologous nucleopolyhedroviruses induce apoptosis in BM-N cells derived from the silkworm *Bombyx mori*

Virus Research, 233:70-76 (English)

196

Han F, Lu A, Yuan Y, Huang W, Beerntsen BT, Huang J and Ling E (2017)

(Key Laboratory of Insect Developmental and Evolutionary Biology, Institute of Plant Physiology and Ecology, Chinese Academy of Sciences, Shanghai, China)

Characterization of an entomopathogenic fungi target integument protein, *Bombyx mori* single domain von Willebrand factor type C, in the silkworm, *Bombyx mori*

Insect Molecular Biology, 26(3):308-316 (English)

197

He L, Hu X, Zhu M, Liang Z, Chen F, Zhu L, Kuang S, Cao G, Xue R and Gong C (2017)

(School of Biology and Basic Medical Science, Soochow University, Suzhou 215123, China)

Identification and characterization of vp7 gene in *Bombyx mori* cytoplasmic polyhedrosis virus

Gene, 627:343-350 (English)

198

Jia S, Song C, He YZ, Liu XL, Yu TH, Zhao C and Zuo LL (2016)

(Sericultural lnstitute of Liaoning Province, Fengcheng Liaoning 118100, China)

Impact of nucleopolyhedrovirus infection on activity of protective enzymes in *Antheraea pernyi* larvae

Canye Kexue, 42(6):1113-1116 (Chinese)

199

Jiang XJ, Zhong J, Chai JP, Su ZG, Huang JR and Bai XR (2016)

(Institute oi Sericulture and Apiculture, Yunnan Academy ot Agricultural Sciences, Mengz,Yunnan 661101, China)

Classification, identification and phylogenetic analysis of mulberry brown spot pathogenic fungi collected in Yunnan sericultural areas based on rDNA-ITS sequence

Canye Kexue, 42(6):973-978 (Chinese)

200

Li XL, Peng XR, Chen G, Dai WJ, Tang XD, Xu L and Shen ZY (2016)

(Colleg of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

Bioinformatic analysis, prokaryotic expression and polyclonal antibody preparation of *Nosema bombycis* trehalase gene

Canye Kexue, 42(6):1026-1034 (Chinese)

201

Li G, Zhou Q, Qiu L, Yao Q, Chen K, Tang Q and Hu Z (2017)

(Institute of Life Sciences, Jiangsu University, Zhenjiang, China)

Serine protease Bm-SP142 was differentially expressed in resistant and susceptible *Bombyx mori* strains, involving in the defence response to viral infection

PLoS one, 12(4):e0175518 (English)

202

Li T, Pan GQ, Vossbrinck CR, Xu JS, Li CF, Chen J, Long MX, Yang M, Xu XF, Xu C, Bettina ADV and Zhou ZY (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing 400715, China)

SilkPathDB: A comprehensive resource for the study of silkworm pathogens

Database (Oxford), 2017: bax001. (English)

203

Li Z, Pan G, Ma Z, Han B, Sun B, Ni Q, Chen J, Li T, Liu T, Long M, Li C and Zhou Z (2017)

(The State Key Laboratory of Silkworm Genome Biology, Southwest University, Chongqing 400716, China)

Comparative proteomic analysis of differentially expressed proteins in the *Bombyx mori* fat body during the microsporidia *Nosema bombycis* infection

Journal of Invertebrate Pathology, 149:36-43 (English)

204

Liu F, Ma Q, Dang X, Wang Y, Song Y, Meng X, Bao J, Chen J, Pan G and Zhou Z (2017)

(The State Key Laboratory of Silkworm Genome Biology, Southwest University, Beibei, Chongqing 400716, China)

Identification of a new subtilisin-like protease NbSLP2 interacting with cytoskeletal protein septin in microsporidia *Nosema bombycis*

Journal of Invertebrate Pathology, 148:110-117 (English)

205

Liu ZF, Ma ZG, Wang LL, You XL, Wang L, Dang XQ, Li Z and Zhou ZY (2017)

(College of Life Sciences, Chongqing Normal University, Chongqing 401331, China)

Sequence features, subcellular localization and functional analysis of *Nosema bombycis* surface protein NBO_33g0013

Canye Kexue, 43(1):56-61 (Chinese)

206

Iiyama K, Morishita M, Lee JM, Mon H, Kusakabe T, Tashiro K, Akasaka T, Aoki CS and Miyamoto K (2017)

(Laboratory of Insect Pathology and Microbial Control, Institute of Biological Control, Faculty of Agricultre, Graduate School, Kyushu University, Fukuoka, Japan)

A reconsideration of the taxonomic position of two bacterial strains isolated from flacherie-diseased silkworms in 1965

Journal of Insect Biotechnology and Sericology, 86(2):35-41 (English)

207

Lü P, Xing Y, Hu Z, Yang Y, Pan Y, Chen K, Zhu F, Zhou Y, Chen K and Yao Q (2017)

(Institute of Life Sciences, Jiangsu University, Zhenjiang 212013, China)

Comparative proteomic analysis of differentially expressed proteins in the *Bombyx mori* fat body during the microsporidia *Nosema bombycis* infection

Journal of Invertebrate Pathology, 144:18-23 (English)

208

Lu XM and Shao YQ (2016)

(Institute of Sericulture and Apiculture, Zhejiang University, Hangzhau 310058, China)

A review on current status and development trend of pebrine prevention and control technology

Canye Kexue, 42(6):945-952 (Chinese)

209

Lu XM, Hu SR, Shao YQ, Lin XX, Cai SF, Fu ZW, Li MQ, He XY, Qiu H H, Ma HY, Lu Y, Liu H, He XK, Li GC and Chen BS (2017)

(College of Animal Science, Zhejiang University, Hangzhou 310058, China)

Impact of pebrine-infected *Bombyx mori* embryos on healthy populations

Canye Kexue, 43(1):68-76 (Chinese)

210

Mamatha M and Balavenkatasubbaiah M (2017)

(Central Sericultural Research and Training Institute, Mysuru 570008, Kamataka, India)

Identification of target tissue(s) of BmIFV infection in the susceptible / tolerant breeds of silkworm, *Bombyx mori* L through immunodiffussion test

Sericologia, 57(1): 45-52, (English)

211

Mi R, Ji WJ, Zhao ZJ, Wang XD, Li PP, Li QF, Sun YX, Wang H, Wang FC, Li YJ, Zhu YM and Fan Q (2017)

(Qalian Institute of Biotechnology, Liaoning Academy of Agricultural Sciences, Oalian Liaoning 116024, China)

A detection method of *Nosema pernyi* by real-time fluorescent quantitative peR

Canye Kexue, 43(2):260-267 (Chinese)

212

Mohan KR, Hema Dhirwani and Manoj M Rai (2016)

(Centre for Sericulture and Biological Pest Management Research (CSBR.), RTM Nagpur University, Nagpur-440022)

Effect of gentamycin and erythromycin on bacterial disease in bivoltine hybrid race CSR6 x CSR26 (FCl) of silkworm, *Bombyx mori* L

Bulletin of Indian Academy of Sericulture 20(1&2):1-5 (English)

213

Nagesha N, Natesh, Anitha Peter and Bharath KN (2017)

(Universtiy of Agricultural Sciences, Bengaluru)

Biotechnological approaches for the control of grasserie (BmNPV) disease of mulberry silkworm *Bombyx mori*

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:260 (English)

214

Pan ZH, Wu P, Gao K, Hou CX, Qin GX, Geng T and Guo XJ (2017)

(School of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang 212018, China)

Identification and characterization of two putative microRNAs encoded by *Bombyx mori* cypovirus

Virus Research, 233:86-94 (English)

215

Peng XR, Li XL, Chen G, Dai WJ, Li N, Wang W, Tang XD, Xu L and Shen ZY (2016)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

Molecular cloning, sequence analysis and prokaryotic expression of *Nosema bombycis* enolase gene

Canye Kexue, 42(6):1033-1040 (Chinese)

216

Rajasekharreddy P, Rani PU, Mattapally S and Banerjee SK (2017)

(Biology and Biotechnology Division, CSIR-Indian Institute of Chemical Technology, Uppal Road, Hyderabad 500007, Telangana State, India)

Ultra-small silver nanoparticles induced ROS activated Toll-pathway against *Staphylococcus aureus* disease in silkworm model

Materials Science and EngineerinG C, Materials for Biological Applications, 77:990-1002 (English)

217

Senapati MD, Ranjana Das, Sarkar BN, Sarmah MC and Ahmed SA (2016)

(Eri Seed Laboratory,Germplasm Conservation Centre, Central Muga Eri Research Training Institute Central Silk Board, Lahdoigarh, Assam)

Standardization of mother moth examination for pebrine detection in *Samia* species and diagnosis of pebrine disease for commercial seed prodution

Bulletin of Indian Academy of Sericulture, 20(1&2):11-15 (English)

218

Shang MK, Gao K, Guo XJ, Geng T, Jiang XX, Guo JY, Hou CX, Qin GX (2016)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

Sequence analysis and expression characterization of ecdysteroid 22-kinase 2 from silkworm, *Bombyx mori*

Canye Kexue, 42(6):997-1003 (Chinese)

219

Shi LL, Geng T, Wu P, Pan ZH, Qin GX, Gao K, Hou CX and Guo XJ (2016)

(School of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang, Jiangsu 212018, China)

MicroRNA Novel-31* up-regulates the expression of hemocytin gene in the silkworm, *Bombyx mori*

Acta Entomologica Sinica, 59(7):724-731 (Chinese)

220

Shi SL, Zhang Y, Wang GB, Wang Y, Liu YQ, Yang RS and Qin L (2017)

(College of Bioscience and Biotechnology, Shenyang Agricultural University, Insect Resource Engineering Research Center of Liaoning Province, Shenyang 110866, China)

Analysis of codon usage patterns in *Philosamia cynthia* Ricini nucleopolyhedrovirus and *Antheraea pernyi* nucleopolyhedrovirus

Canye Kexue, 43(1):77-83 (Chinese)

221

Shobahah J, Xue S, Hu D, Zhao C, Wei M, Quan Y and Yu W (2017)

(Zhejiang Provincial Key Laboratory of Silkworm Bioreactor and Biomedicine, Zhejiang Province, Hangzhou, 310018, People's Republic of China)

Quantitative phosphoproteome on the silkworm (*Bombyx mori*) cells infected with baculovirus

Virology Journal, 14(1):117 (English)

222

Tachibana A, Hamajima R, Tomizaki M, Kondo T, Nanba Y, Kobayashi M, Yamada H and Ikeda M (2017)

(Laboratory of Sericulture and Entomoresources, Graduate School of Bioagricultural Sciences, Nagoya University, Chikusa, Nagoya, 464-8601, Japan)

HCF-1 encoded by baculovirus AcMNPV is required for productive nucleopolyhedrovirus infection of non-permissive Tn368 cells

Scientific Reports, 7(1):3807 (English)

223

Tang FF, Zheng YQ, Bai XR and Chen B (2017)

(State Key Laboratory for Conservation and Utilization of Bio-Resources in Yunnan, College of Plant Protection, Yunnan Agricultural University, Kunming, China)

Changes in the resistance to nucleopolyhedrovirus and the expression levels of the related antimicrobial peptide and heat shock protein genes in *Bombyx mori* exposed to short-time heat shock

Acta Entomologica Sinica, 60(5): 505-512 (Chinese)

224

Tang XD, Ye QY, Yu J, Xu L and Shen ZY (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

iTRAQ-based quantitative analysis on proteomic difference in *Bombyx mori* testis infected with *Nosema bombycis*

Canye Kexue, 43(2):245-252 (Chinese)

225

Wang GW, Yu YC, Huang XH, Huang SH and Su L (2016)

(Guangxi Academy of Sciences, Nanning 530007, China)

Investigation on the heterogeneity of *Nosema bombycis* spores: Insights from single-cell Raman spectroscopy

Canye Kexue, 42(5):855-864 (Chinese)

226

Wang JJ, Bai WW, Zhou W, Liu J, Chen J, Liu XY, Xiang TT, Liu RH, Wang WH, Zhang BL and Wan YJ (2017)

(Laboratory of Invertebrate Pathology and Applied Microbiology, College of Biotechnology, Southwest University, Chongqing 400716, China)

Transcriptomic analysis of two *Beauveria bassiana* strains grown on cuticle extracts of the silkworm uncovers their different metabolic response at early infection stage

Journal of Invertebrate Pathology, 145:45-54 (English)

227

Wang ML, He F, Wang PY, Tang SM, Xia DG, Shen XJ and Zhao QL (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, Jiangsu Key Laboratory of Sericultural Biology and Biotechnology, Zhenjiang Jiangsu 212018, China)

Expressional regulation of *Bombyx mori* nucleopolyhedrovirus lef-1 gene by silkworm bmo-miR-217

Canye Kexue, 43(2):217-224 (Chinese)

228

Wang XY, Yu HZ, Xu JP, Zhang SZ, Yu D, Liu MH and Wang LL (2017)

(School of Life Sciences, Anhui Agricultural University, Hefei, 230036, People's Republic of China)

Comparative subcellular proteomics analysis of susceptible and near-isogenic resistant *Bombyx mori* (Lepidoptera) larval midgut response to BmNPV infection

Scientific Reports, 7:45690 (English)

229

Wankhade LN, Rao MM and Rathod MK (2016)

(Narayanrao Kale Smruti Model College, Karanja (GhA), District-Wardha, Maharashtra, India)

Nosematosis in the tropical tasar silkworm, *Antheraea mylitta* D

Bulletin of Indian Academy of Sericulture, 20(1&2):31-37 (English)

230

Wu P, Jiang X, Sang Q, Annan E, Cheng T and Guo X (2017)

(Sericultural Research Institute, Jiangsu University of Science and Technology, Zhenjiang, Jiangsu,)

Inhibition of miR-274-3p increases BmCPV replication by regulating the expression of BmCPV NS5 gene in *Bombyx mori*

Virus Genes, 53(4):643-649 (English)

231

Xing D, Yang Q, Jiang L, Li Q, Xiao Y, Ye M and Xia Q (2017)

(Sericulture and Agri-Food Research Institute, Guangdong Academy of Agricultural Sciences, Guangzhou 510610, China)

RNA-seq analyses for two silkworm strains reveals insight into their susceptibility and resistance to *Beauveria bassiana* infection

International Journal of Molecular Sciences 18(2): 234 (English)

232

Xing DQ, Li QR, Xiao Y, Ye MQ, Liu X, Yang Q, (2017)

(Sericulture and Agri-food Research Institute, Guangdong Academy of Agricultural Sciences, Guangzhou 510610, China)

Free fatty acids in cuticular and internal lipids of *Bombyx mori* and their inhibitory activity against *Beauveria bassiana*

Canye Kexue, 43(1):84-97 (Chinese)

233

Zhang Y, Cao G, Zhu L, Chen F, Zar MS, Wang S, Hu X, Wei, Y, Xue R and Gong C (2017)

(Suzhou Municipal Key Laboratory of Molecular Diagnostics and Therapeutics, Suzhou Institute of Biomedical Engineering and Technology, Chinese Academy of Sciences, Suzhou, 215163, People's Republic of China)

Integrin beta and receptor for activated protein kinase C are involved in the cell entry of *Bombyx mori* cypovirus

Applied Microbiology and Biotechnology, 101(9):3703-3716 (English)

234

Zhong S, Zhu JX, Li YG, Wang XG and Ji DF (2016)

(Sericultural Research Institute, Zhejiang Academy of Agricultural Sciences, Hangzhou 310021, China)

Toxicity test of insecticide butylene fipronil on BmN cells

Canye Kexue, 42(5):864-869 (Chinese)

235

Zhu F, Xiao S, Zhang Y, Shao Y, Tang F, Chen S and Bai X (2017)

(Institute of Sericulture and Apiculture, Yunnan Academy of Agricultural Sciences, Mengzi 661101, Yunnan, China)

Molecular characterization and expression analysis of Turtle protein in silkworm that is associated with *Nosema bombycis* infection

Journal of Molecular Epidemiology and Evolutionary Genetics in Infectious Diseases, 52:67-74 (English)

2.6. SEED TECHNOLOGY

236

Liao PF, Ding SM, Chen AL, Li QY, Luo SG, Zhu SF, Huang P and Dong ZP (2017)

(The Sericultural & Apicultural Research Institute, Yunnan Academy of Agricultural Sciences, Yunnan, Mengzi 661101, China)

Character features and genetic analysis of lethal red egg mutant Fuyin-lre of silkworm, *Bombyx mori*

Southwest China Journal of Agricultural Sciences, 30(4):969-974 (Chinese)

237

Nagaoka S, Asagoshi M, Kato K and Takata Y (2017)

(Department of Applied Biology, Kyoto Institute of Technology, Matsugasaki, Sakyo-ku, Kyoto 606-8585, Japan)

Success in the acquisition of *Bombyx mori* sperm motility is influenced by the extracellular production of nitric oxide (NO) in the presence of seminal fluid nitric oxide synthase (NOS)

Insect Biochemistry and Molecular Biology, 84:40-47 (English)

238

Vemananda Reddy G, Rajanna KL, Sarkar BN and Sarmah M (2016)

(Silkworm Seed Technology Laboratory, Central Silk Board, Kodathi, Carmalram Post, Bengaluru 560035, India)

Development of preservation techniques for eri silkworm eggs (*Samia ricini* Donovan: lepidoptera -Saturniidae)

Sericologia, 56(4): 247-252, (English)

239

Wazalwar SM and Rai MM (2016)

(Centre for Sericulture and Biological Pest Management Research, RTM Nagpur University, Nagpur-440022 (M S), India)

Rceceptor mediated oviposition preference in the silkworm, *Bombyx mori* L

Bulletin of Indian Academy of Sericulture, 20(1&2):45-49 (English)

3. PEST MANAGEMENT

240

Bhatia NK (2017)

(Silkworm Seed Production Centre, National Silkworm Seed Organisation, Central Silk Board, Udhampur (J & K) 182101, India)

Sex and season specific parasitic interaction between *Xanthopimpla pedator* fabricius (hymenoptera: ichneumonidae) and spinning larva of *Antheraea mylitta* (lepidoptera: saturniidae)

Sericologia 57(1): 20-31 (English)

241

Chai JP, Jiang XJ, Zhang YH, Ni J, Luo YJ, Xie QY and Bai XR, (2016)

(Institute of Sericulture and Apiculture, Yunnan Academy of Agicultural Sciences, Mengzi Yunnan 661101, China)

A preliminary study on genetic differentiation of *Pealius mori* populations in mulberry field of different sericultural areas of Yunnan Province

Canye Kexue 42(6):988-996 (Chinese)

242

Dashora K, Roy S, Nagpal A, Roy SM, Flood J, Prasad AK, Khetarpal R, Neave S and Muraleedharan N (2017)

(CABI South Asia-India, NASC Complex, PUSA, New Delhi, India)

Pest management through *Bacillus thuringiensis* (Bt) in a tea-silkworm ecosystem: Status and potential prospects

Applied Microbiology and Biotechnology 101(5):1795-1803 (English)

243

Narendra Kumar JB, Vinod Kumar and Sivaprasad V (2017)

(Central Sericultural Research and Training Institute, Mysuru 570008, India)

Holistic approach for effective management of silkworm uzi fly, *Exorista bombycis* (louis) (Diptera: Tachinidae)

Sericologia 57(1): 53-57, (English)

244

Song YX, Wang H, Zhang DH, Yang F, Zhen ZX and Yang GM (2016)

(Institute of Sericulture Hebei Universities R& 0 Center for Sericulture and Specialty Enabling Technologies, Medical University, Chengde Hebei 067000, China)

Artificial cultivation test of inonotus hispidus parasitizing on mulberry

Canye Kexue 42(6):1085-1091 (Chinese)

245

Subharani S, Ritwika Sur C, James K, Bidyapati Dev L and Sinha AK (2016)

(Regional Tasar Research Station, Mantripukhri, Imphal, Manipur, India)

Seasonal incidence and intensity of parasitization of uzi fly on *Antheraea proylei* under different climatic zones of Manipur

Sericologia 56(4): 229-234, (English)

246

Yang RS, Liu Y, Xu JS, Jiang YR, Wang Y, Shi SL, Dai XH, Qin U (2016)

(College of Bioscience and Biotechnology, Shenyang Agricultural University, Liaoning Engineering and Technology Research Center for Insect Resource, Shenyang 110866, China)

Preliminary identification of *Rhynchaenus* (Orchestes) *maculosus*, a newly-recorded pest species infesting oak in Liaoning tussah silkworm rearing area

canye kexue 42(5): 799-804 (Chinese)

247

Yukuhiro K, Kuwabara N and Komoto N (2017)

(Institute of Agrobiological Sciences, National Agriculture and Food Research Organization, I-2 Owashi, Tsukuba, Ibaraki 305-8634, Japan)

Pheromone dose and set height of pheromone traps for efficient collection of wild mulberry silkmoths, *Bombyx mandarina*

Journal of Insect Biotechnology and Sericology 86(2):55-57 (English)

4. NUTRITIONAL STUDIES

248

Anbu Radhika S, Sakthivel N and Sahayaraj K (2017)

(Crop Protection Research Centre, ST Xavier's College, Palayamkottai-627002, Tamil Nadu, India)

Acceptance of tertiary and non-food plants by eri silkworm, *Samia cynthia ricini* Boisduval (Lepidoptera: Saturniidae).

Munis Entomology and Zoology, 12 (1): 127-132 (English)

249

Deng MJ, Lin XD, Wen CW, Dong MJ, Lin QT, Zhang SZ and Xu JP (2017)

(School of Life Sciences, Anhui Agricultural University, Hefei, China)

Metabolic changes in the midgut of eri silkworm after oral administration of 1-deoxynojirimycin: A 1H-NMR-based metabonomic study

PloS one, 12(3):e0173213 (English)

250

Goo TW, Choi KH, Kim SR, Park SW and Kim SW (2017)

(Department of Biotechnology, Catholic University of Daegu, Daegu 38430, Republic of Korea)

Expression of the cyan fluorescent protein in fibroin H-chain of transgenic silkworm

International Journal of Industrial Entomology, 34(1):11-15 (English)

251

Sakthivel N (2016)

(Research Extension Centre, Central Silk Board, Srivilliputtur - 626 125, Tamil Nadu, India)

Evaluation of cassava varieties for eri silkworm, *Samia cynthia ricini* Boisduval

Munis Entomology and Zoology, 11 (1): 165-168 (English)

252

Shi G, Zhan P, Jin W, Fei J and Zhao L (2017)

(Huzhou Academy of Agricultural Sciences, Huzhou, Zhejiang, PR China)

Dietary TiO2 particles modulate expression of hormone-related genes in *Bombyx mori*

Archives of Insect Biochemistry and Physiology, 95(4):e21397 (English)

253

Song J, Tang D, Li Z, Tong X, Zhang J, Han M, Hu H, Lu C and Dai F (2017)

(Key Laboratory for Sericulture Functional Genomics and Biotechnology of Agricultural Ministry, College of Biotechnology, Chongqing, China)

Variation of lifespan in multiple strains, and effects of dietary restriction and BmFoxO on lifespan in silkworm, *Bombyx mori*

Oncotarget, 8(5):7294-7300 (English)

255

Tang WC, Xiao YY, Yang CF, Guo DD and Zhu Y (2016)

(School of Biotechnology, Southwest University, Chongqing 400716, China)

Reproductive damage and oxidative stress caused by fluoride in the silkworm, *Bombyx mori*

Acta Entomologica Sinica, 59(12):1308-1316 (Chinesee)

256

Zeng YR, Zhu FR, Lin Q, Zhu GS, Cui QY, Qiu CY and Zhang CH (2016)

(Sericultural Research Institute of Guangxi Zhuang Automomous Region, Nanning 530007, China)

Impact of starvation during grown larva stage on silkworm growth, development and characters of cocooning and laying eggs

Canye Kexue, 42(6):1019-1025 (Chinese)

5. POST COCOON TECHNOLOGY

257

Agrawal SK, Patil VM and Tayde SS (2016)

(College of Engineering and Technology, Akola, Maharashtra)

Composites based on eri-silk with unsaturated polyester resin

Asian Textile Journal, 25(12):68-72 (English)

258

Asakura T, Isobe K, Kametani S, Ukpebor OT, Silverstein MC and Boutis GS (2017)

(Department of Biotechnology, Tokyo University of Agriculture and Technology, Koganei, Tokyo 184-8588, Japan)

Characterization of water in hydrated *Bombyx mori* silk fibroin fiber and films by 2H NMR relaxation and 13C solid state NMR.

Acta Biomaterialia, 50:322-333 (English)

259

Chattopadhyay D, Chakraborty A and Chatterjee SM (2016)

(Zonal Office, Central Silk Technological Research Institute, Central Silk Board, Satyam Complex, Link Road, Bilaspur, Chhattisgarh 495001, India)

Structural characteristics of eri silk cocoons and fibres

Sericologia, 56(4):205-218 (English)

260

Deng TT, Guo NK, Peng YW, Cheng L, Tong XL, Lu C and Dai FY (2017)

(College of Textile and Garment, Southwest University, Chongqing Engineering Research Center of Biomaterial Fiber and Modern Textile, Chongqing 400715, China)

Influence of acid and alkali treatment on structure and property of *Bombyx mandarina* silk

Canye Kexue, 43(1):88-94 (Chinese)

261

Ge GP, Li Y, Jiang XK, Huang Y and Shen XM (2016)

(Inspection and Quarantine Technology Center, Guangxi Entry-Exit Inspection and Quarantine Bureau, Nanning 530021, China)

A comparative study of anti-microdegumming property of fresh cocoon raw silk and dried cocoon raw silk

Journal of Silk, 53 (2) : 26-31 (English)

262

Gotoh Y, Niimi S, Matsuura T and lshizuka Y (2017)

(Ilnstitute of Agrobiologlcal Sciences, National Agriculture and Food Research Organization, 1-'2 Ohwashi, Tsukuba, Ibaraki 305-8634, Japan)

Improvement of hydroxyapatite-coated nonwoven fabrics by coating with silk fibroin for use as a scaffold for culture of human hepatocellular carcinoma-derived FLC-5 cells

Journal of Insect Biotechnology and Sericology, 86(1):29-33 (English)

263

Hariraj G, Mahadevaiah BM and Subhas V Naik (2017)

(Central Silk Technological Research Institute, Central Silk Board, BTM Layout, Bengalum 560068, India)

Production of bulky raw silk yarn using cocoon entanglement method during the process of reeling

Sericologia, 57(1): 39-44, (English)

264

Jiang ZJ and Zuo BQ (2016)

(College of Textile and Clothing Engineering, Soochow University, Suzhou 215021, China)

Effects of acid alkali and alkali/oxidant on tensile properties of silk fibroin

Journal of Silk, 53 (5) : 17-29 (English)

265

Jo YY, Bae SM and Kweon HY (2017)

(Sericultural and Apicultural Materials Division, National Institute of Agricultural Science, RDA, Wanju-gun, 55365, Republic of Korea)

Dissolution of degummed *Antheraea yamamai* silkworm cocoon

International Journal of Industrial Entomology, 34(1) 6-10 (English)

267

Karthik T and Kavitha S (2017)

(Department of Textile Technology, PSG College of Technology, Coimbatore 641 004, India)

Sustainable silk materials

Asian Textile Journal, 26(4):46 -52 (English)

268

Kishimoto Y, Morikawa H, Yamanaka S and Tamada Y (2017)

(Faculty of Textile Science and Technology, Shinshu University, 3-15-1 Tokida, Ueda, Nagano 386-8567, Japan)

Electrospinning of silk fibroin from all aqueous solution at low concentration

Materials Science & Engineering C, Materials for Biological Applications, 73:498-506 (English)

269

Li SC, Huang YY, Zhang XH and Li MZ (2016)

(Institute of Applied Technology of Silk, Suzhou Vocational University, Suzhou 215104, China)

Study on application of DGT digital printing paste in pretreatment of silk

Journal of Silk, 53(3):23-26 (Engliah)

270

Li WW, Ning XY, Lin XP, Dai HX and Cheng HX (2016)

(National Engineering Lab for Textile Fiber Materials & Processing Technology (Zhejiang), Zhejiang Sci-Tech University, Hangzhou 310018, China)

Adsorption behavior of octylphenol ethoxylates on silk fabric

Journal of Silk, 53(09):1-8 (English)

271

Li YC, Dong YC, Cui GX, Li B and Wang P (2016)

(School of TextilesTianjin Polytechnic University, Tianjin 300387, China)

Preparation of Fe-silk fiber complex and its application in oxidative degradation of azo dye

Journal of Silk, 53(5):12-17 (English)

272

Ling XL, Lin HT, Ji CP and Wu XL (2017)

(College of Biological and Chemical Engineering, Guangxi University of Technology, Liuzhou Guangxi 545006, China)

Process optimization for degumming *Bombyx mori* silk with succinic acid

Canye Kexue, 43(2):282-287 (Chinese)

273

Ma V, Li Z, Dai FY and Cheng L (2016)

(College of Textiles & Garments, Southwest University, Chongqing 400715, China)

A review on modification of silk and silk fabrics

Canye Kexue, 42(6):1106-1112 (Chinese)

274

Pramod R, Subramanium V and Ramachandran M (2017)

(CTF, MPSTME, SVKM, NMIMS, Dhule, Maharashtra, India)

Performance of silk yarn with the effect of soaking in Mrudula soaking oil

Colourage, 64(1):41-44 (English)

275

Rajiv Munshi, Mazumdar S and Chattopadhyay D (2016)

(Silk Conditioning and Testing House (SCTH), CSTRI, Central Silk Board, Malda 732101, West Bengal, India)

Physical properties of microwave cured polycarboxylic acid cross-linked silk catalyzed with nano Ti02 photo catalyst and potassium sodium tartrate

Sericologia, 56(4):235-246 (English)

276

Shi TH, Hu HL, Du Z, Dai FY and Deng YM (2016)

(College of Textiles & Garments, Southwest University, Chongqing 400715, China)

Effects of several reducing agents on promoting Papain's function during silk degumming

Canye Kexue, 42(5):878-882 (Chinese)

277

Shi TH and Deng YM (2016)

(College of Textile and Clothing, Southwest University, Chongqing 400715, China)

The effect of papain treatment on fibroin

Journal of Silk, 53(3):27-31 (English)

278

Song HJ, Wang M, Gao YM, Cao Y and Li ZY (2016)

(Department of Material and Chemical Engineering, Henan Institute of Engineering, Zhengzhou 450007, China)

Application of lac dye in silk fabric printing

Journal of Silk, 53(10):7-13 (English)

279

Tang ZJ (2016)

(College of Information and Business, Zhongyuan University of Technology, Zhengzhou 451191, China)

Study on influence of silk fibroin/TiO2 composites on anti-wrinkle and anti-UV properties of cotton fabrics

Journal of Silk, 53(2):14-18 (English)

280

Wang F and Zhang YQ (2017)

(Silk Biotechnology Laboratory, School of Biology and Basic Medical Sciences, Soochow University, RM702-2303, NO 1e99, Renai Road, Dushuhu Higher Edu Town, Suzhou 215123, PR China)

Effects of alkyl polyglycoside (APG) on *Bombyx mori* silk degumming and the mechanical properties of silk fibroin fibre

Materials Science & Engineering C, Materials for Biological Applications, 74:152-158 (English)

281

Wang PL, Zhou JH, Liang RJ and Li YX (2017)

(School of Mechanical Engineering, Nanjing University of Science and Technology, Nanjing, China)

Identifying instrument of light fluffy cocoons based on FSG15N1A micro switch force sensor

Canye Kexue, 43(1):106-111 (Chinese)

282

Wang XF, Wang C, Wu L, Ying L and Yu ZC (2016)

(High Fashion (China) Co. Ltd., Hangzhou 311231, China)

Study on the one bath method of degumming and dyeing process of the interwoven elastic stain fabric made of silk and T400

Journal of Silk, 53 (04) : 18-25 (English)

283

Wang XF, Wu L, Zhang YP, Li XL and Yu ZC (2016)

(R&D Center in Daly (China) CO, LtD, Hangzhou 311231, China)

Study on the preparation of mosquito avoiding fabric by-cyclodextrin grafting silk and clathrating schizonepeta mosquito avoiding agent

Journal of Silk, 53(07):13-1 (English)

284

Wu X, Wu X, Yang B, Shao M and Feng G (2017)

(College of Materials and Textile, Zhejiang Sci-Tech University, Hangzhou, China)

Methanol-water-dependent structural changes of regenerated silk fibroin probed using terahertz spectroscopy

Applied Spectroscopy, 71(8):1785-1794 (English)

285

Xie SY, Jin ZM, Fan MS and Tao JW (2016)

(College of Materials and Textiles Zhejiang Sci-Tech University, Hangzhou 310018, China)

Study on thermal-wet comfort performance of mulberry silk seamless knitted fabric

Journal of Silk, 53(3):9-15 (English)

286

Xu A, Liu SQ, Wu GH, Zheng A, Guo HX and Dai JM (216)

(College of Textile Engineering, Taiyuan University of Technology, Jinzhong 030600, China)

Research on the flame retardant finishing and performances of silk/hemp fabrics

Journal of Silk 53(08):1-7 (English)

287

Yang JQ, Xing TL and Chen GQ (2017)

(National Engineering Laboratory of Modern Silk, Soochow University, Suzhou Jiangsu 215123, China)

Preparation, structure and property testing of hydroxyethyl methacrylate grafted silk fabric catalyzed by Horseradish peroxidase

Canye Kexue, 43(1):95-101 (Chinese)

288

Zhao DF, Yang YQ, Dong YY, Kiyoshi F and Hiroyuki H (2016)

(College of Textiles Ministry of Education, Donghua University, Shanghai 201620, China)

Study on bending properties of silk fabric and glass fiber mat reinforced composites

Journal of Silk, 53(04):1-7 (English)

289

Zhou L, Ding J, Wu YJ, Dong LX and Shao JZ (2016)

(College of Materials and Textiles, Hangzhou 310018, China)

Study on the formation of SiO2 colloidal microspheres on silk fabrics by vertical deposition self-assembly

Journal of Silk, 53(5):1-5 (English)

290

Zhu M, Pan ZJ, Zhao RZ and Wang JG (2016)

(College of Textile and Clothing Engineering, Soochow University, Suzhou 215021, China)

Wearability of spun silk/chitosan blended fabrics

Journal of Silk, 53(1):1-6 (English)

291

Zhu Y and Shen H (2016)

(Suzhou Silk Museum, Suzhou 215001, China)

Study on Song brocade with pattern of colorful silk ribbon and fourseason flowers

Journal of Silk, 53(1):21-35 (English)

6. 1. ECONOMICS AND STATISTICS

292

Jing D (2017)

(School of Accounting, Chongqing Technology and Business University, Chongqing 400067, China)

Interaction between object and etiquette: On emergence and descendance of the Pre-Qin ritual system

Canye Kexue, 43(1):132-138 (Chinese)

293

Sharma SK, (2016)

(Former Sericulture Development Officer, Bhandara Directorate of Sericulture, Government of Maharashtra)

Status of tasar eco-races and need of conservation

Bulletin of Indian Academy of Sericulture, 20(1&2):39-43 (English)

294

Wang L, Li JQ and Gu GD (2017)

(School of Economics, Zhejiang University, Hangzhou 310027, China)

Pricing power of China's cocoon and silk products in international market: An empirical analysis based on international market power

Canye Kexue, 43(2):327-335 (Chinese)

6.2. EXTENSION MANAGEMENT

295

Joycy Rani D, Jayaram H and Sivaprasad V (2017)

(Central Sericultural Research and Training Institute, Mysuru)

Approaches to assess the economic impact of climate change on sericulture

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:99 (English)

296

Joycy RD and Bhakthavatsalam KVS (2017)

(Central Sericuitural Reseerch and Training Institute, Mysuru-570 008)

An overview of finance in sericulture

Agrobios Newsletter, XV(OS):119-120 (English)

297

Junting H (2016)

(The Sericultural Research Institute, Chinese Academy of Agricultural Sciences, Zhenjiang Jiangsu 212018, China)

Exploitation and inovation in sericulture, comments on mulberry genome

Canye Kexue, 42(5):753-757 (Chinese)

298

Liu LX and Xu MD (2016)

(China Academy of Art Post-doctoral Research Flow Station, Hangzhou 310002, China)

Eye tracker experimental study in silk product window display

Journal of Silk, 53(09):37-42 (English)

299

Luikham R, Keisa TJ, Bidyapati L, Sinha AK and Oeigler RS (2017)

(Regional Tasar Research Station, Central Silk Board, Imphal - 795002, Manipur, India)

Biodiversity of sericigenous Saturniidae of Manipur in India

Munis Entomology and Zoology, 12(2):500-507 (English)

300

Sargunamani D, Raghu K, Khadar KMA and Subhas V Naik (2017)

(Silk Conditioning and Testing House, Central Silk Technological Research Institute, Central Silk Board, Kancheepuram 631502, India)

Application of total quality management (TQM) concepts for business improvement in a silk dyeing unit at Kancheepuram

Sericologia, 57(1):58-62 (English)

301

Sreenivasa B, Noble Morrison M and Manjunath D (2017)

(Department of Studies in Sericulture Science, University of Mysore, Manasagangotri, Mysuru 570006, India)

Influence of agronomic practices on the incidence of sucking insect pests of mulberry in Kolar region (Karnataka, India)

Sericologia, 57(1):10-19 (English)

302

Srinivasa G, Parthasarathy BA, Somi Reddy J and Angadi BS (2016)

(National Silkworm Seed Organization, Central Silk Board, Bengaluru 560068, India)

Determinants of bivoltine sericulture technology adoption in sericultural clusters of Southern India - An analysis

Sericologia, 56(4): 262-265 (English)

303

Sunil Kumar T, Ramakrishna Naika, Muralimohan K and Manjunatha KL (2017)

(University of Agricultural Sciences, Bangalore)

ITK practices adopted by the farmers to avoid the pesticide toxicity in major mulberry growing areas of Karnataka

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:547 (English)

304

Wen R, Zhang J and Ma YX (2016)

(Key Laboratory of Textile Science and Technology, Ministry of Education, Donghua University, Shanghai 201620, China)

Study on transformation of educational model of silk product design in the late Qing dynasty and the early Republic of China

Journal of Silk, 53(3):57-63 (English)

305

Xu XH, Jiang XF, Nie T, Fang XH, Xu XQ, Gen Y and Shao HY (2016)

(The Chunan County Cocoon Corporation, Chunan 311700, China)

Chun'an county cocoon industry development present situation and counter measures

Journal of Silk, 53(06):76-81 (English)

6.3. VALUE ADDED PRODUCTS

306

Atmika P, Hamamoto H, Suresh P, Kaneko K, Matsunaga S, Kanai M, Suzuki Y and Sekimizu K (2017)

(Institute of Medical Mycology, Teikyo University, Hachioji, Tokyo, Japan)

A novel spiro-heterocyclic compound identified by the silkworm infection model inhibits transcription in *Staphylococcus aureus*

Frontiers in Microbiology, 8:712 (English)

307

Bhattacharjee P, Maiti TK, Bhattacharya D and Nandi SK (2017)

(Materials Science Centre, Indian Institute of Technology Kharagpur, West Bengal 721302, India)

Effect of different mineralization processes on *in vitro* and *in vivo* bone regeneration and osteoblast-macrophage cross-talk in co-culture system using dual growth factor mediated non-mulberry silk fibroin grafted poly (α-caprolactone) nanofibrous scaffold

Colloids and Surfaces B, Biointerfaces, 156:270-281 (English)

308

Cai R, Tao G, He H, Guo P, Yang M, Ding C, Zuo H, Wang L, Zhao P and Wang Y (2017)

(College of Biotechnology, Southwest University, Beibei, Chongqing 400715, China)

In situ synthesis of silver nanoparticles on the polyelectrolyte-coated sericin/PVA film for enhanced antibacterial application

Materials (Basel, Switzerland), 10(8):967 (English)

309

Cao YG, Zheng XK, Yang FF, Li F, Qi M, Zhang YL, Zhao X, Kuang HX and Feng WS (2017)

(School of Pharmacy , Henan University of Chinese Medicine , Zhengzhou , PR. China)

Two new phenolic constituents from the root bark of *Morus alba* L and their cardioprotective activity

Natural Product Research, 2017:1-8 (English)

310

Chaisabai W, Khamhaengpol A and Siri S (2017)

(School of Biology , Institute of Science, Suranaree University of Technology , Nakhon Ratchasima , ThailanD)

Sericins of mulberry and non-mulberry silkworms for eco-friendly synthesis of silver nanoparticles

Artificial Cells, Nanomedicine and Biotechnology, May 2017:1-8 (English)

311

Chaita E, Gikas E and Aligiannis N (2017)

(Division of Pharmacognosy and Natural Products Chemistry, Faculty of Pharmacy, University of Athens, Panepistimiopolis Zografou, Athens, 15771, Greece)

Integrated HPTLC-based methodology for the tracing of bioactive compounds in herbal extracts employing multivariate chemometrics - A case study on *Morus alba*

Phytochemical Analysis, 28(2):125-131 (English)

312

Chen Y, Li Q, Zhao T, Zhang Z, Mao G, Feng W, Wu X and Yang L (2017)

(School of the Environment and Safety, Jiangsu University, 301 Xuefu RD, 212013 Zhenjiang, Jiangsu, China)

Biotransformation and metabolism of three mulberry anthocyanin monomers by rat gut microflora

Food Chemistry, 237:887-894 (English)

313

Chirila TV, Suzuki S and Papolla C (2017)

(Faculty of Science, The University of Western Australia, Crawley, Australia)

A comparative investigation of *Bombyx mori* silk fibroin hydrogels generated by chemical and enzymatic cross-linking

Biotechnology and Applied Biochemistry, 64(6):771-781 (English)

314

Ebrahim A, Animut G, Urge M and Hailemichael A (2017)

(Department of Animal Production and Technology, Aksum University, PO Box 314, Shire, Ethiopia)

Effect of substituting dried mulberry (*Morns alba*) leaves for concentrate mixture on growth performance and carcass characteristics in lambs fed a natural pasture hay based diet

Indian Journal of Animal Nutrition, 34(1):13-20 (English)

315

El-Qutob D, Bartolome B, Cuesta J, Mir A, Alberola A and Pastor-Vargas C (2017)

(Unit of Allergy, University Hospital of La Plana, Vila-Real, Spain)

Identification of a lipid transfer protein as a new allergen from *Morus alba* pollen

Journal of Investigational Allergology and Clinical Immunology, 27(4):263-265 (English)

316

Fan ZQ, Wang N, Zhu L, Zou DQ, Shi XQ, Yu ZC and Guo G (2016)

(The Sericultural Research Institute ot Shandang Province, Yantai Shandang 264002, China)

Effects of processing technological conditions on 1-Deoxynojirimycin content in mulberry leaf tea

Canye Kexue, 42(6):1062-1067 (Chinese)

317

Feng ML, Zhang Q, Zhu LJ and Yang MY (2017)

(Research Institute ot Applied Biaresaurces, Callege ot Animal Science, Zhejiang University, Hangzhau 310058, China)

Surface property regulation and biomimetic mineralization of silk fibroin fibers by air-plasma technology

Canye Kexue, 43(1):124-131 (Chinese)

318

Gao H, Teng CP, Huang D, Xu W, Zheng C, Chen Y, Liu M, Yang DP, Lin M, Li Z and Ye E (2017)

(The Second Affiliated Hospital of Fujian Medical University, Quanzhou, China)

Microwave assisted synthesis of luminescent carbonaceous nanoparticles from silk fibroin for bioimaging

Materials Science and Engineering C, Materials for Biological Applications, 80:616-623 (English)

319

Gao L, Li YD, Zhu BK, Li ZY, Huang LB, Li XY, Wang F, Ren FC and Liao TG (2017)

(Technical Center of China Tobacco Yunnan Industrial Co. Ltd., Kunming 650231, China)

Two new prenyl flavonoids from *Morus alba*

Journal of Asian Natural Products Research, Jun 2017:1-5 (English)

320

Han Q, Gao H, Chen H, Fang X and Wu W (2017)

(Food Science Institute, Zhejiang Academy of Agricultural Science, Key Laboratory of Fruits and Vegetables Postharvest and Processing Technology Research of Zhejiang Province, Hangzhou 310021, China)

Precooling and ozone treatments affects postharvest quality of black mulberry (*Morus nigra*) fruits

Food Chemistry, 221:1947-1953 (English)

321

He H, Cai R, Wang Y, Tao G, Guo P, Zuo H, Chen L, Liu X, Zhao P and Xia Q (2017)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, Beibei, Chongqing 400715, China)

Preparation and characterization of silk sericin/PVA blend film with silver nanoparticles for potential antimicrobial application

International Journal of Biological Macromolecules, 104(Pt A):457-464 (English)

322

Honda S, Loher P, Morichika K, Shigematsu M, Kawamura T, Kirino Y, Rigoutsos I and Kirino Y (2017)

(Computational Medicine Center, Sidney Kimmel Medical College, Thomas Jefferson University, Philadelphia, Pennsylvania, USA)

Increasing cell density globally enhances the biogenesis of Piwi-interacting RNAs in *Bombyx mori* germ cells

Scientific Reports, 7(1):4110 (English)

323

Hu XQ, Thakur K, Chen GH, Hu F, Zhang JG, Zhang HB and Wei ZJ (2017)

(Department of Neurology, The Affiliated Chaohu Hospital of Anhui Medical University, Chaohu , Hefei 238000, People's Republic of China)

Metabolic effect of 1-Deoxynojirimycin from mulberry leaves on db/db diabetic mice using liquid chromatography-mass spectrometry based metabolomics

Journal of Agricultural and Food Chemistry, 65(23):4658-4667 (English)

324

Jeong KY, Han IS, Lee JY, Park KH, Lee JH and Park JW (2017)

(Department of Internal Medicine, Institute of Allergy, Yonsei University College of Medicine, Seoul 03722, Republic of Korea)

Role of tropomyosin in silkworm allergy

Molecular Medicine Reports, 15(5):3264-3270 (English)

325

Ji SD, Son JG, Kim SW, Kim NS, Kim KY, Kweon HY, Seong GB and Koh YH (2017)

(Department of Agricultural Biology, National Academy of Agricultural Science, Rural Development Administration, Wanju-gun, Jeollabukdo, Republic of Korea)

Production techniques to improve the quality of steamed and freeze-dried mature silkworm larval powder

International Journal of Industrial Entomology, 34(2):17-22 (English)

326

Jiang Y, Dai M, Nie WJ, Yang XR and Zeng XC (2017)

(Department of Laboratory Medicine, Chengdu Medical College, Chengdu 610500, China)

Effects of the ethanol extract of black mulberry (*Morus nigra* L) fruit on experimental atherosclerosis in rats

Journal of Ethnopharmacology, 200:228-235 (English)

327

Józefczuk J, Malikowska K, Glapa A, Stawiska W, Nowak JK, Bajerska J, Lisowska A and Walkowiak J (2017)

(Pediatric Division, City Hospital, 39-360 Nowa Deba, Poland)

Mulberry leaf extract decreases digestion and absorption of starch in healthy subjects - A randomized, placebo-controlled, crossover study

Advances in Medical Sciences, 62(2):302-306 (English)

328

Júnior IIDS, Barbosa HM, Carvalho DCR, Barros RA, Albuquerque FP, da Silva DHA, Souza GR, Souza NAC, Rolim LA, Silva FMM, Duarte GIBP, Almeida JRGDS, de Oliveira Júnior FM, Gomes DA and Lira EC (2017)

(Department of Physiology and Pharmacology, Federal University of Pernambuco, Recife, PE, Brazil)

Brazilian *Morus nigra* attenuated hyperglycemia, dyslipidemia, and prooxidant status in alloxan-induced diabetic rats

The Scientific World Journal, 2017:5275813 (English)

329

Kheawfu K, Pikulkaew S, Hamamoto H, Sekimizu K and Okonogi S (2017)

(Nanoscience and Nanotechnology Program, The Graduate School, Chiang Mai University)

Influence of clove oil and eugenol on muscle contraction of silkworm (*Bombyx mori*).

Drug Discoveries and Therapeutics, 11(2):64-69 (English)

330

Kim Y, Lee M, Choi H, Baek I, Kim JI and Na S (2017)

(Department of Mechanical Engineering , Korea University , Seoul 02841 , Republic of Korea)

Mechanical features of various silkworm crystalline considering hydration effect via molecular dynamics simulations

Journal of Biomolecular Structure and Dynamics, 2017:1-9 (English)

331

Kuk EB, Jo AR, Oh SI, Sohn HS, Seong SH, Roy A, Choi JS and Jung HA (2017)

(Department of Food Science and Human Nutrition, Chonbuk National University, Jeonju, 54896, Republic of Korea)

Anti-Alzheimer's disease activity of compounds from the root bark of *Morus alba* L

Archives of Pharmacal Research, 40(3):338-349 (English)

332

Kumar JP and Mandal BB (2017)

(Biomaterial and Tissue Engineering Laboratory, Department of Biosciences and Bioengineering, Indian Institute of Technology Guwahati (IITG), Guwahati 781039, Assam, India)

Antioxidant potential of mulberry and non-mulberry silk sericin and its implications in biomedicine

Free Radical Biology and Medicine, 108:803-818 (English)

333

Kwak HW, Ju JE, Shin M, Holland C and Lee KH (2017)

(Department of Biosystems and Biomaterials Science and Engineering, Seoul National University , Seoul 151-921, Korea)

Sericin promotes fibroin silk l stabilization across a phase-separation

Biomacromolecules, 18(8):2343-2349 (English)

334

Kwon QC, Ju WT, Kim HB, Sung GB and Kim YS (2017)

(Sericultural and Apicultural Materials Division, National Academy of Agricultural Science, RDA, Wanju-gun, 565-851, Republic of Korea)

Effect of pH values and inoculation amounts for a-glucosidase inhibitory activity in mulberry leaf fermentation

International Journal of Industrial Entomology, 34(2):38-44 (English)

335

Lee HM, Ezhil Vilian AT, Kim JY, Chun MH, Suh JH, Seo HH, Cho S H, Shin IS, Kim SJ, Park SH, Han YK, Lee JH and Huh YS (2017)

(Department of Biological Engineering, Biohybrid Systems Research Center (BSRC), Inha University, Incheon 22212, Republic of Korea)

Design and development of caffeic acid conjugated with *Bombyx mori* derived peptide biomaterials for anti-aging skin care applications

RSC Advances, 7:30205-30213 (English)

336

Li D, Jacobsen MM, Gyune RN, Backman D, Kaplan DL and Wong JY (2017)

(Department of Biomedical Engineering, Boston University, 44 Cummington Mall, Boston, MA 02215, United States of America)

Introducing biomimetic shear and ion gradients to microfluidic spinning improves silk fiber strength

Biofabrication, 9(2):025025 (English)

337

Li HJ, Wang ZG, Tian HT, Yan AH, Lyu F and Bi YG (2017)

(College of Forestry, Agricultural University of Hebei, Key Laboratory of Germplasm Resources of Forest Tree and Forest Protection of Hebei Province, Baoding Hebei 071000, China)

Optimization of ultrasonic-assisted ethanol extraction of anthocyanins from mulberry fruits using response surface methodology

Canye Kexue, 43(2):304-310 (Chinese)

338

Li L, Chen QQ and Xing TL (2016)

(College of Textile and Clothing Engineering, Soochow University, Suzhou 215021, China)

Preparation of self-healing hydrophobic silk fabric

Journal of Silk, 53(07):7-13 (English)

339

Li PP, Jiang Y, Ran RF, Chu YN, Su R and Chen S (2017)

(Institute of Sericulture and Apiculture, Yunnan Academy of Agricultural Sciences, Mengzi Yunnan 661101, China)

A Preliminary survey on fruit traits of 28 wild mulberry germplasm resources in Yunnan sericutural area

Canye Kexue, 43(1):156-162 (Chinese)

340

Li S, Zhang HH, Lu LH and Zhang WP (2016)

(Institute of Biochemistry, College of Life Science, Zhejiang Sci-Tech University, Zhejiang Provincial Key Laboratory of Silkworm Bioreactor and Biomedicine, Hangzhou 310018, China)

Expression of amyloid p-protein in *Bombyx mori* culture cells and larvae using baculovirus expression system

Canye Kexue, 42(5):850-855 (Chinese)

341

Li W, Zhang Z, Lin L and Terenius O (2017)

(School of Life Science and Medicine, Dalian University of Technology, Dalian 116024, China)

Antheraea pernyi (Lepidoptera: Saturniidae) and its importance in sericulture, food consumption, and traditional Chinese medicine

Journal of Economic Entomology, 110(4):1404-1411 (English)

342

Li Y, Meng Q, Zhou B and Zhou Z (2017)

(College of Animal Science and Technology, China Agricultural University, Beijing, 100193, People's Republic of China)

Effect of ensiled mulberry leaves and sun-dried mulberry fruit pomace on the fecal bacterial community composition in finishing steers

BMC Microbiology, 17(1):97 (English)

343

Liang GQ, Wu JJ, Huang ZY, Li Q, Lu CX, Dong GQ, Zhou XL, Wu J and Tan WY (2016)

(Sericultural Research Institute, Guangxi Zhuang Autonomous Region, Nanning 530007, China)

Process optimization for fixation and drying of mulberry leaf

Canye Kexue, 42(5):892-896 (Chinese)

344

Liu CG, Ma YP and Zhang XJ (2017)

(Endocrinology Department, Zhumadian Center Hospital, Henan Province, China)

Effects of mulberry leaf polysaccharide on oxidative stress in pancreatic ß-cells of type 2 diabetic rats

European Review for Medical and Pharmacological Sciences, 21(10):2482-2488 (English)

345

Liu D, Chen H, Pu JS, Xiang ZH and Yang GG (2016)

(State Key Laboratory of Silkworm Genome Biology, Chongqing 400715, China)

Extraction process optimization and antioxidant activity analysis of total polyphenols from medicinal mulberry fruit

Canye Kexue, 42(6):1068-1076 (Chinese)

346

Lown M, Fuller R, Lightowler H, Fraser A, Gallagher A, Stuart B, Byrne C and Lewith G (2017)

(Primary Care and Population Sciences, Faculty of Medicine, University of Southampton, Aldermoor Health Centre, Southampton, United Kingdom)

Mulberry-extract improves glucose tolerance and decreases insulin concentrations in normoglycaemic adults: Results of a randomised double-blind placebo-controlled study

PloS one, 12(2):e0172239 (English)

347

Ma L, Zhang L, Zhang JX, Wu GH, Huang JQ and Li L (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, The Sericultural Research Institute, Chinese Academy of Agricultural Sciences, Zhenjiang Jiangsu 212018, China)

Research progress in converged application of nanomaterials, silk and silkworm on mutual modification

Canye Kexue, 43(1):147-155 (Chinese)

348

Ma S, Xia X, Li Y, Sun L, Liu Y, Liu Y, Wang X, Shi R, Chang J, Zhao P, Xia Q, (2017)

(Chongqing Engineering and Technology Research Center for Novel Silk Materials, Southwest University, 2, Tiansheng Road, Beibei, Chongqing, 400716, China)

Increasing the yield of middle silk gland expression system through transgenic knock-down of endogenous sericin-1.

Molecular Genetics and Genomics, 292(4):823-831 (English)

349

Matsuda S, Nerome R, Maegawa K, Kotaki A, Sugita S, Kawasaki K, Kuroda K, Yamaguchi R, Takasaki T and Nerome K (2017)

(The Institute of Biological Resources, 893-2, Nakayama, Nago-shi, Okinawa 905-0004, Japan)

Development of a Japanese encephalitis virus-like particle vaccine in silkworms using codon-optimised prM and envelope genes

Heliyon, 3(4):e00286 (English)

350

Morokuma D, Xu J, Hino M, Mon H, Merzaban JS, Takahashi M, Kusakabe T and Lee JM (2017)

(Laboratory of Insect Genome Science, Kyushu University Graduate School of Bioresource and Bioenvironmental Sciences, Hakozaki 6-10-1, Higashi-ku, Fukuoka, 812-8581, Japan)

Expression and characterization of human ß-1, 4-galactosyltransferase 1 (ß4GalT1) using silkworm-baculovirus expression system

Molecular Biotechnology, 59(4-5):151-158 (English)

351

Oh NS, Lee JY, Lee JM, Lee KW and Kim Y (2017)

(R&D Center, Seoul Dairy Cooperative, Ansan, Gyeonggi, South Korea)

Mulberry leaf extract fermented with *Lactobacillus acidophilus* A4 ameliorates 5-fluorouracil-induced intestinal mucositis in rats

Letters in Applied Microbiology, 64(6):459-468 (English)

352

Otsuki R, Yamamoto M, Matsumoto E, Iwamoto SI, Sezutsu H, Suzui M, Takaki K, Wakabayashi K, Mori H and Kotani E (2017)

(Department of Applied Biology, Kyoto Institute of Technology, Sakyo-ku, Kyoto 606-8585, Japan)

Bioengineered silkworms with butterfly cytotoxin-modified silk glands produce sericin cocoons with a utility for a new biomaterial

Proceedings of the National Academy of Sciences USA, 114(26):6740-6745 (English)

354

Panthee S, Paudel A, Hamamoto H and Sekimizu K (2017)

(Institute of Medical Mycology, Teikyo University Tokyo, Japan)

Advantages of the silkworm as an animal model for developing novel antimicrobial agents

Frontiers in Microbiology 2017, 8:373 (English)

355

Pel P, Chae HS, Nhoek P, Kim YM and Chin YW (2017)

(College of Pharmacy and Integrated Research Institute for Drug Development, Dongguk University-Seoul , 32, Dongguk-lo, Goyang-si, Gyeonggi-do 10326, Korea)

Chemical constituents with proprotein convertase subtilisin/kexin type 9 mRNA expression inhibitory activity from dried immature *Morus alba* fruits

Journal of Agricultural and Food Chemistry, 65(26):5316-5321 (English)

356

Qiu W, Wu J, Choi JH, Hirai H, Nishida H and Kawagishi H (2017)

(Graduate School of Science and Technology, Shizuoka University, Shizuoka, Japan)

Cytotoxic compounds against cancer cells from *Bombyx mori* inoculated with *Cordyceps militaris*

Bioscience, Biotechnology and Biochemistry, 81(6):1224-1226 (English)

357

Rebai O, Belkhir M, Boujelben A, Fattouch S and Amri M (2017)

(Research Unit of Functional Neurophysiology and Pathology, 00/UR/08-01, Faculty of Science of Tunis, University El Manar, 2092, Tunis, Tunisia)

Morus alba leaf extract mediates neuroprotection against glyphosate-induced toxicity and biochemical alterations in the brain

Environmental Science and Pollution Research International, 24(10):9605-9613 (English)

358

Riche DM, Riche KD, East HE, Barrett EK and May WL (2017)

(The University of Mississippi School of Pharmacy, Jackson, MS, United States)

Impact of mulberry leaf extract on type 2 diabetes (Mul-DM): A randomized, placebo-controlled pilot study

Complementary Therapies in Medicine, 32:105-108 (English)

359

Shi XY, Xu XH, Jin CQ, Liu X, Sheng S, Wu GH, Wu F and Wang J (2016)

(Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212003, China)

Regulatory function of Fe3+ and Zn2+ in defatted silkworm pupal hydrolysate on lipid production from *Yarrowia lipolytica*

Canye Kexue, 42(5):901-909 (Chinese)

360

Shuai YJ, Yang MY, Zhu LJ and Zhu YJ (2016)

(Research Institute of Applied Bioresources, College of Animal Science, Zhejiang University, Hangzhou 310058, China)

Effects of *Bombyx mori* sericins of two molecular weights on proliferation of cancer cells and adult stem cells

Canye Kexue, 42(6):1092-1098 (Chinese)

361

Soonthornsit N, Pitaksutheepong C, Hemstapat W, Utaisincharoen P and Pitaksuteepong T (2017)

(Department of Pharmaceutical Technology, Faculty of Pharmaceutical Sciences and Center of Excellence for Innovation in Chemistry, Naresuan University, Tha Pho, Mueang Phitsanulok, Phitsanulok 65000, ThailanD)

In vitro anti-inflammatory activity of *Morus alba* L stem extract in LPS-stimulated RAW 264.7 cells

Evidence-based Complementary and Alternative Medicine: ECAM, 2017:3928956 (English)

362

Tchabo W, Ma Y, Kwaw E, Zhang H, Xiao L and Tahir HE (2017)

(School of Food and Biological Engineering, Jiangsu University, 301 Xuefu Road, Zhenjiang 212013, PR China)

Aroma profile and sensory characteristics of a sulfur dioxide-free mulberry (*Morus nigra*) wine subjected to non-thermal accelerating aging techniques

Food Chemistry, 232:89-97 (English)

363

Thirumalaisamy GY, Malik PK, Kolte AP, Poornachandra KT and Bhatta R (2017)

(ICAR-Nationallnstitute of Animal Nutrition and Physiology, Adugodi, Bengaluru)

Methane amelioration using graded levels of silkworm pupae (*Bombyx mori*) oil

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:463 (English)

364

Vidhathri BS, Vijayalakshmi, Vishaka GV, Narayanaswamy TK, Mahesh DS, Muthuraju R and Vidyashree DN (2017)

(Department of Sericulture, University of Agricultural Sciences, GKVK, Bengaluru)

Silkorm pupal residue value added products for human consumption

XIII Agricultural Science Congress - 2017 Climate Smart Agriculture 21-24, February 2017, UAS, Bengaluru, p:34 (English)

365

Wang C, Zhi S, Liu C, Xu F, Zhao A, Wang X, Ren Y, Li Z and Yu M (2017)

(College of Biotechnology, Southwest University , NO 2 Tiansheng Road, BeiBei District, Chongqing 400716, China)

Characterization of stilbene synthase genes in mulberry (*Morus atropurpurea*) and metabolic engineering for the production of resveratrol in *Escherichia coli*

Journal of Agricultural and Food Chemistry, 65(8):1659-1668 (English)

366

Wang LJ, Lei CH, Zhu HJ and Chen JY (2016)

(Zhejiang Provincal Key Laboratory of Fiber Materials and Manufacturing Technology, Zhejiang Sci- Tech University, Hangzhou 310018, China)

Morphological structure and hemostatic property of silk fibroin peptides prepared by enzymatic digestion

Canye Kexue, 42(6):1099-1105 (Chinese)

367

Wang P and Zuo BQ (2016)

(College of Textile and Clothing Engineering, Soochow University, Suzhou 215021, China)

Preparation and characterization of the silk fibroin films in different salt/formic acid dissolution system

Journal of Silk, 53(07):18-23 (English)

368

Wang X, Zhang JH, Yao L, Pang LY and Tang T (2016)

(Soil and Fertilizer Research Institute, Sichuan Academy of Agricultural Sciences, Chengdu, China)

The status of quantitative analysis and utilization of various components in silkworm excrement

Canye Kexue, 42(5):918-925 (Chinese)

369

Wu HY, Zhou Y and Zuo BQ (2016)

(Suzhou Institute of Trade & Commerce, Suzhou 215 009, China)

Preparation of silk fibroin artificial ligaments and analysis on its property

Journal of Silk, 53(07):1-7 (English)

370

Wu TF, Chan YY, Shi WY and Jhong MT (2017)

(Department of Biotechnology, Southern Taiwan University of Science and Technology, Tainan 71005, Taiwan)

Uncovering the molecular mechanism of anti-allergic activity of silkworm pupa-grown *Cordyceps militaris* fruit body

The American Journal of Chinese Medicine, 45(3):497-513 (English)

371

Yagi A, Uchida R, Hamamoto H, Sekimizu K, Kimura KI and Tomoda H (2017)

(Graduate School of Pharmaceutical Sciences, Kitasato University, Tokyo, Japan)

Anti-Mycobacterium activity of microbial peptides in a silkworm infection model with *Mycobacterium smegmatis*

The Journal of Antibiotics, 70(5):685-690 (English)

372

Yamashita M, Xu J, Morokuma D, Hirata K, Hino M, Mon H, Takahashi M, Hamdan SM, Sakashita K, Iiyama K, Banno Y, Kusakabe T and Lee JM (2017)

(Laboratory of Insect Genome Science, Kyushu University Graduate School of Bioresource and Bioenvironmental Sciences, 6-10-1 Hakozaki Higashi-ku, Fukuoka, 812-8581, Japan)

Characterization of recombinant thermococcus kodakaraensis (KOD) DNA polymerases produced using silkworm-baculovirus expression vector system

Molecular Biotechnology, 59(6):221-233 (English)

373

Yan H, Guo C, Di DD, Li X, Liu L, Liang MX and Xiong M (2016)

(School of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

Establishment of partial least square regression model for determination of soluble solid content in mulberry fruit by handheld near infrared spectrometer

Canye Kexue, 42(6):1077-1084 (Chinese)

374

Yang YM, Wu QY, Kuang C, Zhang XF, Gui ZZ and Jia JQ (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu, China)

Analysis on amino acid composition and nutrition of *Bombyx mori* silk fibroin and *in vitro* antioxidant activity of its enzyme digestion product

Canye Kexue, 43(1):118-123 (Chinese)

375

Yimam M, Jiao P, Hong M, Brownell L, Lee YC, Hyun EJ, Kim HJ, Nam JB, Kim MR and Jia Q (2017)

(Unigen Inc., 3005, 1st Avenue, Seattle, WA, 98121, USA)

UP601, a standardized botanical composition composed of *Morus alba*, *Yerba mate* and *Magnolia officinalis* for weight loss

BMC Complementary and Alternative Medicine, 17(1):114 (English)

376

Yu K, Lu F, Li Q, Zou Y, Xiao Y, Lu B, Liu J, Dai F, Wu D and Lan G (2017)

(College of Textile and Garments, Southwest University, Chongqing 400715, China)

Accelerated wound-healing capabilities of a dressing fabricated from silkworm cocoon

International Journal of Biological Macromolecules, 102:901-913 (English)

377

Yu K, Lu F, Li Q, Chen H, Lu B, Liu J, Li Z, Dai F, Wu D and Lan G (2017)

(College of Textile and Garments, Southwest University, Chongqing, 400715, China)

In situ assembly of Ag nanoparticles (AgNPs) on porous silkworm cocoon-based would film: Enhanced antimicrobial and wound healing activity

Scientific Reports, 7(1):2107 (English)

378

Zhan PF, Huang SH, Liu YC, Dong JM and Xu YS (2016)

(Huzhou Academy of Agricultural Sciences, Huzhou Zhejiang 313000, China)

Construction of transgenic *Bombyx mori* lines expressing type human collagen-like protein and Prolyl 4-Hydroxylase u-subunit

Canye Kexue, 42(5): 832-839 (Chinese)

379

Zhang HY, Huang XZ, Zheng W, Wang NW, Han MJ and Shen YH (2016)

(State Key Laboratory of Silkworm Genome Biology, Key Laboratory for Sericulture Functional Genomics and Biotechnology of Agricultural Ministry, Southwest University, Chongqing 400715, China)

Screening microorganism agents to ameliorate main nutrient contents of fermented mulberry leaf forage

Canye Kexue, 42(6):1053-1061 (Chinese)

380

Zhao X, Ji GS, Li Q, Cao XT, Zhang DZ, Min WL and Zhang W (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

Process optimization for enzyme-assisted extraction of 1-Deoxynojirimycin from mulberry leaves using response surface methodology

Canye Kexue, 43(2):311-317 (Chinese)

381

Zhou M, Chen Q, Bi J, Wang Y and Wu X (2017)

(Institute of Food Science and Technology, CAAS/Key Laboratory of Agro-Products Processing, Ministry of Agriculture, Beijing 100193, China)

Degradation kinetics of cyanidin 3-O-glucoside and cyanidin 3-O-rutinoside during hot air and vacuum drying in mulberry (*Morus alba* L) fruit: A comparative study based on solid food system

Food Chemistry, 229:574-579 (English)

382

Zhou Y and Wu HY (2016)

(Clothing and Media Arts College of Textiles, Suzhou Institute of Trade & Commerce, Suzhou 215009, China)

Property and application of regenerated silk fibroin hydrogels

Journal of Silk, 53(04):29-35 (English)

383

Zhou ZF, Li SH, Ren ZX, Jia JQ and Gui ZZ (2017)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu, China)

A kinetic study on enzymatic hydrolysis of silkworm pupa proteins by ultrasonic pretreatment

Canye Kexue, 43(1):112-117 (Chinese)

6.4. ENGINEERING AND MISCELLANEOUS

384

Abdul KM, Rameshbabu, Mahesh VK, Gurulingappa M and Naik SV (2017)

(Central Silk Technological Research Institute, Central Silk Board, Bangalore 560068, India)

Production performance impact assessment of motorized two bobbin weft winding machine

Canye Kexue, 43(1):102-105 (Chinese)

385

Angadi BS, Shetty KK and Nagesh Prabhu H (2016)

(Central Silk Board, Bengaluru)

Silk Textile Industry: Challenges and 'Way' Forward

YOJANA, 60:57-62 (English)

386

Cai X (2016)

(Fashion·Art Design Institute, Donghua University, Shanghai 2000051, China)

Study on warp twisted silk fabrics in Song dynasty

Journal of Silk, 53(2):61-72 (English)

387

Chen H, Yang Z, Liu X and Shao L (2016)

(National Cocoon and Silk Quality Supervision and Inspection Center(Shandong), Shandong Fiber Inspection Bureau, Ji'nan 250032, China)

Study on auxiliary testing method for mulberry silkworm cocoon sorting based on MATLAB

Journal of Silk, 53(3):32-36 (English)

388

El-Gendy MMAA, Hassanein NM, Abd El-Hay IH, Abd El-Baky DH (2017)

(Chemistry of Natural and Microbial Products Department, National Research Centre, Dokki, Giza 12622, Egypt)

Heavy metals biosorption from aqueous solution by Endophytic *Drechslera hawaiiensis* of *Morus alba* L derived from heavy metals habitats

Mycobiology, 45(2):73-83 (English)

389

Jia JJ, Nie KW, Xia Y, Zhang XX, Yue J and Wang GH (2016)

(College of Textile and Clothing Engineering, Soochow University, Suzhou 215006, China)

Effect of silk fabrics display form on visual cognition evaluation

Journal of Silk, 53(3):41-45 (English)

390

Jing D (2016)

(School of Accounting, Chongqing Technology and Business University, Chongqing 400076, China)

A research on the ornamentation system and influence of using silk fabric in etiquette during the Zhou dynasty

Journal of Silk, 53(10):58-65 (English)

391

Li ZQ and Qian MY (2016)

(Fashion Design Department, Xiamen Academy of Arts and Design, Fuzhou University, Xiamen 361021, China)

MeiYa silk factorys contribution to the fashion industry in the Republic of China

Journal of Silk, 53(10):77-84 (English)

392

Liao JB and Yang XM (2016)

(College of Textiles, Donghua University, Shanghai 201600, China,)

Based on hemp and silk comparative perspective researched commoner clothing culture

Journal of Silk, 53(04):72-78 (English)

393

Liu Q, Ding B, Guan C, Guan C, Wang HD, Li X and Hao FL (2016)

(Light Chemical Engineering, Jilin Institute of Chemical Technology, Jilin 132022, China)

Research of bleaching process of formic acid on tussah cloth

Journal of Silk, 53(04):25-29 (English)

394

Su C and Qian YH (2017)

(College of Animal Science and Technology, Northwest A & F University, Yangling Shaanxi 712100, China)

Cogitation on development of mulberry industry in construction of the silk road economic belt

Canye Kexue, 43(2):181-188 (Chinese)

395

Wang H and Xu JM (2016)

(College of Textile and Clothing Engineering, Soochow University, Suzhou 215021, China)

Silk defect recognition method and its application

Journal of Silk, 53(2):32-35 (English)

396

Wang YS and Zhang BB (2016)

(School of Art, Soochow University, Suzhou 215123, China)

Design renovation in Chinese traditional silk pattern from multi-cultural perspective

Journal of Silk, 53(07):55-62 (English)

397

Wang YS and Zhang BB (2016)

(The research of design thinking based on Chinese traditional silk pattern WANG Yansheng, ZHANG Beibei School of Arts, Soochow University, Jiangsu Suzhou 215123, China)

The research of design thinking based on Chinese traditional silk pattern

Journal of Silk, 53(10):45-52 (English)

398

Xiong Y (2016)

(Academy of Arts & Design, Tsinghua University, Beijing 100084, China)

The evolution of silk gold decoration in the Ming dynasty and the reason analysis

Journal of Silk, 53(08):66-72 (English)

399

Zeng QW, He NJ and Xiang ZH (2017)

(State Key Laboratory of Silkworm Genome Biology, Chongqing 400716, China)

The planting history and current situation of mulberry trees in the United States of America

Canye Kexue, 43(1):1-7 (Chinese)

400

Zhang J and Xiang ZQ (2016)

(Center for Studies of Education and Psychology of Minorities in Southwest China, Southwest University, Chongqing 400715, China)

Axiology of Chinese silk road culture

Canye Kexue, 42(5):910-917 (Chinese)

401

Zhang L, Xu Y, Li Y, Bao T, Gowd V and Chen W (2017)

(Department of Food Science and Nutrition, Zhejiang Key Laboratory for Agro-Food Processing, Key Laboratory of Agro-Products Postharvest Handling, Ministry of Agriculture, National & Local Joint Engineering Laboratory of Intelligent Food Technology and Equipment, Zhejiang University, Hangzhou 310058, China)

Protective property of mulberry digest against oxidative stress - A potential approach to ameliorate dietary acrylamide-induced cytotoxicity

Food Chemistry, 230:306-315 (English)

402

Zhou YB and Zhou YH (2016)

(Academy of agricultural sciences, Zhaotong 657000, China)

The research about sericulture industry under the background of the worlds second largest hydropower station: Taking Qiaojia Yunnan for example

Journal of Silk, 53(5):76-82 (English)

Author Index

Abbas MN 061, 079
Abd El-Baky DH 388
Abd El-Hay IH 388
Abdul KM 384
Abe S 092
Abmed SA 217
Adur M 149
Agrawal SK 257
Ahmed M 080
Ai JW 135
Akasaka T 206
Alberola A 315
Albuquerque FP 328
Aligiannis N 311
Almeida JRGDS 328
Amri M 357
An HY 182
An Y 186
Anbu Radhika S 248
Angadi BS 302, 385
Anil Dhar 041
Animut G 314
Anitha Peter 213
Annan E 230
Anusha HG 058
Aoki CS 206
Arora V 045
Arunkumar KP 152-153
Asagoshi M 237
Asakura T 258
Asano UM 062
Asaoka K 153
Aslam M 142
ASMA M 063
Atmika P 306
Awasthi AK 172
Babu Lal 142
Backman D 336
Bae SM 265-266
Baek I 330
Bai H 128
Bai WW 046, 226
Bai X 235
Bai XQ 027
Bai XR 148, 199, 223, 241
Bajerska J 327
Balavenkatasubbaiah M 053, 183, 210
Ban YY 031
Banerjee SK 216
Banno Y 068, 372
Banuprakash KG 058
Bao J 186 204
Bao T 401
Bao XY 064
Baqual MF 037
Baranwal VK 016
Barbosa HM 328
Barrett EK 358
Barros RA 328
Bartolome B 315
Bednár B 136
Beerntsen BT 196
Bela Zutshi 089
Belkhir M 357
Bettina ADV 202
Bhagas NV 001
Bhakthavatsalam KVS 296
Bharath HR 009
Bharath KN 213
Bhaskar RN 058
Bhatia NK 142, 240
Bhatta R 363
Bhattacharjee P 307
Bhattacharya D 307

Bi J 381
Bi S 113
Bi YG 337
Bidyapati Dev L 245
Bidyapati L 056, 299
Blessing D 129
Boujelben A 357
Boutis GS 258
Bozzato A 102
Brownell L 375
Bu X L 086
Byrne C 346

Cai F 083
Cai R 308, 321
Cai SF 209
Cai X 386
Cao G 057, 073, 197, 233
Cao M 002
Cao X 031-032
Cao XT 380
Cao Y 166, 278
Cao YG 309
Cappellozza S 090, 102
Carvalho DCR 328
Chae HS 355
Chai JP 148, 199, 241
Chaisabai W 310
Chaita E 311
Chakraborty A 259
Chan YY 370
Chandasekar R 104
Chang J 160, 348
Chatterjee SM 259
Chattopadhyay D 259, 275
Chauhan SS 041
Chen AL 236
Chen B 223
Chen B S 209
Chen C 018, 164
Chen D 036
Chen D S 175
Chen E 069
Chen F 057, 073, 197, 233
Chen FS 082
Chen G 046, 184, 189, 200, 215
Chen GH 323
Chen GQ 287
Chen H 184, 320, 345, 377, 387
Chen HI 018
Chen HQ 185
Chen J 046, 186, 202, 204, 226
Chen J Y 366
Chen K 093, 118, 201, 207
Chen L 107, 321
Chen LJ 139
Chen P 064, 107, 119, 169, 193
Chen Q 381
Chen QQ 338
Chen RT 065
Chen S 066, 121, 138, 235, 339
Chen SL 187
Chen T 012, 159
Chen TT 193
Chen W 401
Chen WG 003
Chen XY 169
Chen Y 070, 312, 318
Chen YB 125
Chen YH 106
Chen Z 153
Cheng D 097, 194
Cheng HX 270
Cheng JL 031-032
Cheng L 260, 273
Cheng R 137
Cheng T 153, 194, 230
Cheng T C 188

Cheng X 072, 122
Cheng XY 106
Chikkalingaiah 010-011
Chin YW 355
Chirila TV 313
Cho SH 335
Choi H 330
Choi JH 356
Choi JS 024, 331
Choi KH 140, 151, 250
Chu C 185
Chu YN 339
Chun MH 335
Chutia P 080
Cizmár D 136
Clark KD 095
Cuesta J 315
Cui GX 271
Cui H 130
Cui HB 125
Cui L 137
Cui QY 256
Cui WZ 125

D'Antona P 102

Da Silva DHA 328
Da A 050
Dai F 028, 143, 253-254, 376-377
Dai FY 107, 260, 273, 276
Dai HX 270
Dai JH 003
Dai JM 286
Dai M 326
Dai W 184
Dai WJ 189, 200, 215
Dai XH 246
Daimon T 062, 075
Dang X 186, 204
Dang XQ 182, 205
Dar H U 063
Das K 190-191
Das R 190-191
Dashora K 242
Datta D 017
De Eguileor M 090
De Oliveira Júnior FM 328
Debaraj Y 056
Deng HM 088, 134
Deng MJ 249
Deng TT 260
Deng W 014-015
Deng YM 276-277
Devaraju S 039
Devi D 076
Dey DG 055, 094
Dhanyalakshmi KH 038
Di DD 373
Ding B 393
Ding C 308
Ding J 289
Ding SM 236
Ding W 047-048
Ding X 146
Ding Y 120
Dong F 119
Dong FF 193
Dong GQ 343
Dong JM 378
Dong LX 289
Dong MJ 249
Dong RH 003
Dong S 111
Dong X 026
Dong XL 149
Dong YC 271
Dong YY 288
Dong Z 110
Dong ZP 236
Dong ZQ 192-193
Dongarjal RP 001

Du GY 124, 149
Du W 031-032
Du Z 276
Duarte GIBP 328

East HE 358

Ebrahim A 314
El-Gendy MMAA 388
El-Qutob D 315
Endo H 167
Ezhil Vilian AT 335

Fakrudin B 034

Fan MS 285
Fan Q 211
Fan T 082
Fan YQ 164
Fan YY 150
Fan ZQ 316
Fang R 036
Fang RJ 031-032, 042
Fang X 320
Fang XH 305
Fattouch S 357
Fei D 126
Fei J 252
Feng G 284
Feng HC 027
Feng J 047-048
Feng ML 317
Feng Q 066, 120
Feng QL 088, 134
Feng T 194
Feng W 312
Feng WS 309
Feng Y 057
Flood J 242
Fotadar RK 041
Fraser A 346
Fu J 194
Fu JF 188
Fu MY 107
Fu Z 071
Fu ZW 209
Fujii T 068
Fujinaga D 067
Fukumori H 068
Fuller R 346

Gai YP 052
Gallagher A 346
Gang X 097
Gangopadhyay G 045
Gao H 318, 320
Gao H J 051, 127
Gao JH 187
Gao K 159, 214, 218-219
Gao L 319
Gao X 187
Gao YM 278
Ge GP 261
Gen Y 305
Geng P 112
Geng T 214 218-219
Getachew M 059
Ghosh M K 045
Gikas E 311
Girish KS 039
Glapa A 327
Goldsmith MR 153
Gomes DA 328
Gong C 057, 073, 197, 233
Goo TW 151, 250
Gopinath G 152
Gopinathan KP 153

Gotoh Y 262
Gowd V 401
Grimaldi A 090
Gu GD 294
Gu L 044
Guan C 393
Guan Q 071
Gui ZZ 018, 374, 383
Guo C 138, 373
Guo DD 255
Guo G 316
Guo H 153
Guo HX 286
Guo JH 158
Guo JY 218
Guo K 110
Guo NK 260
Guo P 110, 308, 321
Guo W 186
Guo X 159, 230
Guo XJ 032, 214, 218-219
Guo Y 153
Guo YX 154
Gurulingappa M 384
Gurumurthy DS 023
Gyune RN 336

Hailemichael A 314
Haloi K 076
Hamajima R 195, 222
Hamamoto H 306, 329, 354, 371
Hamdan SM 372
Han B 203
Han C 069, 074
Han F 196
Han G 015
Han IS 324
Han M 253-254
Han MJ 379
Han Q 320
Han YK 335
Hao D 087
Hao FL 393
Hao X 130
Hao Y 175
Hariraj G 263
Hassanein NM 388
He F 227
He G 156
He H 308, 321
He L 197
He N 174
He NJ 399
He XB 177
He XJ 135
He XK 209
He XY 209
He Y 093, 116
He YZ 198
Hema Dhirwani 212
Hemstapat W 361
Hino M 163, 350, 372
Hirai H 356
Hirata K 372
Hirom Premjit M 005
Hirowataril A 155
Hiroyuki H 288
Holland C 333
Honda S 322
Hong M 375
Hou C 159
Hou CX 214, 218-219
Hou Y 138
Hu B 070
Hu D 221
Hu F 036, 323
Hu H 143, 253-254
Hu HL 276
Hu J 071-072, 122
Hu JH 106

Hu JS 106
Hu N 193
Hu Q 156
Hu QH 088
Hu SR 209
Hu WB 131
Hu W 109, 156
Hu X 015, 057, 073, 197, 233
Hu XM 014
Hu XQ 323
Hu Z 201, 207
Huang D 318
Huang GQ 146
Huang J 196
Huang JQ 347
Huang JR 199
Huang L 074
Huang LB 319
Huang P 025, 236
Huang QH 139
Huang QX 004
Huang S 074
Huang SH 225, 378
Huang W 047-048, 196
Huang XH 225
Huang XZ 002, 379
Huang Y 087, 121, 128, 133, 186,261
Huang YY 269
Huang ZY 343
Huh YS 335
Hungund SP 161
Husen A 033
Hyun EJ 375

Iiyama K 372

Ikeda M 195, 222
Inui T 075
Iqbal M 033
Ishii M 092
Isobe K 258
Iwamoto SI 352
Iwanaga M 145
Iyao FG 139
Jacobsen MM 336

Jacquin JE 153

James AA 121
James K 245
Jayaprakash 089
Jayaram H 295
Jeong JS 140
Jeong KY 324
Jhong MT 370
Ji CP 272
Ji DF 234
Ji GS 380
Ji SD 325
Ji WJ 211
Ji XL 052
Jia JJ 389
Jia JQ 018, 374, 383
Jia Q 147, 375
Jia S 198
Jiang DH 144
Jiang L 131, 153, 188, 231
Jiang N 137
Jiang T 150, 164
Jiang WY 086
Jiang X 230
Jiang XF 305
Jiang XJ 050, 199, 241
Jiang XK 261
Jiang XX 218
Jiang Y 119, 326, 339
Jiang YM 193
Jiang YR 246

Jiang YY 002
Jiang ZD 083
Jiang ZJ 264
Jiao Feng YH 181
Jiao F 043
Jiao P 065, 375
Jiao Y 144
Jin C 018
Jin CQ 359
Jin Q 044, 049
Jin W 252
Jin ZM 285
Jing D 292, 390
Jo AR 331
Jo YY 265-266
Joycy Rani D 295-296
Józefczuk J 327
Ju JE 333
Ju WT 334
Jung HA 331
Júnior IIDS 328
Junting H 297
Jyoti Biradar 034

Kajiura Z 068
Kako N 078
Kalita MK 076
Kametani S 258
Kameyama OM 081
Kamoto N 077
Kanai M 306
Kaneko K 306
Kanematsu A 157
Kanika Tirivedy 005, 007, 099
Kaplan DL 336
Karaba N Nataraja 023, 038
Karthik T 267
Karthikeyan S 096
Kasashima K 167
Kataoka H 067
Kato K 078, 157, 237
Kato T 078, 157
Kausar S 061, 079
Kavitha S 267
Kawagishi H 356
Kawamura T 322
Kawasaki H 145
Kawasaki K 349
Kayalvizhi N 096
Kayukawa T 062
Keisa TJ 299
Khadar KMA 300
Khamhaengpol A 310
Kheawfu K 329
Khetarpal R 242
Khurana P 016, 022
Kikuta K 078, 157
Kim H. 334
Kim HJ 375
Kim I 140
Kim JA 024
Kim JI 330
Kim JY 335
Kim KH 140
Kim KY 140, 325
Kim MJ 140
Kim MR 375
Kim NS 325
Kim SJ 335
Kim SR 140, 151, 250
Kim SW 151, 250, 325
Kim Y 330, 351
Kim YM 355
Kim YS 334
Kimura KI 371
Kirino Y 322
Kishimoto Y 268
Kishino H 153
Kiyoshi F 288
Kobayashi I 170

Kobayashi M 195, 222
Kobori T 081
Koh YH 325
Kohmura Y 067
Kolte AP 363
Komoto N 247
Kondo M 167
Kondo S 078, 157
Kondo T 222
Kong WQ 035
Kong X 047-048
Kotaki A 349
Kotani E 352
Krishnan M 096
Kuang C 374
Kuang HX 309
Kuang S 057, 073, 197
Kuk E B 331
Kumar D 057, 073
Kumar JP 332
Kumar R 080
Kuramochi KM 081
Kuroda K 349
Kusakabe T 162-163, 206, 350, 372
Kuwabara N 247
Kwak HW 333
Kwaw E 362
Kweon HY 265-266, 325
Kwon QC 334

Lai XD 046

Lan FJ 125
Lan G 376-377
Latpate CB 054
Lee HM 335
Lee J 068
Lee JH 024, 324, 335
Lee JM 162-163, 206, 350-351, 372
Lee JY 324, 351
Lee KH 333
Lee KW 351
Lee M 330
Lee YC 375
Lei CH 366
Lei M 012
Lewith G 346
Li XL 200
Li B 072, 082, 106, 122, 271
Li C 070, 093, 130, 203
Li CF 202
Li D 166, 336
Li DC 175
Li F 072, 122, 309
Li FC 106
Li G 201
Li GC 209
Li H 027, 174
Li HJ 337
Li J 044, 072, 109, 122, 129
Li JK 083
Li JQ 026-027, 294
Li JX 106
Li JY 083
Li K 133, 154
Li L 013, 030, 036, 338, 347
Li M 019, 129, 133, 139
Li MQ 209
Li MT 144
Li MZ 269
Li N 215
Li PP 144, 211, 339
Li Q 231, 312, 343, 376-377, 380
Li QF 211
Li QL 158
Li QR 013, 232
Li QY 236
Li R 036
Li S 147, 153-154, 340

Li S. 269
Li SH 018, 383
Li T 202-203
Li W 131, 341
Li WL 112
Li WQ 051
Li WW 270
Li X 082, 184, 373, 393
Li XG 004
Li XL 189, 215, 283
Li XT 084
Li XY 319
Li Y 014-015, 071, 115, 261, 342, 348, 401
Li YC 271
Li YD 319
Li YF 169
Li YG 234
Li YJ 211
Li YL 004
Li YM 187
Li YX 281
Li Z 025, 097, 143, 182, 203, 205, 253-254, 273, 318, 365, 377
Li ZQ 391
Li ZY 278, 319
Li QR 085
Liang GQ 343
Liang JS 083
Liang MX 373
Liang RJ 281
Liang Z 057, 073, 109, 197
Liao GS 139
Liao HZ 139
Liao JB 392
Liao PF 236
Liao S 013, 085
Liao TG 319
Liao WL 086
Lightowler H 346
Lin HT 272
Lin L 341
Lin M 318
Lin P 188, 194
Lin Q 256
Lin QT 249
Lin X 066
Lin XD 249
Lin XP 270
Lin XX 209
Lin Y 069
Ling E 196
Ling XL 272
Lira EC 328
Lisowska A 327
Liu B 057
Liu C 025, 131, 365
Liu CG 344
Liu CL 061, 079
Liu CW 135
Liu D 345
Liu F 186, 204
Liu G 146
Liu H 069, 209
Liu J 120, 153, 226, 376-377
Liu JS 086
Liu L 031, 042, 373
Liu LX 298
Liu M 143, 318
Liu MH 228
Liu N 129
Liu Q 052, 087, 115, 393
Liu QX 125
Liu RH 226
Liu S 147
Liu SQ 286
Liu T 119, 203
Liu TH 064, 124, 149, 169
Liu U 032
Liu W 087
Liu WB 064
Liu X 044, 118, 133, 232, 321,359, 387

Liu XL 198
Liu XS 088
Liu XY 226
Liu Y 135, 160, 165, 246, 348
Liu YC 378
Liu YQ 220
Liu Z 065, 109
Liu ZF 205
Liu ZY 030
Liyama K 206
Loher P 322
Long M 186, 203
Long MX 202
Lown M 346
Lshizuka Y 262
Lu A 196
Lu B 376-377
Lu C 064, 107, 119, 143, 149, 169, 178, 193, 253-254, 260
Lu CX 343
Lu D 159
Lu F 376-377
Lu LH 340
Lu M 002
Lü P 093, 207
Lu PF 050
Lu W 160
Lu X 071, 116
Lu XM 208-209
Lu Y 065, 209
Lu Z 166
Luikham R 299
Luo G 028
Luo GQ 085
Luo SG 236
Luo YJ 050, 241
Lyu F 337
Lyu H 120
Lyu Z Q 049

Ma HY 209
Ma L 029, 154, 189, 347
Ma Q 204
Ma S 160, 348
Ma SY 188
Ma V 273
Ma XP 178
Ma Y 082, 126, 362
Ma YP 344
Ma YX 304
Ma Z 074, 203
Ma ZG 205
Machida S 081
Maegawa K 349
Mahadevaiah BM 263
Mahesh DS 008, 108, 364
Mahesh R 005
Mahesh VK 384
Mai T 066
Maiti TK 307
Makwana P 161
Malik F 063
Malik GN 063
Malik MA 037
Malik PK 363
Malikowska K 327
Mamatha M 210
Mamatha 089
Mandal BB 332
Manjunath D 301
Manjunatha KL 105, 303
Manoj M Rai 212
Mao G 312
Maqsood I 079
Mary Josepha AV 053, 183
Masresha G 033
Matsuda S 349
Matsumoto E 352

Matsunaga S 306
Matsuura T 262
Mattapally S 216
Maurya KR 142
May WL 358
Mazumdar S 275
Meng FZ 125
Meng Q 342
Meng X 186-204
Meng XM 144
Merzaban JS 350
Mi R 211
Miao YG 065
Min BS 024
Min WL 380
Mir A 315
Mir GM 037
Mir SA 063
Misawa T 167
Mita K 145, 153
Mitrová D 136
Miyamoto K 206
Miyazaki T 078
Mizoguchi A 067
Mo RL 014
Mohan KR 212
Mohanty N 094
Mon H 162-163, 206, 350, 372
Monica Chaudhuri 005-006
Montagn N 153
Montali A 090
Mori H 352
Mori K 091
Morichika K 322
Morikawa H 268
Morishita M 206
Moriyama M 145
Morokuma D 163, 350, 372
Mu ZM 051, 125, 127
Muhammad A 126
Muraleedharan N 242
Muralimohan K 105, 303
Muthuraju R 008, 108, 364

Na

Na S 330
Nagaoka S 123, 155, 237
Nagesh Prabhu H 385
Nagesha N 213
Nagpal A 242
Naik SV 384
Nakamura K 167
Nalwandikar PK 001
Nam JB 375
Nanba Y 222
Nandi SK 307
Narasimha Nayaka AR 053
Narayanaswamy TK 008, 010-011, 108, 364
Narendra Kumar JB 243
Natesh 213
Nayak P 098
Neave S 242
Nerome K 349
Nerome R 349
Nguyen VT 024
Nhoek P 355
Ni HM 042
Ni J 241
Ni Q 203
Ni Y 044
Nie KW 389
Nie T 305
Nie WJ 326
Nie Z 166
Niimi S 262
Ning JQ 043
Ning XY 270
Nishida H 356
Nishida S 092
Nishiyama Y 092

Noble Morrison M 301
Nooruddin S 037
Nowak JK 327

Oeigler RS 299

Oh NS 351
Oh SI 331
Okamoto N 067
Okonogi S 329
Okuda KK 153
Ono Y 092
Otsuki R 352
Ou X 029

Pal S 045

Pallavi K 009
Pallavi N 023, 038
Palli SR 128
Pan CX 149
Pan G 042, 130, 186, 203-204
Pan GQ 202
Pan M 119
Pan MH 064, 124, 149, 169, 178, 192-193
Pan QL 187
Pan Y 093, 207
Pan ZH 214, 219
Pan ZJ 290
Pandit IK 055
Pang LY 368
Pankaj Tewary 142
Panthee S 354
Papolla C 313
Park EY 078, 157
Park JW 324
Park KH 324
Park SH 335
Park SW 151 250
Parthasarathy BA 302
Pastor-Vargas C 315
Patil AA 163
Patil VM 257
Patra GC 094
Paudel A 354
Pel P 355
Peng J 097
Peng LN 124
Peng X 184
Peng XJ 020
Peng XR 189, 200, 215
Peng YW 260
Peng Z 069
Peng ZQ 131
Phillips DR 095
Pi Z 020
Pikulkaew S 329
Pitaksuteepong T 361
Pitaksutheepong C 361
Ponnuvel KM 161, 172
Poornachandra KT 363
Pradeep AN 161
Pramod R 274
Prasad AK 242
Pratheep T 096
Preethi NV 034
Pu JS 345

Qi L 144

Qi M 309
Qian C 061, 079
Qian J 042
Qian MY 391
Qian P 150-164
Qian QJ 003
Qian W 097

Qian YH 043, 394
Qian ZY 181
Qin G 159
Qin GX 177, 214, 218-219
Qin L 220
Qin S 129
Qin U 246
Qiu CY 256
Qiu HH 209
Qiu L 201
Qiu W 356
Qiu Z 114, 173
Qu M 165
Quan Y 221

Raghu K 300
Rahmathulla VK 098
Rahul K 099
Rai MM 239
Rajann KL 238
Rajasekharreddy P 216
Rajeev Lochan 041
Rajiv Munshi 275
Rajkhowa G 080
Ramachandran M 274
Ramakrishna Naika 105, 303
Ramakrishna Parama VR 108
Rameshbabu 384
Rameshkumar N 096
Ran RF 339
Rani PU 216
Ranjana Das 217
Ranjit Kar 007
Rao MM 229
Rao XJ 103
Rashmi Kumari 100-101
Rathod MK 229
Rathore MS 041
Rebai O 357
Reddy AR 021-040
Reddy KS 021, 040
Ren D 019
Ren FC 319
Ren Y 165, 365
Ren ZX 383
Renuka G 141
Rho SS 024
Riche DM 358
Riche KD 358
Rigoutsos I 322
Ritwika Sur C 245
Rohith LS 039
Rolim LA 328
Roller L 136
Romanelli D 090
Romoli O 102
Roy A 331
Roy G 099
Roy S 242
Roy SM 242
Roy S P 100-101

Saeed B 022
Sagisaka A 168
Sahara K 060
Sahayaraj K 248
Sajeevan RS 023, 038
Sakashita K 372
Sakthivel N 248, 251
Sandrelli F 102
Sang Q 230
Sargunamani D 300
Sarkar BN 217, 238
Sarmah M 238
Sarmah MC 217
Satish G 183
Sato M 162
Satpathy SK 055

Saviane A 102
Sawant CG 001
Sekhar KM 021, 040
Sekhar SMC 152
Sekimizu K 092, 306, 329, 354,371
Senapati MD 217
Seo HH 335
Seong GB 325
Seong SH 331
Seth RK 153
Sezutsu H 062, 081, 167, 170-171, 352
Shabnam AA 041
Shahzad T 103
Shamim Baksh 041
Shamitha G 141
Shang BQ 139
Shang MK 218
Shang YJ 042
Shanthanu K 008
Shao D 118
Shao HY 305
Shao JZ 289
Shao L 387
Shao M 117, 284
Shao Y 235
Shao YL 148
Shao YQ 208-209
Sharma SK 293
Shen G 069
Shen H 291
Shen L 130
Shen SH 020
Shen T 019
Shen W 072
Shen X 113-114, 173
Shen XJ 150, 164, 227
Shen XM 261
Shen YH 379
Shen Z 184
Shen ZY 179, 189, 200, 215, 224
Sheng Q 166
Sheng S 359
Sheshshayee MS 034
Shetty KK 385
Shi G 252
Shi JH 004
Shi LF 139
Shi LG 084
Shi LL 219
Shi R 160, 348
Shi SL 220, 246
Shi TH 276-277
Shi WY 370
Shi XQ 316
Shi XY 359
Shigematsu M 322
Shin I S 335
Shin M 333
Shinoda T 062
Shiotsuki T 128, 133
Shivanna MB 023
Shivashankara KS 023
Shobahah J 221
Shobha N 039
Shuai YJ 360
Shwetha NV 009
Si H 166
Siddiqui SN 033
Silva FMM 328
Silverstein MC 258
Sima YH 135
Singh NI 080
Sinha AK 056, 245, 299
Siri S 310
Siripuk S 104
Sivaprasad V 053, 183, 243, 295
Sohn HS 331
Sohrab SS 033
Somi Reddy J 302

Son JG 325
Song C 198
Song F 164
Song HJ 278
Song HS 147
Song J 253-254
Song L 097, 111
Song Q 120
Song QX 043
Song Y 204
Song YX 244
Soonthornsit N 361
Souza GR 328
Souza NAC 328
Sowmya P 010-011
Squartini A 102
Sreenivasa B 301
Srikeerthana K 152
Srinivasa G 302
Stawiska W 327
Stuart B 346
Su C 394
Su G N 144
Su J 130
Su L 225
Su Q 181
Su R 339
Su XL 049
Su Z 070
Su ZG 050, 199
Subbarayappa CT 008, 010-011
Subharani S 056, 245
Subhas V Naik 263, 300
Subramanium V 274
Suganya T 096
Sugita S 349
Suh JH 335
Suman 100-101
Sumitani M 167
Sun B 203
Sun HY 003
Sun L 348
Sun WL 181
Sun Y 061, 079
Sun YX 061 211
Sun Z 057
Sun ZY 043
Sung GB 334
Sunil Kumar T 105, 303
Suresh P 306
Suzui M 352
Suzuki S 313
Suzuki Y 306
Swamy MJ 017
Swathi HC 058

Tachibana A 222

Tahir HE 362
Takahashi M 350, 372
Takaki K 352
Takasaki T 349
Takasu Y 170
Takata Y 237
Tamada Y 268
Tan A 121, 128, 133
Tan WY 343
Tan X 131
Tan Y 012
Tanaka H 167-168
Tanaka Y 145
Tang C 028
Tang D 253-254
Tang F 235
Tang F F 148, 223
Tang Q 201
Tang S 114, 173
Tang SM 150, 164, 227
Tang T 368
Tang WC 255
Tang X 025, 184

Tang XD 179, 189, 200, 215, 224
Tang XF 169
Tang Z 026
Tang ZJ 279
Taniai K 153
Tao G 308, 321
Tao JW 285
Tashiro K 206
Tatematsu KI 081
Tatsuke T 163
Tayde SS 257
Tchabo W 362
Teng CP 318
Terenius O 341
Tettamanti G 090, 102
Thakur K 323
Thirumalaisamy GY 363
Tian HT 337
Tian HY 026
Tian J 071-072, 122
Tian JH 106
Tian S 138
Tomar A 152
Tomizaki M 222
Tomoda H 371
Tong X 143, 253-254
Tong XL 107, 260
Tran HNK 024
Tripathi PM 142
Trivedy K 161
Tsubota T 170-171
Tukaram AN 054
Tulsi Naik KS 172

Uchida R 371
Uchinol K 170
Ukpebor OT 258
Umer B 059
Urge M 314
Utaisincharoen P 361

Vasantrao Naik 054
Vemananda Reddy G 238
Vidhathri BS 108, 364
Vidyashree DN 008, 108, 364
Vijayalakshmi 364
Vineet Kumar P 183
Vinod Kumar 243
Vishaka GV 364
Vishka GV 009
Vossbrinck CR 202

Wakabayashi K 352
Waktole Sod 059
Walkowiak J 327
Wan JY 046
Wan X 012
Wan Y 036
Wan YJ 046, 226
Wang XG 234
Wang C 025, 282, 365
Wang D 110
Wang DW 049
Wang F 111, 280, 319
Wang FC 211
Wang G 087
Wang GB 220
Wang GH 389
Wang GW 225
Wang H 052, 109, 143, 145, 211, 244, 395
Wang HD 393
Wang J 156, 359
Wang JG 290
Wang JJ 226

Wang JN 176
Wang K 116
Wang L 061, 064, 079, 109, 119, 205, 294, 308
Wang LJ 366
Wang LL 182, 205, 228
Wang M 278
Wang ML 227
Wang N 316
Wang NH 112
Wang NW 379
Wang P 097, 113-114, 173, 271, 367
Wang PL 281
Wang PY 227
Wang Q 093, 118, 182
Wang S 047, 048, 233
Wang S X 026
Wang T 036
Wang W 026-027, 124, 149, 184, 215
Wang WH 226
Wang X 019, 025, 115-116, 126, 150, 160, 164, 348, 365, 368
Wang XD 211
Wang XF 282-283
Wang XY 228
Wang Y 036, 204, 220, 246, 308, 321, 381
Wang YH 049
Wang YS 396-397
Wang YW 051, 127
Wang Z 028-133
Wang ZG 337
Wang 169
Wankhade LN 229
Wazalwar SM 239
Wei G 079
Wei GQ 061
Wei J 049
Wei L 097, 146
Wei M 221
Wei Y 233
Wei ZJ 323
Wen CW 249
Wen D 116
Wen R 304
Wen Y 174
Wong JY 336
Woo MH 024
Wu C 116, 129
Wu D 376-377
Wu F 113, 175, 359
Wu GH 030, 286, 347, 359
Wu HY 369, 382
Wu J 069, 153, 343, 356
Wu JJ 343
Wu L 282-283
Wu MY 083, 176
Wu P 214, 219, 230
Wu QY 374
Wu SS 177
Wu TF 370
Wu W 320
Wu X 019, 117, 284, 312, 381
Wu XL 272
Wu Y 119, 144, 176
Wu YF 124, 149
Wu YJ 289
Wu YQ 125

Xia D 114, 173

Xia D G 227
Xia H 118
Xia Q 069, 097, 110-111, 115, 138, 153, 160, 194, 231, 321, 348
Xia QY 131, 180, 188
Xia X 160, 348
Xia Y 389
Xiang TT 226
Xiang Z 143, 174, 186
Xiang ZH 107, 345, 399

Xiang ZQ 400
Xiao G 028
Xiao J 119
Xiao L 362
Xiao SW 175
Xiao S 235
Xiao SY 187
Xiao W 119
Xiao Y 013, 085, 231,232, 376
Xiao YY 255
Xie QY 241
Xie SY 285
Xie ZL 046
Xin HH 065
Xing D 231
Xing DQ 232
Xing DX 013, 085
Xing TL 287, 338
Xing Y 207
Xiong C 014-015
Xiong M 373
Xiong SW 014
Xiong Y 398
Xu A 286
Xu AY 177
Xu C 202
Xu F 025, 365
Xu G 120
Xu J 047-048, 121, 126, 128, 350, 372
Xu JM 395
Xu JP 082, 228, 249
Xu JS 187, 202, 246
Xu L 144, 179, 184, 189, 200, 215, 224
Xu MD 298
Xu P 113
Xu PZ 180
Xu Q 177
Xu SQ 135
Xu W 318
Xu X 133
Xu XF 202
Xu XH 004, 305, 359
Xu XQ 305
Xu Y 069, 401
Xu YS 378
Xue B 072, 106,122
Xue H 135
Xue R 057, 073, 197, 233
Xue S 221

Yagi A 371

Yagi H 078, 157
Yamada H 222
Yamadal N 155
Yamaguchi R 349
Yamamoto K 123, 155
Yamamoto M 352
Yamamoto MM 081
Yamanaka S 268
Yamashita M 372
Yan AH 337
Yan H 071, 109, 373
Yan HY 145
Yan N 158
Yang B 117, 284
Yang CF 255
Yang DP 318
Yang F 244
Yang FF 309
Yang GG 345
Yang GM 244
Yang GQ 176
Yang H 138
Yang J 012, 029, 043-044
Yang JG 124
Yang JH 035
Yang JQ 287
Yang JR 046

Yang L 312
Yang M 202, 308
Yang MY 317, 360
Yang P 109
Yang PJ 103
Yang Q 013, 085, 165, 231-232
Yang RG 187
Yang RS 220, 246
Yang X 097
Yang XH 002
Yang XM 392
Yang XR 326
Yang Y 097, 125, 207
Yang YM 374
Yang YP 003, 046
Yang YQ 288
Yang Z 387
Yang ZG 050
Yao L 368
Yao Q 201, 207
Ye CJ 082
Ye E 318
Ye M 231
Ye MJ 085
Ye MQ 013, 232
Ye QY 224
Ye XG 083
Yi HS 178
Yimam M 375
Yin C R 031-032
Ying L 282
You XL 205
You ZY 083
Yu C 014-015
Yu D 126, 228
Yu H 126
Yu HZ 082, 228
Yu J 071, 179, 224
Yu JJ 177
Yu K 376-377
Yu M 002, 025, 365
Yu TH 198
Yu W 221
Yu X 139
Yu XQ 103
Yu YC 225
Yu ZC 282-283, 316
Yuan Y 196
Yue J 389
Yukuhiro K 247
Yuri K 060

Zaffar G 063
Zakir Hossain 099
Zang YL 127
Zanwar PR 054
Zar MS 233
Zeng B 087, 121, 128
Zeng L 109
Zeng QW 399
Zeng XC 326
Zeng YC 146
Zeng YR 256
Zeng Z 146
Zhan MY 103
Zhan P 252
Zhan PF 378
Zhang BB 396-397
Zhang BL 226
Zhang CD 169
Zhang CH 256
Zhang DH 244
Zhang DP 065
Zhang DZ 380
Zhang G 147
Zhang GH 177
Zhang H 047-048, 069, 153, 362
Zhang HB 323
Zhang HH 340
Zhang HL 052

Zhang HM 027
Zhang HY 379
Zhang J 026, 074, 116, 120, 129, 253-254, 304, 400
Zhang JG 323
Zhang JH 368
Zhang JL 134
Zhang JX 347
Zhang K 130
Zhang L 042, 131, 347, 401
Zhang MJ 149
Zhang MR 180
Zhang N 146
Zhang P 147
Zhang Q 124, 169, 194, 317
Zhang R 116, 130
Zhang S 126
Zhang SJ 051
Zhang SZ 228, 249
Zhang T 097, 160
Zhang W 380
Zhang WP 340
Zhang X 029, 044, 066, 132
Zhang XF 374
Zhang XH 269
Zhang XJ 344
Zhang XX 389
Zhang Y 028, 030, 069, 110, 119-220, 233, 235
Zhang YH 148, 241
Zhang YL 181, 309
Zhang YP 283
Zhang YQ 280
Zhang Y S 177
Zhang Z 070, 133, 312, 341
Zhao A 025, 365
Zhao C 198, 221
Zhao D 083
Zhao DF 288
Zhao HN 052
Zhao L 252
Zhao ML 020
Zhao N 144
Zhao P 110, 115, 138, 160, 308, 321, 348
Zhao Q 070, 113-114, 173
Zhao QL 227
Zhao RZ 290
Zhao T 312
Zhao W 036
Zhao WG 042
Zhao X 145, 309, 380
Zhao Y 130
Zhao YN 052
Zhao ZJ 211
Zhen ZX 244
Zheng A 286
Zheng C 318
Zheng S 066, 120, 132
Zheng SC 088
Zheng W 379
Zheng X K 309
Zheng Y 135
Zheng YQ 223
Zhi S 025, 365
Zhong BX 083
Zhong J 199
Zhong L 144
Zhong S 234
Zhou B 342
Zhou H 036
Zhou J 074
Zhou J H 281
Zhou L 289
Zhou M 381
Zhou Q 201
Zhou W 226
Zhou X 138
Zhou XL 169, 343
Zhou Y 118, 207, 369, 382

Zhou YB 402
Zhou YH 402
Zhou YJ 185
Zhou Z 029, 186, 203-204, 342
Zhou ZF 383
Zhou Z Y 182, 202, 205
Zhu B 079
Zhu BJ 061
Zhu BK 319
Zhu F 093, 148, 207, 235
Zhu FR 256
Zhu GS 256
Zhu H 166
Zhu HJ 366
Zhu HS 046
Zhu JX 234
Zhu L 057, 073, 197, 233, 316
Zhu LJ 317, 360
Zhu M 057, 073, 197, 290
Zhu SF 236
Zhu W 071
Zhu Y 070, 255, 291
Zhu YJ 360
Zhu YM 211
Zhu ZD 134
Zitnan D 136
Zou DQ 316
Zou X 066
Zou Y 376
Zou Z 174
Zuo B Q 264, 367, 369
Zuo H 308, 321
Zuo LL 198

Subject Index

(q-lp) mutant 173
1-Deoxynojirimycin (DNJ) 249, 316, 323, 334, 380
2-Furaldehyde 362
20-hydroxyecdysone 066, 120
20E pathway 132
3-Hydroxy-2-butanone 362
3-Methyl-1-butanol 362
4-Ethylguaiacol 362
4-Vinylphenol 362
5-fluorouracil 351
5-Methyl-2-furaldehyde 362
A-Glucosidase Inhibitory activity 334
ß-1, 4-Galactosyltransferase1 350
ß-Damascenone 362
ß-Sheet 117, 284

Abdominal appendage 107
Abiotic stress, 038
Abnormalities, 114
Absorption of starch 327
Academic monograph 297
Acetylcholinesterase 331
Acid 264
  phosphatase 088
  treatment 260
Acmnpv 195
Acrylamide 401
Acrylic acid (AA) 275
Acute toxicity 003
Adaptability 220
Adaptive evolution 143
Adoption 302-303
Adsorption 270
Agnps 308
Agronomic character 002
  practices 301
Air-plasma 317
Alkali and hydrogen peroxide treatment 264
Alkaline phosphatase 063
Allatotropin 136
Allergy 109, 370
  diagnosis 324
Alpha linolenic acid 108
Alteration 322
Alternative medicine 358
  splicing variant 120
  use 068
Altitude 055
Alzheimer's disease 331, 340
Amino acid 374
  peptidase 194
Ammonia-oxidizing bacteria 014
Amylase 063
Amyloid (3-protein) 340
Anabolism 125
Animals 236
Annotation 153
Antheraea assamensis 190-191
  frithi 148
  mylitta 055,101,141, 229
  paphia 094
  pernyi 112, 116, 198
  nucleopolyhedrovirus 198, 220, 341
Antheraea proylei 056, 245
  yamamai silk 265-266
Anthocyanidin 042
Anthocyanin 326, 337, 381
  monomers 312
Anti - aging 335
  atherosclerosis 326
  bmnpv activity 149
  hyperlipidaemia 326
  inflammatory activity 024, 361
  mycobacterium activity 371
  oxidation 326

oxidative gene expression 161
staphylococcal 306
UV property 279
wrinkle property 279
bacterial activity 308, 310, 321
performance 377
Antibiotic administration 098
Antifungal activity 232
Antimicrobial agent 306
Antimicrobial peptide 066
Antimicrobial peptides 082, 116, 168, 216, 223
Antioxidant 094, 328, 332
activity 029, 070, 345, 374
effect 328
enzyme 255
systems 040
Antioxidative enzyme 031
Antiviral protein 213
Apolipoprotein 138
Apoptosis 064, 076, 088, 090, 178, 195
Apriona germari 027
Aprostocetus prolixus 026
Aquaporins 016
Aqueous solution 268
Arbuscular mycorrhizal fungi 002
Archaeological finding 386
Arrogation 398
Art industry 397
Arthropods 236
Artificial cultivation 244
ligament 369
Ascorbic acid 125
Aspartate aminotransferase 063
Assessment 295
ATCC 4356 099
ATCC 9595 099
Atherogenic index 328
Atshine1 038
Atshn1 023
Attractiveness 026
Autophagy 088, 090
Auxiliary factor 121
Azotobacter 001

Bacillus bombysepticus 188,194
Bacteria 046
invasion 320
Response 015
Bacterial 16S rdna sequence 046
disease 212
identification 206
response 130
wilt 047, 048
Baculovirus 222
expression system 185, 340
vector system 350
Bave 259
Beauveria bassiana 191, 226, 231-232
Benzaldehyde 362
Biexponential decay 017
Bioactive substance 018, 343
Biochemical compositions 251
parameters 357
Biocompatibility 376
Biodiversity 299
Bioimaging 318
Biological function 175
insecticide 202
Biomaterial 313, 321, 347
Biomedical material 360
Biomimetic mineralization 317
Biomimetic shear 336
Biomineralization 307
Biopesticides 191
Bioreactor 348

Biosorption 388
Biosynthesis 113
Biotin bait 081
Bivoltine hybrids 212
Bivoltine sericulture 302
Black mulberry (Morus nigra L) 326
Bleaching 393
Blended yarn 290
Bm cypovirus 214, 233
Bm nuclear polyhedrovirus
Bm nucleopolyhedrovirus 073, 177, 195, 227
Bm1645 166
Bmacer 145
Bmago2-associated small rnas 166
Bmbdv 207
Bmcpv, 230
Bmdichaete 124
Bmdredd 065
Bmfib-L 150
Bmfoxo 253, 254
Bmhdd1 130
Bmifv 210
Bmn cell 234
Bmnpv 192, 195, 221, 223
infection 228
Bmo-mir-217 227
Bmo-mir-2771 164
Bmo-mir-375-3p 150
Bmp25 150
Bmreepa-rnai 149
Bmring gene 180
Bmtoll9-2 086
Body weight 314
Bombycidae 080, 137, 236
Bombykol 247
Bombyx mandarina 083, 260
mori nucleopolyhedrovirus 126
testis 224
Bombyxin 252
Bone tissue regeneration 307
Breeding material 192
Broad-complex 097
Brown spot disease 050, 199
Bulky yam 263
Buried tryptophans 017
Butyrylcholinesterase 331
Bytulene fipronil 234

C-type lectin 103
Cacl2-formid acid 369
Cadherin-like protein 188
Calcium bromide 367
Chloride 367
nitrate 265, 266
Callus rooting 032
Camera calibration 387
Cancer cell 360
CAPS marker development 045
Carbon sequestration 007
Carcass 314
Cardioprotective effect 309
Cas9 160
Caspase 234
Caspase3 088
Cassava varieties 251
Castor accessions 059
Catalase 198
Cathepsin 175
Cdna sequence 123, 155
Cdt1 169
Cell apoptosis 234
cultivation 313
cycle 169, 234
density 322
entry 233
proliferation 360
Cellular localization 179

Cellulase 380
Chalcone synthase 025
gene 045
Characterization 074
Checklist 080
Chemical denaturation 017
library 306
method 273
Chemometrics 311
Chemosensory protein 085
Chilling tolerance 020
Chinese oak silkworm variety 144
silkmoth 341
Chitin assembly 165
binding protein 165
deacetylase 165
Chitinase 132
Chitosan 165
fiber 290
Chloroplast genome 035, 158
Cholesterol 073
Chromosome composition 297
Climate change 295
condition 034, 057
Clonal Propagation 033
Clone 072
Cloning 159, 180
Clothing culture 392
Clove oil 329
Cluster analysis 028, 146, 158
Co-expression 025
Coagulants 095
Coating 262
Cocoon 001, 060, 091, 305, 387
characters 148
entanglement 263
filament quality 139
loss 240
parameter 011
sorting 387
wax 259
yield 056, 058, 139
Cocooning 256
Codon bias 220
usage 035, 174
pattern 220
Coexpression 365
Cognitive behavioristics 389
Colloidal microsphere 289
Color fastness 135
Colorful silk ribbon 291
Commoner clothing 392
Communication and combination 396
Compatibility 278
Complementary medicine 358
Composite cross breeding 139
Computer vision 387
Concentrate mixture 314
Conservation 293, 299
Contaminated farmland 012
Control efficacy 003
Cordyceps militaris 104, 356, 370
Correlation 245
coefficients 063
Cortex rooting 032
Cosmetic material 335
Cost savings 300
Cotton fabric finish 279
Countermeasures 305
Covered yarn 285
CPAP3 165
Cpf1 160
Crease resistance 287
CRISPR/Cas9 087, 128, 133, 171
Crop improvement 039
Cross-linking 275
Crude fat 379
fiber 379
protein 379
Crystalline silkworms 330
Crystallization 117, 284

Culture 400
cell 340
Cuticle 165, 196
proteins 115
Cyanidin 3-O-glucoside 381
-rutinoside 381
Cyclodextrin 283
Cypermethrin 076
Cysteine protease 175
Cytochrome "c" reductase 089
Cytoplasmic polyhedrovirus 218
Cytotoxic activity 019
compound 356
Cytotoxicity 401
Cytotoxin 352

Data 202

Death receptor pathway 064
Decomposition 320
Decoration regulation 390
Defatted silkworm pupa 359
Defect 395
Defence response 201
Defensive activities 110
Degenerated Abdominal Legs
mutant 143
Degradation 369
kinetic 381
Degradome sequencing 036
Degumming 259, 280
rate 272, 276
Denaturing gel gradient
electrophoresis 014
Dendritic cells 109
Denier 259
Descendance 292
Design thinking 396-397
Destruxin 156
Detection 047-048
Detoxification enzyme 127
Development 038, 120, 128, 305, 385
guideline 394
Developmental abnormality 173
change 114
stage 125
timing defect 062
DGT paste 269
Diabetes 358
Diagnostic characteristics 137
Died biomass 388
Dietary restriction 093, 253-254
Differential expression genes 226
Digestibility 314
Digestion 327
Digital gene expression 122, 252
printing 269
Disease 217
free layings 243
incidence 001, 191
Disinfectant 053
Dispersal 077
Display form 389
Dissolution 265-266
Distal proleg structure 143
Distribution 137
Diversity 014
DNA polymerase 185
replication 169
sequence 049
Domestication 077, 083
Dosage compensation 152
Dose 105
Double step preservation 238
blind placebo-control 346
DPPH 332
Drechslera hawaiiensis 388
Dried cocoon raw silk 261
Drought 040
resistance 036
stress 036

tolerance 021
Drying 343
Dual luciferase reporter gene system 164
Dye degradation 271
Dyeing 282

Ecdysis 196
Ecdysone 075, 123, 134, 145
oxidase 123
Ecdysteroid 067
22-kinase 218
ECFP 151
Eclosion rate 209
Eco-friendly 037
Economic Belt 394
impact 295
parameter 011
trait 099, 135
traits 001, 248, 251
Economy 400
Ecorace 055, 141
Editing efficiency 160
Educational model 304
Elasticity model 294
Electrodeposition 307
Electronic test 395
Electrophoresis 101
Electrospinning 268
Elevated CO_2 040
Elongation factor gene 049
Embroidery art 390
Embryo infection 209
Embryogenesis 124
Embryonic rnai 167
stage 238
Endocytose 069
Endocytosis 069
Endoplasmic reticulum pathway 064
Enhanced cyan fluorescent proteins 250
Enolase 215
Enoyl-coa hydratase precursor 1 (ECH1) 182
Enrichment pattern 004
Ensiled mulberry leaves 342
Entomophagy 341
Environmental sustainabillty 009
Enzymatic hydrolysis 366, 383
reactions 313
Enzyme activity 013
flavoenzyme 089
Epicuticular wax 023
Epidemic pattern 208
Epidermal chitin synthase 120
growth factor receptor 111
Epidermis 085
Eri egg preservation 238
silkworm 059, 251
biology 248
-silk 257
ERR percent 056
Erythromycin 212
Escherichia coli 086
Esterase 063
Esterification 275
Ethanol extract 326
Etiquette 292, 392
using 390
Ets family proteins 168
Eugenol 329
Eukaryotes 236
Eukaryotic expression 178
Evaluatlon 142
Excitation dependent 318
Exogenous jasmonic acid 027
Exorista bombycis 243
sorbillans 190

Experimental animal 253-254
Export earning 385
Expression 118, 159, 235
analysis 016, 179
level 042, 174
profile 124
Extra leg 107
Extraction process 345, 380
Eye tracking 298

Fabrication 267
Fabrics 270
Far-infrared spectroscopy 117
Fashion design 391
industry 391
material 391
show 391
Fat body 094, 106, 203
Fatty acid composition 070
Favorable health effect 099
Fe3+; Zn2+ 359
Fecal bacteria community composition 342
Feed fermentation 363
intake 314
value 368
Female heterogamety 152
Fenton reaction 271
Fermentation 379
Fertilizer dose 005
dose Effect 006
efficiency 368
type 014
Fiber 258
strength 336
Fibroin 277, 280
activity 072
heavy chain 176
f peptide 366
protein 131, 154
silk 333
Fifth instar 100
Filament 001
strength 261
Film 258
Finance 296
Fixation 316, 343
map 298
Flame retardant finishing 286
Flavanone-3-hydroxylase of mulberry 042
Flavonoid 025, 042, 216
biosynthesis 045
Floss 259
Flow cytometry 043
Fluorescence quenching 017
Fluorescent 151, 250
brightener 28 189
immuno histo chemistry 131
quantitative per 125
staining 189
Four-season flower pattern 291
Free fatty acid 232
Freeze-dried 325
Fresh cocoon raw silk 261
Frozen gonad 068
Fruit body 244
length 339
setting rate 339
traits 339
FSG 15N1 A 281
Function 394
Functional evolution 083
gene 297
site 181
Fungal ITS rdna sequence 046
Fungi 046, 196

G protein coupled receptors 084
Galactosylated N-glycan 078
Gas chromatography 232
Gauze 386
Gelation 333
Geminin 169
Gene cloning 042, 200, 205, 215
editing 188
expression 031, 085-086, 150, 168, 175, 224
family 016
mapping 177
related Infection 159
transcription 218
Genetic differentiation 241
diversity 028, 146
pools 140
variability 034
Genipin 313
Genital development 067
Genome 061
editing 075, 160, 170
Genotype 037
Gentamycin 212
Genus enterobacter 206
rhynchaenus 246
Geraniol 362
Germplasm 142
difference 042
resources 339
Gerotarget 253-254
Gland 259
Glass fiber 288
Global warming 007
Glucose tolerance 346
Glutamic acid 329
Glutathione 155
s-transferase 155
Glutosinate 003
Glycerol-3-phosphate dehydrogenase-1 182
Glyphosate 357
Go annotation 224
Gold decoration 398
Grafting 287
Grainage 055
Grasserie (bmnpv) disease 213
Green synthesis 310
Growth 038, 062
and development 256
factors 307
of silk gland 098
parameter 011
regulator 037
Gustatory receptor 153
Gut microbiota 312

Haemolymph 094, 100, 198
Hardwood cutting 032
Harvest season 018
Hatching 238
Heat shock 223
protein 223
Heavy metal 004, 388
Helicase 112
Hemocytin 219
Hemoglobin A1c 358
Hemostatic property 366
Hepatic tissue engineering 262
Herbal medicine 358
Herbicide 003
Heterogeneity 225
Hexapoda 236
High death rate 173
density lipophorin 096
humidity 060

performance liquid chromatography 316
pressure 362
productivity 144
temperature response 085
fat high-fructose-induced obesity 375
resolution melting analysis 177
throughput sequencing 158
Hijack 193
Hippophae memnoides 004
Holocentric chromosome 162
Homology 061
Horseradish peroxidise 287, 313
Host gene expression 057
pathogen interaction 230
plant 110
Hot air drying 381
Housekeeping genes 174
HPLC-TOF-MS 044
HPTLC 311
Hub protein 020
Human consumption 364
egg 157
Humoral immune response 116
Hydraulic conductance 021
Hydro-fluctuation belt 002
Hydrogel 352, 382
Hydrogen Peroxide 393
Hydrophobicity 338
Hydropower 402
Hydrothermal treatment 318
Hydroxyapatite 307
Hydroxyethyl methacrylate 287

*I*dentification of chromosome ploidy 043, 074
Image processing 387
Imitation 291
Immune 340
response 102, 159
Immuno fluorescence 186
histochemistry staining 154
Immunology 349
In vitro culture 360
digestion 374
Indole-3- Butyric Acid 033
Induced activity 052
expression 134
Inducer concentration 176
Industrial application 333
Infected tissue 210
wound healing 377
Infection 092, 102, 193, 213
and spread 209
Infectious disease 349
Infectivity 187
Infrared spectroscopy 284
Inhibiting energy metabolism 249
Inhibitor of apoptosis protein 178
Initial bacterial density 176
Innate immunity 079, 092
Inoculation amount 334
Inonotus hispidus 244
Inorganic nitrogen fertilizer 015
Insect 163, 236
herbivores 110
immunity 103, 130, 168
pests 213, 246
proteomics 115
plant interactions 153
Insecticidal application 105
Insecticide 234
Insulin 128
Integrin beta 233
Integument 196
Inter simple sequence repeat 028
Interacted protein 197

Interacting protein 180
Interaction 110, 194, 292
Intercrop 303
International market power 294
Intestinal flora 057
mucositis 351
Intracellular parasite 203
Intumescent flame retardant 286
Invertebrates 236
Ion-transporting proteins 115
Iron complex 271
tailing 004
Isomoracin D 355
Isotherm 270
Isozymes 063
ISSR molecular marker 146
Iterative synthesis 091
ITK practice 303
Itraq 126
quantitative proteornics124

Jasmonic acid 026

JHE 128
Juvenile hormone 075, 128
mimic 091
pathway 093
esterase 133

Kainic acid 329

KEGG pathway 083, 224
Kinetics 270, 383
Kinetochore 162
Knock down 348
Knock-in 170-171
Ko-hemp 392
Kodakaraensis (KOD) 372
Kuso 170

Label-free quantification 083

Lac dye 278
Lactic acid bacteria 092
Lactobacillus sp 092
Lambs 314
Larva rearing 209
Larval behaviour 077
duration 054
growth 001
hemolymph 340
powder 325
weight 054, 098
pupal transformation 065
Laying eggs 256
LC-MS 323
LC-MS/MS 115
Leaf position 018
yield 010, 041
Leaky scanning translation 207
Lebocin 066
Lef-1 gene 227
Lemonia taraxaci 137
Lemoniidae 137
Leno 386
Lentiviral expression vector 219
Lepidoptera 077, 236, 247
Lepidopterans 152
Lflavirus , 2C protein 112
Liaocan 582 144
Lifespan 253-254
Ligand 111
Light fluffy cocoon 281
Lipid 096
metabolism 249
peroxidation 332
rafts 073
producing fungal strain 051
Lipophorin 096
Lipopolysaccharide 086

Lithium bromide 367
Live cocoon reeling 135
Livelihood 240
Llvestock-sericulture farming 009
Logit model 302
Long-term preservation 068
Loop-mediated isothermal amplification 047-048
Low cycle bending fatigue 288
density lipophorin 096
Lowering locus T gene 181
Luminescence 318
Luminescent carbonaceous nanoparticles 318
Luxury 398
Lysocin E 354

Macrophages 109
Macrophomina phaseolinaMOO-1 051
Major intrinsic proteins 021
Manosonication 362
MAPK 106
Mass loss 277
ratio 279
Mat reinforced composites 288
Material's lifecycle 267
MATLAB 387
Mechanical characterization 330
properties 280
Mechanization 382
Medicinal value 328
Melanisation 095
Mentorship 304
Mesenchymal stem cell 360
Metabolism 312
Metabolomics 323
Metal element 030
Metamorphosis 066, 075, 090, 132, 138, 145
Meteorological parameters 044
Methane amelioration 363
Methyl 12-trishomofarnesoate 091
Micro switch force sensor 281
wave curing 275
Microbial infection 079
lipid 359
peptide 371
Microenvironment 058
Microfluidic spinning 336
Micronutrients 010-011
Microorganism 008
strain 379
Microrna 164, 227
Microsatellite markers 140
Microsporidia 204
Microsporidium 184
Microtrichia 239
Microwave-assisted extraction 070
Midgut 126
proteins 182
response 228
Ming dynasty 398
Mir-274-3P 230
Mirna 150, 219
Misidentification 137
Mitochondria 167
Mitochondrial cytochrome C oxidase subunit I gene 148
DNA gene 140
pathway 064
Mixed forest 004
Model organism 347
Modification 273, 347
Moisture retention capacity 023
Molecular biological method 273
dynamics 330
identification 187
mechanism 039, 084

weight degradation 265-266
Molting fluid 138
regulation 067
Monitoring 247
Moraceae 309, 319
Moracin C 355
Moracin N 071
Mordant 278
Morphologic diversity 107
Morphological characteristic 246
structure 277, 366
Morphology 183, 187
Morus alba 319, 357
fruits 355
pollen 315
cathayana 035
etropurouree 158
multicaulis 035
Morusalbol A 319
Morusalbol B 319
Mother moth examination 217
Motorized weft winding machine 384
Moulting 132
Mouse 375
Mrna expression level 223, 255
Mrudula oil 274
Mtdna 167
Mucin 351
Mulberry 021
accession 034
branch 027
medium 244
cultivar 146
digest 401
endophytic fungi 051
field weeds 003, 013
soil 014-015
fruit 337, 345, 373, 381
gardens 301
genome 297
industry 297, 394
leaf 013, 018, 030, 380
extract 327, 351, 358
forage 379
powder 343
tea 316
leaves 110, 314
silk 285
species 399
stem 361
twigs 024
variety 018
extract 346
Multi-functional immune complex 095
Multilocus sequence analysis 206
Multivoltine 190
Muscardine 191
Mutation 035
Mycelium 104
Mycosphaerella mori 199

N-(N-phenzoyl-l-phenylalanyl) -l- phenylalanol 355
N-acetyl-cysteine 127
N-Glycan 157
N-glycosylated srage 081
N-glycosylation 350
N Bombycis infection 203
Naci stress 031
Naked pupa 060
Nalia 094
Nano fiber structure 367
hydroxyapatite 317
Nanomaterial 347
Nanoparticles 216
Native silk fiber 369
Natural yellow cocoon 135
NEDD8 179
Nervous system 136

Neuropeptide 084, 136
Neurotoxicity 357
New microsporidian 183
Next-generation sequencing 140
Nitric oxide (NO) 237
Nitric oxide synthase (NOS) 237
Nitrogen application 010
source 359
Nm2 mutant 113
Non-chemical pest management 242
coding RNA 163
food plants 248
mulberry silk fibroin 307
repetitive polypeptide 176
toxic material 267
woven mat 268
specific lipid transfer protein 315
woven fabrics 262
Norfloxacin 098
Nosema sp CP 187, 229
Nosema bombycis 182, 186, 189, 200, 204-205, 208-209, 215, 224-225, 235
pernyi 211
Nosematosis 229
Novel antibiotics 354
Novel-31 219
Nucieopolyhedrosis virus 172
Nuclear polyhedrosis virus 071
Nucleoid 167
Nucleotide triphosphotase 112
Nutrient 368
content 379
use efficiency 005-006
Nutritional physiology 076
Nutritive value 364

Oak 246

Obesity 375
Octanal 362
Octylphenol ethoxylates 270
Odorant-receptor co-receptor 087
Oefense enzyme 027
One bath method 282
Operational performance 384
Optimal condition 334
Oral administration 249
Organic fertilizer 013
Osmotic regulative substance 031
Ovary-derived culture 163
Oviposition behaviour 239
Oxidative stress 344, 401

P-element somatic inhibitor 121

P143 protein 195
P25 protein 131
Pancreatic α-cells 344
Papain 276-277
Paper mulberry 020
Parasites 202
Parasitic infection184
Passive Cutaneous Anaphylaxis 370
Pathogen 053, 199, 202
dependent 102
Pathogenesis-related protein gene 052
Pathogenicity 183, 206
Pattern design 397
recognition 095
PC toxin 194
Pcg protein family 180
PCSK9 mrna expression 355
Pealius mori 241

Pebrine 144, 208, 217
disease 203
Pelade 259
Peptide biomaterial 335
Per amplification 014
Performance evaluation 054
Performic acid 393
Peroxidae 063
Pest and predator 240
monitoring 301
Pesticide poisoning 127
toxicity 303
Ph value 334
Pharmaceutical materials 368
Pharmacokinetics 354
Phase-Separation 333
Phenolic acid 312
compounds 044, 401
constituents 309
Activity 029
Pheromone trap 247
Philosamia cynthia ricini
nucleopolyhedrovirus 220
Phloeospora mecutens 199
Phosphatise 074
Phosphobacteria 001
Phosphorylation 020-221
Photo catalyst 275
Photonic crystal 289
Photosynthesis 021, 040
Phoxim 106, 127
Phylogenesis 297
Phylogenetic tree 049
Phylotype I mulberry strains
047-048
Physical method 273
Physicochemical properties 070
Physiological character 002
property 032
PI3K/Akt 106
Piggybac transposon 378
Pirna biogenesis 322
Pitch 170-171
Piwi-interacting rnas 322
Plant expression vector 052
extract 375
Planting history 399
PLS-regression 311
Poikilotherm 057, 119
Politics 400
Poly(vinyl alcohol) 308
Polyclonal antibody 131, 200
Polyelectrolyte multilayers 308
Polymerase activity 185
Polyphagous 190
Polysaccharide 344
Polysensitization 315
Population dynamics 245
structure 140
Post-harvest water loss 023
Post-transcriptional regulation
164
Posterior silk gland 083, 147
Powdery Mildew 045
Pre-molting larvae 113
Precooling treatment 320
Preference 248
Prenylflavonoid 319
Present situation 382
Prevention 184
Prevention and control
technology 208
Pricing power 294
Primary speciation 030
Primordium 129
Principal component analysis 028
Printing 278
Pro-oxidative enzyme activity 161
Probiotics 099, 351
Process condition optimization
337
Processing temperature 316

time 316
Production 300
performance 384
Profilin 315
Progeny virus 222
Programmed cell death 090
Prokaryotic expression 124, 131, 176, 200, 205, 215
Prolegs 143
Proliferation 234
Proliferative phase 186
Prolyl 4-hydroxylase 378
Promoter 052 181
Propagation 041
Property 260, 369
Prophenoloxidase 082
activation 116
Propidium Iodide 189
Proportions 001
Protein 089
expression 024
hydrolysate 359
interaction 182
sericin 101
protein interaction 111
Proteomics 083, 110, 221
Protoplast fusion 051
Pseudomonas aeruginosa 092
PTTH deficient silkworm 062
Pupa 055, 094, 100
Pupal commitment 075
residue 008, 364
Pyridoxal 5'-phosphate 074

QGriffithii 056
Q Serrata 056
Qiaojia county 402
Quail-like (q-lp) mutant 114
Quality 010, 013
cocoons 058
Quantitative proteomics 126
real-time PCR 061
Quarantine method 189

RAGE-ligand interaction 081
Raily 055
Ralstonia solanacearum 047-048
Raman spectroscopy 225
Random sampling 302
Raw silk 395
cohesion 261
defects 261
quality 263
RCC house 058
Rdna-ITS sequence 199
Real-time fluorescent qper 211
quantitativePCR 218
Rearing 001, 055
environment 060
performance 056, 059, 105
Receptor for activated protein inaseC 233
Recognition method 395
Recombinant protein 078, 185
Recurrent backcross breeding 135
Red pigment 339
Reducing agent 276
Reeling basin 263
Regenerated silk fibroin filament 369
Regional population 241
Regression 373
Regulation 150, 221
Relaxation 258
Relish 156
Repress 228
Reproductive damage 255
Residual demand 294
toxicity 003

Resistance 139, 144, 188, 192, 231
to friction 338
to washing 338
Resistant gene 177
molecular mechanism 192
Resource conservation 009
management 295
Response surface methodology 337, 345, 380
Responsive pathway 020
Resveratrol 365
Revenue 384
Reweighted sampling 373
Ribosomal protein gene 049
RNA interference 172
polymerase 306
virus-encoded micrornas 214
seq 016, 153, 226, 231
Rnai 157, 162
Rocky desertification 002
Root bark 019, 331
Rooting 033, 037
type 032
Rosales 016
Rotunda rotundapex 137
Rpm 243

Samia cynthia ricini 251
Sampling technique 050
Saturniidae 080, 148
Scaffold protein 204
Schizonepeta 283
Seamless knitted fabric 285
Seasonal incidence 301
Secondary metabolite 027
Seed germination 031
Self-healing 338
monitoring blood glucose 358
Semi-quantitative RT –PCR 164
Seminal fluid proteins 237
Sensitivity 102
Sensory quality 343
Sequence analysis 124, 215, 235
feature 134, 180, 200, 205
Sequencing 297, 342
Sequential structure 181
Sericigenous Saturniidae 299
Sericin 308, 310, 321, 332-333, 360
gene1 164
expression system 348
Sericultural waste 008
Sericulture 296
Industry 402
Serifit 053
Serine protease 201
Serpin 079, 116
Serpin6 082
Sex Determination 121
Sf21 cell infection 222
Shelf-life 320
Shell 259
Short rotation coppice 040
Shot-hole disease 046
Sigma factor 306
Signal transduction 066 084
Signaling pathway 111
Silk 151, 260, 273-274, 284, 332, 347, 374
crepe satin 269
degumminq 272, 276
dyeing 300
fabric 283, 287-289, 292, 338, 389-390
feedstock 333
fiber 264, 271
fibrillogenesis 115
fibroin 117, 258, 262, 268, 313, 325, 336, 366, 374, 377, 382
fiber 317

films 367
ratio2 279
Gland 065, 090, 122
moths 299
pattern 396-397
powder 325
product 294, 298
design 304
production 012, 267
productivity 384
property 272
protein 352
synthesis 072
road 394, 400
sericin 325
textile industry 385
yarn 299
yield 147
gland bioreactor 378
hemp fabric 286
moth 077, 140
Silkwom seed production 217
allergy 324
cocoon 376-377
eggs 089
excrement 013, 368
feces 110
feeding method 273
infection model 306
larva 256
model 354
pupa 078, 324
protein 383
oil 070, 108, 363
variety 135, 139
BEVS 372
Silver nanoparticles 310, 377
Simple sequence repeats 141
Single cell 225
nucleus suspension 043
cell gel electrophoresis 076
Size of wing 129
Slgnaling pathway 154
Slow growth 173
Small subunit rrna 211
Soaking 274
Sodium fluoride 255
Soil enzyme 013
health 008
organic carbon 007
Soluble solid content 373
Solvent effect 029, 330
extraction 029
Song brocade 291
dynasty 386
Spatail distribution pattern 050
Specification 291
Spectrophotometry 125
Sperm activation 237
Spinneret 259
Splice variants 136
Split application 005-006
Sporogonic phase 186
Spun silk fabric 290
SSR molecular marker 177
Staphylococcus aureus 216
Starvation 256
Steamed 325
Stem Cutting 033
Stilbene 365
synthase 025, 365
Stone house 058
Storage protein 1 069
Strain improvement 051
Strength loss 277
Stress resistance 335
Structural color 289
identification 356
protein 197, 207
Structure 260
transition 117
Subcellular location 118

localization 205
Succinate dehydrogenase 063
Succinic acid 272
Sucking pests 301
Sugar degree 339
Suitable condition 054
Sun-dried mulberry fruit pomace 342
Superior quality 144
Superoxide dismutase Peroxidase198
Surface elasticity 281
morphology 261
protein 205
Surfactants 280
Susceptibility 039
Susceptible breed 210
SWATH proteomics 071
Synthesis 267
System of official costume 390

Transgenic tobacco 181
T400 fiber 282
TALEN 170-171
Tandem mass tag 221
Target gene 214, 219
site 160
Tasar eco-race 293
seed sector 240
silkworm 100-101, 141, 229
Taste 153
TE-sirna 166
Tea plantations 242
Technological condition 272
measure 394
Temperate climate 041
Temperature and humidity 119
Temporal change 026
Tertiary food plant 248
TFAM 167
Thai rice 104
Thatched roof asbestos sheet house 058
Therapeutic activity 306, 354
Therapeutical effect 371
Thermal inactivation 017
tolerance 119
wet comfort performance 285
Thermotolerance 119
Thiol peroxiredoxin 109
Three point bending 288
design method 176
Thz time-domain spectroscopy117
Tiny pests 046
Tio(2) nanoparticles (nps) 122
Tissue engineering 313
expression 180
sections 255
Titanium dioxide nanoparticles 252
Tolerant breed 210
Toll pathway 079
like receptor 086
pathway 216
Total polyphenols 345
quality management 300
Traditional Chinese medicine 341
culture 397
medicine 361
Transcription 118
activation 022
factor 097
Transcriptional activity 097
Transcriptomic 093
difference 226
Transformation 304
Transgene 087, 378
Transgenic 025
plants 023
silkworm 081, 147, 151, 250, 348, 352
Transgenosis 149

Transient expression 178
Transkingdom rnai 172
Transmissibility 187
Tree cultivation 012
Trehalase 200
Trehalose 100
Trichoderma 051
Trichoid sensilla 239
Tropomyosin 324
Trypsin-like protease 237
Turtle/IGSF9 235
Tussah cloth 393
moth 341
Two-dimensional electrophoresis 138, 207
Type 2 diabetes 323
I human collagen-like protein 378
Tyrosinase inhibition 311

Ubiquitin-like protein 179
Ubiquitination 179
Ultrabithorax 107
Ultrasnic-assisted ethanol extraction 337
Ultrasound 362, 383
Unsaturated polyester resin 257
Uric acid 093
Urinary metabolites 323
Utilization 142
value 399
Uzi fly 243, 245

Vaccines 349
Vacuum drying 381
Value added product 364
Vanya silk 240
Variance analysis method 264
Vermicompost 001
Vertical deposition self-assembly 289
Viral infection 201
propagation 201
Virulence 226
Virus infection 218
Multiplication 193
resistance 071
like particles 207
Visual cognition 389
Vitellogenin 069
receptor 069
Volatile compounds 362
Volatiles 026
Vp7 gene 197
Vta1 118

Warp twisted 386
Warping 274
Wastage 384
Water resistance 286
Wavelength selection 373
Wearability 290
Weather 245
Weave structure 285
Weight gain or loss 248
Western blot 154
White mulberry 361
Wild mulberry 339
silk-producing insect 148
Window 298
Wine 362
Wing cuticle protein gene 134
development 129
disc 088, 129
Wisting 274
Wound healing 376

X-ray diffraction 284

Xiangcaihuang 1 135

Yarn evenness 261

Yarrowia lipotyttce 359
Yeast 022
Yellow dwarf phytoplasrna 049
Yield 013
traits 063
Yorkie(CA) 147

Z-linked expression 152

ZFN 171
Zhou dynasty 390