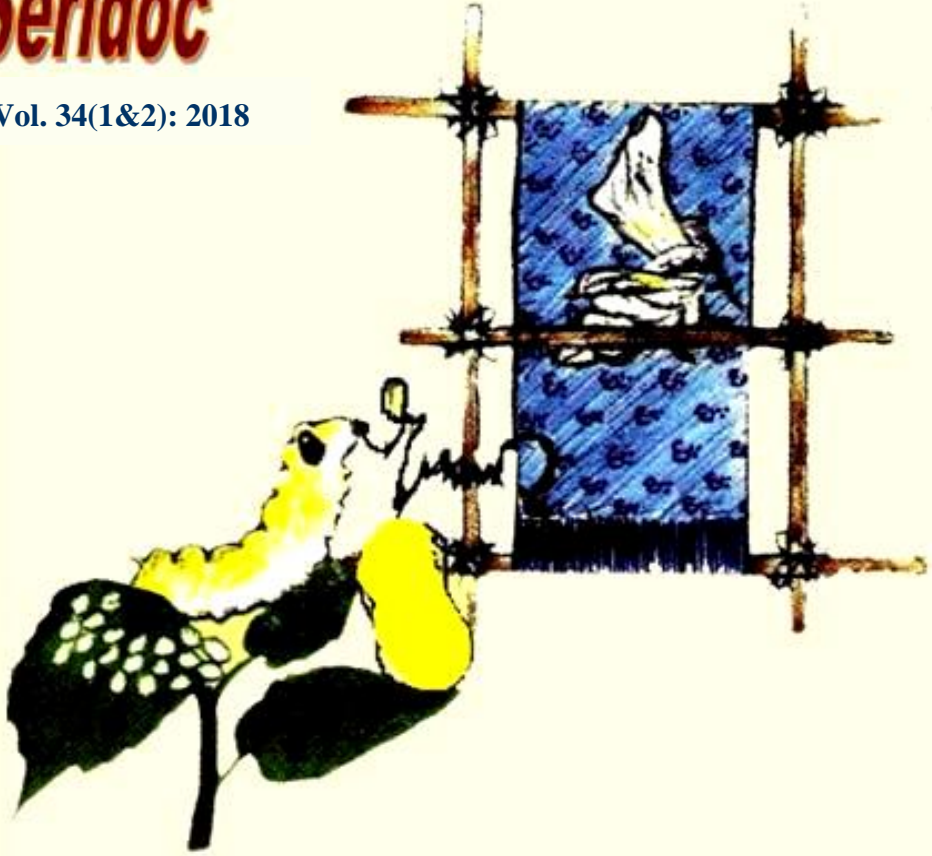


आईएसएसएन / ISSN : 0970-4906

सेरिडॉक Seridoc

खंड/Vol. 34(1&2): 2018



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

2018

सेरिडॉक *Seridoc*

(Half - Yearly)



प्रकाशक/Published by

डॉ पंकज तिवारी/Dr. Pankaj Tewary

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

2018

मुख्या संपादक
डॉ .प्रतीश कुमार, पी.एम.
Editor in Chief
Dr.Pratheesh Kumar, P.M.

संपादकीय समिति

Editorial Team

डॉ .तिरुपतैय्या, वाई. Dr.Thirpathaiah, Y.

डॉ .एल. सतीश. Dr.L. Satish

डॉ .गायत्री टी. Dr.Gayathri, T.

मंजुनाथ, एन.के. Mr.Manjunatha, N.K.

रामकृष्ण वी. Mr.Ramakrishna, V.

गुनेश्वर कुमार चुरेंद्र. Mr. Guneshwar Kumar Churendra

IN THIS ISSUE

SUBJECT

PAGE NO

HOST PLANT	
1.1. Soil Science and Cultivation	001
1.2. Physiology and Biochemistry	002
1.3. Cytology, Breeding and Genetics	009
1.4. Diseases	011
1. SILKWORM	
2.1. Rearing Technology	016
2.2. Physiology and Biochemistry	016
2.3. Cytology, Breeding and genetics	028
2.4. Molecular Biology	032
2.5. Diseases	046
2.6. Seed Technology	052
3. PEST MANAGEMENT	055
4. NUTRITIONAL STUDIES	056
5. POST COCOON TECHNOLOGY	056
6. SERICULTURE	
6.1. Economics and Statistics	062
6.2. Extension Management	065
6.3. Value Added Products	067
6.4. Engineering and Miscellaneous	090
7. AUTHOR INDEX	092
8. SUBJECT INDEX	121

Journals Covered in the issue

A

1. Acta Biomaterialia
2. ACS Biomaterials Science and Engineering
3. Agricultural Engineering Today
4. Agricinternational
5. Applied Microbiology
6. Archives of phytopathology and plant Protection
7. Asian Journal of Multidimension research

B

8. Biochemical and Biophysical Research Communications
9. Bioinfolet - A Quarterly Journal of Life Science
10. Biological Agriculture and Horticulture
11. Biomacromolecules
12. Bioscience, Biotechnology, and Biochemistry
13. BMC Genomics

C

14. Canadian Journal of Plant Science
15. Canye Kexue
16. Chemosphere
17. Colloids and Surfaces. B, Biointerfaces
18. Comparative Biochemistry and Physiology. Part B, Biochemistry & Molecular Biology

D

19. Developmental and Comparative Immunology
20. Drug Discoveries and Therapeutics

E

21. Environmental Science and Pollution Research
22. European Review for Medical and Pharmacological Sciences
23. Experimental and Therapeutic Medicine

F

24. Food Chemistry
25. Frontiers in Microbiology
26. Frontiers in Plant Science
27. Frontiers in Physiology

G

28. *Gene*

H

29. Heredity

I

30. Indian Journal of Entomology
31. Indian Horticulture Journal
32. Indian Silk
33. Insect Biochemistry and Molecular Biology
34. Insect Molecular Biology
35. Invertis Journal of Science and Technology
36. International Journal of Biological Macromolecules
37. International Journal of Molecular Sciences
38. International Journal of Phytoremediation
39. International Journal of Food Property

40. International Journal of Polymer Science

J

- 41. Journal of Agricultural and Food Chemistry
- 42. Journal of Economic Entomology
- 43. Journal of Entomological Research
- 44. Journal of Genetics
- 45. Journal of Insect Biotechnology and Sericology
- 46. Journal of Insect Physiology
- 47. Journal of Insect Science
- 48. Journal of Invertebrate Pathology
- 49. Journal of Photochemistry and Photobiology B, Biology
- 50. Journal of Progressive Agriculture
- 51. Journal of Proteomics
- 52. Journal of Royal Society Interface

M

- 53. Materials (Basel, Switzerland)
- 54. Materials Science and Engineering. C, Materials for Biological Applications
- 55. Microbiology Open
- 56. Mitochondrial DNA Part B, Resources
- 57. Molecular Biotechnology
- 58. Molecular Immunology
- 59. Molecular Medicine Reports
- 60. Molecules (Basel, Switzerland)
- 61. Munis Entomology and Zoology

N

- 62. Natural Product Research

O

63. Open Biology

P

64. Peer Journal
65. Plant Physiology and Biochemistry
66. Plant Signaling and Behavior
67. PLoS Genetics
68. PloS One
69. Proceedings of the National Academy of Sciences, USA
70. Proteomics

R

71. Range Management and Agroforestry
72. Research on Crops
73. Royal Society Open Science
74. RSC Advances

S

75. Scientific Reports
76. Sericologia

T

77. The Journal of Biological Chemistry

1. HOST PLANT

1. 1. Host Plant Soil Science and Cultivation

001

Jiang YB ; Huang RZ; Jiang SM; (2018)

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

Adsorption of Cd(II) by rhizosphere and non-rhizosphere soil originating from mulberry field under laboratory condition

International Journal of Phytoremediation 20(4):378-383 (English)

002

Maria JR; Thomas AD; Cohen E; Huang WW; Omenetto FG; Kalpan DL; (2018)

(Department of Biomedical Engineering, Tufts University, Medford, MA, USA)

3D free form printing of silk fibroin

Acta Biomaterialia 71:379-387 (English)

003

Mogili T; Padmini P; Vaijayanthi PV; Sivaprasad V; (2017)

(Central Sericultural Reserch and Training Institute, Mysuru 570008, Karnataka, India)

Rapid assessment of fertilizer sufficiency and leaf quality in mulberry using chlorophyll meter and leaf color chart

Sericologia 57(4):224-230 (English)

004

Ray P; Gogoi SH; Bandyopadhyay S; Padua S; Jena RK; Roy DP; Ramachandran S; Sharma GK; Sah KD; Trivedy K; Singh SK; Ray SK; (2018)

Host Plant

(ICAR- National Bureau of Soil Survey and Land use planning, Regional Centre, Jorhat-785004, India)

Fertility status of mulberry (*Morus indica* L.) growing soils of upper Brahmaputra valley region of north eastern India

Range Management and Agroforestry 39(2):147-155 (English)

005

Sharma D D; (2018)

(Retired Scientist, Central Sericultural Research Training Institute, CSB, Mysuru)

Valuable suggestions for harvesting mulberry from new plantation

Indian Silk 9(5-6):46-47 (Hindi)

006

Zheng ZY; Zhang MH; Li ZI; Ran RL; Yang Y; Ren J; (2018)

(Chongqing Three Gorges Academy of Agricultural Sciences, Chongqing 404155, China)

Effect of applyig N, P and K fertilizers at different proportions on mulberry fruit quality

Canye Kexue 44(5):787-791 (Chinese)

007

Zheng Li; Di DD; Xiao WW; Ma Yue; Xiong M; Zhang YH; Yan H; Zhang GH; (2018)

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

Rapid determination of soil organic matter in mulberry field by micro near infrared spectrometer

Canye Kexue 44(6):923-928 (Chinese)

1. 2. Host Plant Physiology and Biochemistry

008

Dai FW; Li ZY; Wang ZA; Luo GQ; Chaoyi Z; Tang CM; (2018)

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

Contents of Nutritinal components in Mulberry bud and their correlation with taste

Canye Kexue 44(6):968-972 (Chinese)

009

Hao JY; Yi W; Yao XH; Zhao WG; Hu RZ; Chen C; Li L; Zhang DY; Wu GH; (2018)

(College of Biotechnology and Sericultural Research Institute, Jiangsu University of Science and Technology, Zhenjiang, P.R. China)

Effect of different planting areas on the chemical compositions and hypoglycemic and antioxidant activities of mulberry leaf extracts in Southern China

Plos One 13(6):e0198072 (English)

010

Hassan B; Mankowski ME; Kirker GT; Clausen CA; Ahmed S ; (2018)

(Termite Research Laboratory, Department of Entomology, University of Agriculture Faisalabad, Faisalabad, Pakistan)

Effects of White Mulberry (*Morus alba*) Hear twood Extract Against Reticulitermes flavipes (Blattodea: Rhinotermitidae)

Journal of Economic Entomology 111(3):1337-1345 (English)

011

Hu DW; Xu Y; Xie JH; Sun CG; Zheng XD; Wei C; (2018)

(Department of Food Science and Nutrition, National Engineering Laboratory of Intelligent Food Technology and Equipment, Hangzhou 310058, China)

Systematic evaluation of phenolic compounds and protective capacity of a new mulberry cultivar J33 against palmitic acid-induced lipotoxicity using a simulated digestion method

Food Chemistry 258:43-50 (English)

012

Huang RZ; Li Y; Jiang YB; Jia CH; Jiang SM; Yan XP; Qin ZLJ; (2018)

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

Effect of Cadmium and lead combined stress on growth of mulberry saplings and contents of heavy metal in mulberry leaf.

Canye Kexue 44(5):665-671 (Chinese)

013

Jiang JH; Cai C; Cui XH; Weng LJ; Li RN; (2018)

(Zhejiang Provincial key Laboratory of Biometrology and Inspection Quarantine, College of Life Sciences, China Jiliang University, Hangzhou 310018, China)

Changes in texture and cell wall structure of post harvest mulberry fruits during aril breakdown

Canye Kexue 44(4):580-587 (Chinese)

014

Khalifa I; Nie RG; Ge ZZ; Li KK; Li CM; (2018)

(College of Food Science and Technology, Huazhong Agricultural University, Wuhan 430070, China)

Understanding the shielding effects of whey protein on mulberry anthocyanins: Insights from multispectral and molecular modelling investigations

International Journal of Biological Macromolecules 119:116-124 (English)

015

Liang QQ; Wang QI; Wang Y; Wang YN; Jia H; Jiang MM; (2018)

(Tianjin State Key Laboratory of Modern Chinese Medicine, Tianjin University of Traditional Chinese Medicine, Tianjin 300193, China)

Quantitative ¹H-NMR Spectroscopy for Profiling Primary Metabolites in Mulberry Leaves

Molecules (Base, Switzerland) 23(3):554 (English)

016

Lin C; Hou Y; Hu WJ; Qiu XY; Lu HL; Wei J; Yu SF; He NJ; Zhang H; Shen GX; (2018)

(Sericultural Research Institute, Zhejiang Academy of Agricultural Sciences, Hangzhou, 310021, China)

The molecular chaperon AKR2A increases the mulberry chilling-tolerant capacity by maintaining SOD activity and unsaturated fatty acids composition

Scientific Reports 8:12120 (English)

017

Ma QQ; Ramesh Kumar; Zihan SN; Xue QW; Guo XD; Chen GH; (2018)

(Tianjin Key Laboratory for Modern Drug Delivery High-Efficiency, School of Pharmaceutical Science and Technology, Tianjin University, Tianjin 300072, PR China)

Effect of different drying methods on the physicochemical properties and antioxidant activities of mulberry leaves polysaccharides

International Journal of Biological Macromolecules 119:1137-1143 (English)

018

Nagaveni V; Shree MP; Mahadeva A ; (2018)

(Department of Studies in Sericulture, Bangalore University, Jnana Bharati Campus, Bengaluru 560056, India)

Production of phytoalexins - a post-infectional defense mechanism in mulberry (*Morus spp.*)

Sericologia 58(2):74-90 (English)

019

Rodriguez P; Grinan I; Hernandez Y; Cruz ZN; Galindo A; Ruiz A; Perez MC ; Rodriguez Y ; (2018)

Host Plant

(Corporación Colombiana de Investigación Agropecuaria (Corpoica), Centro De Investigación Obonuco. Kilómetro 5, Vía Pasto-Obonuco, San Juan de Pasto, Nariño, Colombia)

Agronomical, Physiological and Biochemical Characterization of Chinese Mulberry Cultivars under Cuban Tropical Conditions

Indian Horticulture Journal 8(1):25-30 (English)

020

Shen WZ; Zou YX; Liu F; Lin GY; Liao S; (2018)

(Laboratory of functional Foods, Ministry of Agriculture, Guangdong, China)

Variation of total alkaloid content in mulberry leaf

Canye Kexue 44(5):783-786 (Chinese)

021

Sun R; Lei S; Han CM; (2018)

(School of Food Science and Engineering, Qilu University of Technology (Shandong Academy of Sciences), Jinan, China)

Partial least squares and canonical correlation analysis of chemical constituents and active ingredients of new types of Chinese mulberries

Food Science Nutrition 6(7):1950-1959 (English)

022

Tao YL; Chen BW; (2018)

(National Engineering Laboratory of Intelligent Food Technology and Equipment, Key Laboratory for Agro-Products Post harvest Handling of Ministry of Agriculture, Zhejiang, Hangzhou 310058, China)

Comparison of the protective effect of black and white mulberry against ethy 1 carbamate-induced cytotoxicity and oxidative damage

Food Chemistry 243:65-73 (English)

023

Vijayan K; Jayarama Raju P; Singhvi NR; Ravikumar G ; (2017)

(Central Silk Board, BTM Layout, Madiwala, Bengaluru 560 068, India)

Genetic improvement of mulberry in India: challenges and prospects

Sericologia 57(4):185-197 (English)

024

Xiang WH; Huimin C; Yu LY; Shen CM; (2018)

(Hygiene Detection Center, Guangdong Provincial Key Laboratory of Tropical Disease Research, School of Public Health, Southern Medical University, Guangzhou 510515, China)

Seasonal variations of iminosugars in mulberry leaves detected by hydrophilic interaction chromatography coupled with tandem mass spectrometry

Food Chemistry 251:110-114 (English)

025

Yin CR; Fang RJ; Shang CQ; Shen Q; Cao Xu; Cheng JL; (2018)

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

Salt tolerance related physiological and biochemical characteristics and salt tolerance evaluation of three practical mulberry varieties

Canye Kexue 44(3):359-366 (English)

026

Yu YF; Li HY; Zhang B; Wang JW; Shi XP ; Huang JZ; (2018)

(State Key Laboratory of Food Science and Technology, Nanchang University, Nanchang, Jiangxi, China)

Nutritional and functional components of mulberry leaves from different varieties: Evaluation of their potential as food materials

International Journal of Food Properties 21(1):1495-1507 (English)

027

Zeng WA; Zheng S; Han L; Zhou L; Liu CY; Yu MD; Xiang ZH; Zhao AH; (2018)

Host Plant

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

Comprehensive evaluation of medicinal quality of mulberry leaves from 53 germplasm resources

Canye Kexue 44(6):905-915 (Chinese)

028

Zhang HH; Li X; Zhang S; Yin Z; Zhu W; Li J; Meng L; Zhong HX; Nan X; Yining W; Sun GY; (2018)

(College of Resources and Environment, Northeast Agricultural University, Harbin, China)

Rootstock Alleviates Salt Stress in Grafted Mulberry Seedlings: Physiological and PSII Function Responses

Frontiers in Plant Science 9:1806 (English)

029

Zhang J; Yan XP; Li YI; Huang RZ; Shao YY; Jiang SM; Jiang YB; Zou XG; (2018)

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

Determination and analysis on Alkaloids contents in leaves of main mulberry varieties cultivated in Hunan province

Canye Kexue 44(6):916-922 (Chinese)

030

Zhang MJ; Li ZL; Jiao F; Chao S; (2018)

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

Anatomical Structures of stem and leaf from eight mulberry varieties and their correlation ship with drought tolerance

Canye Kexue 44(4):516-522 (Chinese)

031

Zhang MM; Wang N; Hu BY; Sun GY; (2018)

(College of Life Science, Northeast Forestry University, Harbin, Heilongjiang, China)

Changes in soil physicochemical properties and soil bacterial community in mulberry (*Morus alba* L.)/alfalfa (*Medicago sativa* L.) intercropping system

Microbiology Open 7(2):e00555 (English)

1. 3. Host Plant Cytology, Breeding and Genetics

426

032

Dail FW; Zhao XI; Tang CM; Wang ZJ; Kuang ZS; Li Z; Huang J; Luo GQ; (2018)

(Sericultural Agri-Food Research Institute, Guangdong Academy of Agricultural Sciences, Guangzhou, China)

Identification and validation of reference genes for qRT-PCR analysis in mulberry (*Morus alba* L.)

Plos One 13(3):e194129 (English)

033

Fan W; Guo Q; Ying C; Liu XQ; Liu M; Zhang DG; Long ZG; Zhao XA; (2018)

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

Two mulberry phytochelatin synthase genes confer zinc/cadmium tolerance and accumulation in transgenic *Arabidopsis* and tobacco

Gene 645:95-104 (English)

034

Heng W; Chen DD; Hong Z; Afriyie AJ; Kotoka DK; Li RF; Sun RJ; Li L; Zhao WG; (2018)

Host Plant

(Key Laboratory of Silkworm and Mulberry Genetic Improvement, Ministry of Agriculture, School of Biology and Technology, Jiangsu University of Science and Technology, Zhenjiang, Jiangsu 212018, China)

Molecular cloning and induced expression of the plasma membrane intrinsic protein gene and promoter from mulberry (*Morus multicaulis*)

Canadian Journal of Plant Science 98(6):1245-1253 (English)

035

Li RX; Li L; Dominic K; Wang TC; Fan T; Hu F; Wang YI; Zhang L; Zhao WG; (2018)

(Key Laboratory of Silkworm and Mulberry Genetic Improvement, Ministry of Agriculture, School of Biology and Technology, Jiangsu University of Science and Technology, Zhenjiang, Jiangsu, China)

Mulberry (*Morus alba*) Mm SK gene enhances tolerance to drought stress in transgenic mulberry

Plant Physiology and Biochemistry 132:603-611 (English)

036

Li ZG; Liu SJ; Wei D; Ding TL; Ruifa R; Chu Y; Ping H; (2018)

(The Sericultural Apicultural Research Institute, Yunnan Academy of Agricultural Sciences, Mengzi Yunnan 661101, China)

An experiment on plant regeneration from tissue culture of in vitro winter buds of medicinal mulberry and from cottage propagation of branches

Canye Kexue 44(3):367-375 (Chinese)

037

Li ZG; Ran R; Liu SJ; Yang W; Wei D; Song C; Chu YN; Ping H; (2018)

(The Sericultural Apicultural Research Institute, Yunnan Academy of Agricultural Sciences, Mengzi Yunnan 661101, China)

Preliminary report on breeding of new mulberry variety Yunsang 5

Canye Kexue 44(2):329-335 (Chinese)

038

Pinto MV; Poornima HS; Sivaprasad V; Girish Naik V ; (2018)

(Molecular Biology Laboratory-1, Central Sericultural Research and Training Institute, Srirampura, Manandavadi Road, Mysuru 570 008, Karnataka)

A new set of mulberry -specific SSR markers for application in cultivar identification and DUS testing

Journal of Genetics 97(1):e31-e37 (English)

039

Pinto MV; Poornima HS; Rukmangada MS; Triveni R; Girish Naik V ; (2018)

(Molecular Biology Laboratory- 1, Central Sericultural Research and Training Institute, Mysuru, RSRS, Chamarajanagar, Karnataka, India)

Association mapping of quantitative resistance to charcoal root rot in mulberry germplasm

Plos One 13(7):e0200099 (English)

1. 4. Host Plant Diseases

040

Akanksha C; Srivastava RP ; (2018)

(Insecticide Toxicology Laboratory Department of Entomology, College of Agriculture, Govind Ballabh Pant University of Agriculture and Technology, Pantnagar-263 145, Uttarakhand, India)

Persistent toxicity of some insecticides against *Spilosoma obliqua* (Walker) on rajmah and mulberry plants

Journal of Entomological Research 42(1):81-86 (English)

041

Bandyopadhyay UK; Santha Kumar MV; Chatterjee S; Maji C; Bindroo BB ; (2018)

(Authors are Scientist (Retd.), Central Silk Board, Bangalore)

Leaf Webber in mulberry and its management

Indian Silk 9(5-6):8-10 (English)

042

Gai YP; Zhao HN; Zhao YN; Zhu BS; Yuan SS; Li S; Guo FY; Ji XL; (2018)

(State Key Laboratory of Crop Biology, Shandong Agricultural University, Taian, Shandong, 271018, People's Republic of China)

MiRNA-seq-based profiles of miRNAs in mulberry phloem sap provide insight into the pathogenic mechanisms of mulberry yellow dwarf disease

Scientific Reports 8:812 (English)

043

Gani M; Chouhan S; Bharath Kumar; Bhat AH; Ahmad MN; Ghosh MK ; (2017)

(Central Sericultural Research and Training Institute, Central Silk Board, Pampore 192121, Jammu Kashmir, India)

Incidence, distribution and management of root rot disease of mulberry in sericulture practicing areas of Kashmir, India

Sericologia 57(4):198-205 (English)

044

Jiang XJ; Chai JP; Su ZG; Luo YJ; (2018)

(Institute of Sericulture and Apiculture, Yunnan Academy of Agricultural Sciences, Mengzi Yunnan 661100, China)

Major biological characteristics of *Phloeospora maculans* causing mulberry brown spot disease

Canye Kexue 44(4):523-529 (Chinese)

045

Lalitha N; Chatterjee H; Santhkumar MV; Poorani J; Nirmal Kumar S ; (2018)

(Eri Silkworm Seed Production Centre, Central Silk Board, Bongara, Guwahati, Assam, India)

Inventory and population assessment of native predators attacking mealybugs infesting mulberry in west bengal

Sericologia 58(2):112-122 (English)

046

Negi K; Srivastava RP ; (2018)

(Insecticide Toxicology Laboratory Department of Entomology, College of Agriculture, Govind Ballabh Pant University of Agriculture and Technology, Pantnagar-263 145, Uttarakhand, India)

Persistent toxicity of certain newer insecticides on mulberry, rajmah bean and mung bean plants against *Spodoptera litura* (Fabricius)

Journal of Entomological Research 42(3):361-368 (English)

047

Somaprakash DS; Mary Josepha AV; Krishnan CR; Sivaprasad V ; (2018)

(Central Sericultural Research and Training Institute, Srirampura, Manandavadi Road, Mysuru 570 008, Karnataka)

Stem borer attack on mulberry

Indian Silk 9(3-4):14 (English)

048

Sowmya P; Nishitha Naik V; Sivaprasad V; Girish Naik V; (2018)

(Molecular Biology Lab-1, Central Sericultural Research and Training Institute, Mysuru, India)

Characterization and correlation of pathogenicity of *Botryodiplodia theobromae* isolates, the causal agent of black root rot of mulberry (*Morus spp.*)

Archives of Phytopathology and Plant Protection 51(19-20):1022-1038 (English)

049

Xiao SY; Zhu F; Ran R; Feng W; Li ZG; (2018)

(Institute of Sericulture and Apiculture, Yunnan Academy of Agriculture Science, Mengzi Yunnan 661101, China)

Occurrence and control of mulberry brown spot disease in Yunnan

Canye Kexue 44(5):778-782 (Chinese)

050

Xin S; Jian Z; Lei Y; Lu QY ; (2018)

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

Establishment and application of nucleic acid spot hybridization method used for detection of mulberry crinkle leaf virus

Canye Kexue 44(6):828-833 (Chinese)

051

Xu Y; Song WM; Zhu D; Zhang DY; Sheng S; Wang J; Wu F; (2018)

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

Study on Inhibitory activity of propolis residue extracts against *ralstonia solanacearum*

Canye Kexue 44(2):0205-0215 (Chinese)

052

Zeng YH; Ling W; Huang GQ; Zhu HQ; Zeng Z; Liu G; Yin Hao; Wang XJ; Xia CL; (2018)

(Sericultural Research Institute, Sichuan Academy of Agricultural, Nanchong Sichuan 637000, China)

Identification of mulberry fruit sclerotinose pathogen by rDNA- ITS analysis

Canye Kexue 44(6):962-967 (Chinese)

053

Zhang CP; Yu SF; Liu SG; Ma HY; Shen G; Lin C; (2018)

(Tiantai Bureau of Special forestry products, Tiantai Zhejiang 317200, China)

A Study on appropriate drug applying period and control methods against mulberry sclerotium disease.

Canye

Kexue

44(2):0216-0225

(Chinese)

2. SILKWORM

2. 1. Silkworm Rearing Technology

054

Sakthivel N; (2018)

(RSRS Salem)

Fogging technology : Maintenance of micro - climate in rearing house

Indian Silk 9(5-6):4-7 (English)

2. 2. Silkworm Physiology and Biochemistry

055

Abbas MN; Kausar S; Sun YX; Tian JW; Zhu BJ; Liu CL; (2018)

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

Suppressor of cytokine signaling 6 can enhance epidermal growth factor receptor signaling pathway in *Bombyx mori* (Dazao)

Developmental Comparative Immunology 81:187-192 (English)

056

Abdelli N; Peng L; Keping C; (2018)

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

Silkworm, *Bombyx mori*, as an alternative model organism in toxicological research

Environmental Science and Pollution Research 25(35):35048-35054 (English)

057

Bhatia NK; (2018)

(Silkworm Seed Production Centre, National Silkworm Seed Organization, Central Silk Board, Laddan Power House Road, Udhampur (J K) 182101, India)

Assessment of host plant suitability for best silk production efficiency and post cocoon attributes of *Antheraea Mylitta* in uttarakhand

Sericologia 58(1):28-47 (English)

058

Biswas TD; Saha AK; Bindroo BB; Nirmal Kumar S ; (2018)

(Central Sericultural Research and Training Institute, Berhampore)

Seed crop production in West Bengal: Scope for improvement

Indian Silk 9(3-4):12-13 (English)

059

Chen HX; Liu YQ; Wang WB; Olatunji OJ; Pan G; Ouyang Z; (2018)

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

Proteomic-Based Approach to the Proteins Involved in 1-Deoxynojirimycin Accumulation in Silkworm *Bombyx mori* (Lepidoptera: Bombycidae)

Journal of Insect Science 18(2):42;1-8 (English)

060

Cui Y; Zhu Y; Lin YJ; Chen L; Feng QL; (2018)

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

New insight into the mechanism underlying the silk gland biological process by knocking out fibroin heavy chain in the silkworm

BMC Genomics 19(1):215 (English)

061

Decker RE; Harris TI; Memmott DR; Peterson CJ; Lewis RV; Jones JA; (2018)

(Department of Biological Engineering, Utah State University, Logan, Utah, 84322, United States)

Method for the Destruction of Endotoxin in Synthetic Spider Silk Proteins

Scientific Reports 8:12166 (English)

062

Dong HL; Zhang SX; Chen ZH; Tao H; Xue Li ; Qiu JF; Cui WZ; Sima YH; Cui WZ; Xu SQ; (2018)

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

Differences in gut microbiota between silkworms (*Bombyx mori*) reared on fresh mulberry (*Morus alba* var. *multicaulis*) leaves or an artificial diet

RSC Advances 8(46):26188-26200 (English)

063

Fujii T; Sakurai T; Ito K; Yokoyama T; Kanzaki R; (2018)

(Department of Science of Biological Production, Graduate School of Agricultural Science, Tokyo University of Agricultural and Technology, 3-5-8 Saiwai-cho, Fuchu-shi, Tokyo 183-8509, Japan)

Lipid droplets in the pheromone gland of wild silkmoth *Bombyx mandarina*

Journal of Insect Biotechnology and Sericology 87(2):29-34 (English)

064

Gao J; Sun Y; Sun YU; Chen, C; Kausar S; Tian J; Zhu BJ; Liu CL; (2018)

(College of Life Sciences, Anhui Agricultural University, 130 Changjiang West Road, Hefei 230036, China)

Identification and function of cAMP response element binding protein in Oak silkworm *Antheraea pernyi*

Journal of Invertebrate Pathology 151:14-20 (English)

065

Guo PC; Wang Q; Wang Z; Dong ZM; He HW; Zhao P; (2018)

(State Key Laboratory of Silkworm Genome Biology, Southwest University, 216, Tiansheng Road, Beibei, Chongqing 400716, People's Republic of China)

Biochemical characterization and functional analysis of invertase Bmsuc1 from silkworm, *Bombyx mori*

International Journal of Biological Macromolecules 107 Part-B:2334-2341 (English)

066

He JY; Yavuz B; Kluge JA; Li AB; Omenetto FG; Kaplan DL; (2018)

(Department of Biomedical Engineering, Tufts University, 4 Colby Street, Medford, Massachusetts 02155, United States)

Stabilization of RNA Encapsulated in Silk

ACS Biomaterials Science Engineering 4(5):1708-1715 (English)

067

Hirayama C; Mase K; Iizuka T; Takasu Y; Okada E; Yamamoto KK; (2018)

(National Agriculture and Food Research Organization, NARO, Tsukuba, Ibaraki, 305-8634, Japan)

Deficiency of a pyrroline-5-carboxylate reductase produces the yellowish green cocoon 'Ryokuken' of the silkworm, *Bombyx mori*

Heredity 120:422-436 (English)

068

Hu JH; Cheng XY; Li JX; Bin X; Tian JH; Hu JS; Bing L; (2018)

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

Apoptosis of posterior silk gland of *Bombyx mori* during spinning period and the role of PI3K/Akt pathway

Archives of Insect Biochemistry and Physiology 98(1):e21450 (English)

069

Ishii M; Matsumoto YH; Sekimizu KH; (2018)

(Genome Pharmaceuticals Institute Co., Ltd., Tokyo, Japan)

Bacterial polysaccharides inhibit sucrose-induced hyperglycemia in silkworms

Drug Discoveries Therapeutics 12(4):185-188 (English)

070

Jine C; Li FG; Yan L; Shen WF; Xin D; Lihua H; Meng Z; Ma XL; Wang YQ; (2018)

(Sericultural Research Institute, Zhejiang Academy of Agricultural Sciences, Hangzhou 310021, China)

Systematic identification of mitochondrial lysine succinylome in silkworm (*Bombyx mori*) midgut during the larval gluttonous stage

Journal of Proteomics 174:61-74 (English)

071

Jyotipragyan M; Acharya A; Patra GC; Mohanty N; Prasanta Kumar; (2018)

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

Biochemical constituents in leaves of primary host of tasar silkworm *Antheraea Mylitta*

Indian Journal of Entomology 80(4):1338-1340 (English)

072

Kun X; Mijie L; Chenya J; Haiju L ; Qiong K; Gao Bo; Yang WY; (2018)

(College of Life Science and Technology, Honghe University, Mengzi Yunnan, 661199, China)

Research advances on BmATG5 protein as a molecule triggering cell utophagy and apoptosis during metamorphosis of silkworm

Canye Kexue 44(2):315-320 (Chinese)

073

Lan FJ; Man H; Wang XX; Shi XQ; Xu SI; Huiling D; Zhang SX; Cui WH; (2018)

(College of forestry, Shandong Agricultural University, Tai an Shandong 271018, China)

Blood metabonomic analysis of silkworm, *Bombyx mori*, fed with artificial diet added with 1 Deoxynojirimycin

Canye Kexue 44(6):875-883 (Chinese)

074

Lele C; Jing H; Zheshi K; Zhou PF; Jiping L; Yuxiao Z; Pan MH; Sentai L; (2018)

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

Effect of fermentation on the degradation of nitrite in silkworm excrement from different sources

Canye Kexue 44(3):458-465 (Chinese)

075

Li QR; Sentai L; Xing DG; Yang X; Qiong Y; (2018)

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

Isolation and Identification of Phosphate and potassium solubilising bacteria from fermented Silkworm excrement

Canye Kexue 44(5):753-759 (Chinese)

076

Li WU; Lang WC; Lin M; Long L; Wu GH; (2018)

Silkworm

(College of Environmental and Chemical Engineering, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 212018, China)

Rapid determination of γ -Aminobutyric acid content in mulberry leaves using direct analysis in real time mass spectrometry (DART- MS)

Canye Kexue 44(4):567-572 (Chinese)

077

Liang Z; Lu YH; Qian Y; Zhu LU; Kuang S; Fei C; Feng YJ; Hu XL; Cao GG; Renyu X; Gong CL; (2018)

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

Cultured cells and wing disc size of silkworm can be controlled by the Hippo pathway

Open Biology 8(7):180029 (English)

078

Liu YM; Zhang H; He FM; Li XE; Tan HH; (2018)

(Cultivation Base of Guangxi Key Laboratory for Agro-Environment and Agro-Product Safety, National Demonstration Center for Experimental Plant Science Education, College of Agriculture Guangxi University Nanning China)

Combined toxicity of chlorantraniliprole, lambda-cyhalothrin, and imidacloprid to the silkworm *Bombyx mori* (Lepidoptera: *Bombycidae*)

Environmental Science and Pollution Research 25(23):22598-22605 (English)

079

Midha S; Chawla S; Chakraborty J; Chameettachal S; Ghosh S; (2018)

Differential Regulation of Hedgehog and Parathyroid Signaling in Mulberry and Non mulberry Silk Fibroin Textile Braids

ACS Biomaterials Science Engineering 4(2):595-607 (English)

080

Nithya BN; Naika R; Naveen DV; Venkatachalapathi V ; (2018)

(Department of Soil Science and Agriculture Chemistry, College of Sericulture UAS, Bengaluru, Chintamani, 563125, Karnataka, India)

Effect of foliar spray of nano zinc on growth and cocoon productivity of mulberry silkworm (*Bombyx mori* L.)

Agricinternational 5(2):40-42 (English)

081

Pinto JRAS; Arcuri HA; Esteves FG; Palma MS; Lubec G; (2018)

(Center of the Study of Social Insects, Department of Biology, Institute of Biosciences of Rio Claro, Sao Paulo State University, Rio Claro, SP, 13500, Brazil)

Spider silk proteome provides insight into the structural characterization of *Nephila clavipes* flagelliform spidroin

Scientific Reports 8:14674 (English)

082

Qiang J; Chen X; Lixian W; Ruan Z; Kang L; Sheng L; (2018)

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

Matrix metalloproteinases promote fat body cell dissociation and ovary development in *Bombyx mori*

Journal of Insect Physiology 111(6):8-15 (English)

083

Qu SN; Liquan Q; Song SF; (2018)

(College of Chemistry and Material Science, Shandong Agricultural University, Tai'an Shandong 271018, China)

A method for determining imidacloprid content in silkworm hemolymph by high performance liquid chromatography

Canye Kexue 44(2):270-274 (Chinese)

084

Sahu S; Dutta A; Ray DK; Pradhan J; Dandapat J; (2018)

(Department of Biotechnology, Utkal University, Bhubaneswar, Odisha, India)

Host plant-derived allelochemicals and metal components are associated with oxidative predominance and antioxidant plasticity in the larval tissues of silkworm, *Antheraea mylitta*: Further evidence of joint effects hypothesis

Comparative Biochemistry and Physiology Part B: Biochemistry and Molecular Biology 223:39-49 (English)

085

Takai H; Asaoka K; Ishizuna F; Kiuchi T; Katsuma S; Shimada T; (2018)

(Laboratory of Insect Genetics and Bioscience, Graduate School of Agricultural and Life Sciences, the University of Tokyo, Tokyo 113-8657, Japan)

Morphological and electrophysiological differences in tarsal chemosensilla between the wild silkworm, *Bombyx mandarina* and the domesticated species *Bombyx mori*

Arthropod Structure Development 47(3):238-247 (English)

086

Takai H; Ozawa R; Junji TB; Fujii S; Arai KR; Ichiki RT; Takao KD; Dohra H; Ohnishi TY; Sakura TT; Jun KY; Kainoh YC; Satoshi NM; Fujii T; Yukio IK; Kiuchi TS; Katsuma S; Uefune MY; Shimada T; Matsui KJ; (2018)

(Division of Agricultural Sciences, Graduate School of Sciences and Technology for Innovation, Yamaguchi University, Yamaguchi, 753-8515, Japan)

Silkworms suppress the release of green leaf volatiles by mulberry leaves with an enzyme from their spinnerets

Scientific Reports 8:11942 (English)

087

Takei M; Kogure S; Chiaki YY; Kouzuma YA; Suzuki YH; (2018)

(Department of Food and Life Sciences, Ibaraki University, Inashiki, Japan)

Identification of an aldehyde oxidase involved in indole-3-acetic acid synthesis in *Bombyx mori* silk gland

Bioscience, Biotechnonology and Biochemistry 83(1):129-136 (English)

088

Temak GD; Nalwandikar PK; Shinde PR ; (2018)

(Department of Agricultural Entomology, Vasantao Naik Marathwada Krishi Vidyapeeth, Parbhani-431 402, Maharashtra, India)

Effect of feeding mulberry variety V1 on the biology of different bivoltine silkworm (*Bombyx mori* L.) races

Journal of Entomological Research 42(1):93-96 (English)

089

Thirupathaiah Y; Bhuvaneswari E; Vaijyanthi PV; Vineet Kumar; Sivaprasad V ; (2018)

(Central Sericultural Research and Training Institute, Mysuru 570 008, India)

Diversity and functional role of gut microbiota of silkworm, *Bombyx mori* L.

Sericologia 58(1):1-11 (English)

090

Tsuchiya K; Ishii T; Masunaga H; Numata K; (2018)

(Enzyme Research Team, RIKEN Center for Sustainable Resource Science, 2-1 Hirosawa, Wako-shi, Saitama, 351-0198, Japan)

Spider dragline silk composite films doped with linear and telechelic polyalanine: Effect of polyalanine on the structure and mechanical properties

Scientific Reports 8:3654 (English)

091

Umer B; Sori W; Getachew M; (2017)

Silkworm

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

Evaluation of proximate nutrient and mineral compositions of castor leaves and their relationship with eri silkworm (*Samia Cynthia Ricini* B.) traits

Sericologia 57(4):212-223 (English)

092

Wang Q; Guo PC; Wang Z; Liu HW; Zhang YS; Jiang S; Han WZ; Xia QY; Zhao P; (2018)

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

Antibacterial Mechanism of Gloverin2 from Silkworm, *Bombyx mori*

International Journal of Molecular Sciences 19(8):2275 (English)

093

Wang YZ; Bofan W; Ying C; Yang JJ; Huili Q; (2018)

(Henan Key Laboratory of Insect biology in Funiu Mountain, College of Agricultural Engineering, Nanyang Normal University, Nanyang Henan 473061, China)

Preparation and comparative analysis of polyclonal antibody to reference proteins in silkworm, *Bombyx mori*

Canye Kexue 44(6):859-866 (Chinese)

094

Xu YY; Wang WR; Zeyu L; Zhang DY; Long L; Wu GH; (2018)

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

Acute toxicity test of zinc oxide nanoparticles to silkworm (*Bombyx mori* L.)

Canye Kexue 44(3):404-412 (Chinese)

095

Yang G; Chang Z; Guo HY; Fang W; Li QA; Zhao HP; Feng XQ; Gao HJ; (2018)

(AML, Department of Engineering Mechanics, and 2 State Key Laboratory of Tribology, Tsinghua University, Beijing 100084, People's Republic of China)

Synergistic adhesion mechanisms of spider capture silk

Journal of the Royal Society Interface 15(140):20170894 (English)

096

Yaru D; Zhao DX; Du JX; Sun JS; Chen CJ; Wang ZH; (2018)

(Sericulture Research Institute of Shandong Province, Yantai Shandong 264002, China)

Effect of exogenous nitric oxide on mulberry seed germination and physiological characteristics of mulberry seeding upon salt stress

Canye Kexue 44(6):821-827 (Chinese)

097

Zhang JG; Huan W; Haixu B; Tianmo W; Liu YQ; (2018)

(College of Bioscience and Biotechnology, Shenyang Agricultural University, Shenyang 110866, China)

Bacterial community structure and diversity in the intestine of Chinese Oak silkworm, *Antheraea pernyi*

Canye Kexue 44(5):678-685 (Chinese)

098

Zhang RN; Ren FF; Zhou CB; Xu JF; Yi HY; Ming QY; Deng XJ; Cao Y; Yu XQ; Yang WY; (2018)

(Laboratory of Insect Molecular Biology and Biotechnology, Guangdong Provincial Key Laboratory of Agro-animal Genomics and Molecular Breeding, College of Animal Science, South China Agricultural University, Guangzhou 510642, China)

An ML protein from the silkworm *Bombyx mori* may function as a key accessory protein for lipopolysaccharide signaling

Developmental Comparative Immunology 88:94-103 (English)

099

Zhang X; Chang H; Dong ZM; Zhang Y; Zhao DC; Lin Ye; Xia QY; Zhao P; (2018)

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

Comparative Proteome Analysis Reveals that Cuticular Proteins Analogous to Peritrophin Motif Proteins are involved in the Regeneration of Chitin Layer in the Silk Gland of *Bombyx mori* at the Molting Stage

Proteomics 18(19):1700398 (English)

100

Zhao E; Jiang XL; Cui HJ; (2018)

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

Bombyx mori Dihydroorotate Dehydrogenase: Knock down Inhibits Cell Growth and Proliferation via Inducing Cell Cycle Arrest

International Journal of Molecular Sciences 19(9):2581 (English)

101

Zhou Y; Wang L; Li QU; Liu M; Xiaotong; Li H; Su YS; Wang XH; (2018)

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

Secreted glycoprotein BmApoD1 plays a critical role in anti-oxidation and anti-apoptosis in *Bombyx mori*

Biochemical and Biophysical Research Communications 495(1):839-845 (English)

2. 3. Silkworm Cytology, Breeding and Genetics

102

Chaudhuri RS; Subramanya G ; (2018)

(Department of studies in sericulture science, University of Mysore, Manasagangotri, Mysore -570006)

Prospects of molecular genetics in silkworm breeding: an overview

Indian Journal of Entomology 80(4):1716-1719 (English)

103

Feng Q; Liang S; Tong XO; Yan Z; Xia JF; Hao H; Zhang YX; Zhang SY; Yu ZB; Deh H; (2018)

(Institute of Sericulture, Anhui Academy of Agricultural Sciences, Hefei 230061, China)

Breeding of the speckle sex limited marking silkworm varieties 521B and 523B for summer and autumn rearing and the quaternary hybrid combination Wan. Feng x Xia .Hui

Canye Kexue 44(4):544-550 (Chinese)

104

Ito KS; Fujii T; Murakami M; Yokoyama T; (2018)

(Department of Science of Biological Production, Graduate School of Agricultural Science, Tokyo 183-8509, Japan)

Linkage analysis and mapping of a gene responsible for the lethal 19 mutation in the silkworm, *Bombyx mori*

Journal of Insect Biotechnology and Sericology 87(1):9-16 (English)

105

Lang Y; Yan D; James AA; Huang YP; Tan AA; (2018)

(CAS Key Laboratory of Insect Developmental and Evolutionary Biology, China)

Bombyx mori histone methyltransferase BmAsh2 is essential for silkworm piRNA mediated sex determination Zhiqian Li

Plos Genetics 14(2):e100 (English)

106

Liang Z; Chen MM; Liang X; Meng XM; Su GM; Yang QJ; Li XH; (2018)

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

Potential application of RAD -seq in SNP exploitation and genetic linkage map construction for Tussah, *Antheraea pernyi*

Canye Kexue 44(5):770-777 (Chinese)

107

Sakae K; Yamashiki N; (2018)

(Laboratory of Developmental Biology, Rakuno Gakuen University, Ebetsu 069-8501, Japan)

Characterization of the apical cell in the testicular follicle of the silkworm, *Bombyx mori* L. from the embryonic to adult stage

Journal of Insect Biotechnology and Sericology 87(1):17-24 (English)

108

Singh H; Suresh Kumar N; Kour RN; (2018)

(P.G. Department of Sericulture, Poonch Campus (University of Jammu), Poonch, 185101)

Selection of breeding resource materials of bivoltine breeds of *Bombyx mori* L. for high temperature and high humidity tolerance

Indian Journal of Entomology 80(1):131-135 (English)

109

Wang XY; Guo DG; Zhong SU; Zhang GL; Huang P; Zhuo XH; Chen LH; Hu ZM; (2018)

(Guangdong Provincial Sericultural Technology Extension Center, Guangzhou 510640, China)

Innovation of silkworm germplasms with sex-limited yellow and green cocoon colors and evaluation on main characteristics of their hybrid combination

Canye Kexue 44(5):800-804 (Chinese)

110

Xu LA; Wu Y; Meng XM; Yang QJ; Su GM; Liang Z; (2018)

(Sericulture Research Institute of Liaoning Province, Fengcheng Liaoning 118100, China)

A study on yield component factors and their effect on cocoon output of Autumn Tussah silkworm

Canye Kexue 44(2):336-341 (Chinese)

111

Zhang YL; Zhao AH; Long DP; Bi LH; Wei W; Lu C; Zhang GH; (2018)

(Sericultural Research Institute, Guangxi Zhuang Autonomous Region, Nanning 530007, China)

A method for screening transgenic homozygote by mixed sperm fertilization of different marketing varieties in *Bombyx mori*.

Canye Kexue 44(5):805-809 (Chinese)

112

Zhang ZG; Niu BL; Ji DF; Li MW; Li K; James AA; Tan AA; Huang YP; (2018)

(Key Laboratory of Insect Developmental and Evolutionary Biology, Center for Excellence in Molecular Plant Sciences, Shanghai Institute of Plant Physiology and Ecology, Chinese Academy of Sciences, 200032 Shanghai, China)

Silkworm genetic sexing through W chromosome-linked, targeted gene integration

Proceedings of the National Academy of Sciences, USA 115(35):8752-8756 (English)

113

Zhao MY; Xinyu JA; Niu BL; Tao YE; Chen ZG; Zheng SN; Chu GD; (2018)

(College of Mechanical and Electrical Engineering, China Jiliang University, Hangzhou 310018, China)

Design of high speed sorting machine for male and female silkworm pupae on basis of female with red fluorescence

Canye Kexue 44(5):711-715 (Chinese)

114

Zhao QL; Wu HM; Qiu ZY; Lou LI; Xia DG; Qian WH; Liu ZL; (2018)

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

Breeding of a new healthy and excellent quality Silkworm variety Siyu No. 2

Canye Kexue 44(5):672-677 (Chinese)

2. 4. Silkworm Molecular Biology

115

Anli C; Jian Z; Liu ZH; Li QY; Liao PF; Yang WK; Dong ZP; (2018)

(The Sericultural and Apicultural Research Institute, Yunnan Academy of Agricultural Sciences, Mengzi Yunnan 661101)

Cloning and expression stability analysis of *Antheraea assama* internal reference genes

Canye Kexue 44(3):390-397 (Chinese)

116

Bo Z; Chen MM; Liang Z; Ji WJ; Zhao CS; Li XH; Wang FC; (2018)

(Sericulture Research Institute of Liaoning Province, Fengcheng Liaoning 118100, China)

Heat shock response and expression characteristics of two heat shock protein family genes in Tussah silkworm, *Antheraea pernyi*

Canye Kexue 44(2):257-263 (Chinese)

117

Chen MJ; Zhai JJ; Liu Y; Xue B; Hu JH; Cheng X; Li JX; Hu JS; Li B; (2018)

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

Molecular cloning and characterization of C1tetrahydrofolate (C1-THF) synthase in *Bombyx mori*, silkworm

Gene 663:25-33 (English)

118

Chen RT; Xiao Y; Liu Z; Li L; Lu Y; Jiao P; Miao YG; (2018)

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

Three vital RNA functions and interactions in the process of silk gland apoptosis in Silkworm *Bombyx mori*

Archives of Insect Biochemistry and Physiology 100(1):e21511 (English)

119

Chen WJ; Wang F; Tian C; Wang YC; Sheng X; Wang RY; Hou K; Zhao P; Yu L; Lu ZS; Xia QY; (2018)

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

Transgenic Silkworm-Based Silk Gland Bioreactor for Large Scale Production of Bioactive Human Platelet-Derived Growth Factor (PDGF-BB) in Silk Cocoons

International Journal of Molecular Sciences 19(9):2533 (English)

120

Cheng X; Hu JH; Li JX; Chen J; Wang H; Mao TT; Xue B; Li B; (2018)

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

The silk gland damage and the transcriptional response to detoxifying enzymes-related genes of *Bombyx mori* under phoxim exposure

Chemosphere 209:964-971 (English)

121

Deng PY; Wei Y; Li YH; Wang GJ; Li CK; (2018)

(Laboratory of Biological Species Resources Research of Zhengzhou, Zhengzhou Normal University, Zhengzhou -450044, China)

Molecular modelling studies on interactions between pheromons binding protein and bombykal in *Bombyx mori*

Canye Kexue 44(5):796-799 (Chinese)

122

Dong Z; Dong FF; Yu XB; Huang L; Jiang YI; Hu ZA; Chen P; Cheng L; Pan MH; (2018)

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

Excision of Nucleopolyhedrovirus Form Transgenic Silkworm Using the CRISPR/Cas9 System

Frontiers in Microbiology 9:209 (English)

123

Feng M; Wang X; Ren FF; Zhang N; Zhou YH; Sun JC; (2018)

(Provincial Key Laboratory of Agro-Animal Genomics and Molecular Breeding, College of Animal Science, South China Agricultural University, Guangzhou, China)

Genome-Wide Characterization of Endogenous Retroviruses in *Bombyx mori* Reveals the Relatives and Activity of env Genes

Frontiers in Microbiology 9:1732 (English)

124

Fu P; Sun W; Lai J; Shen YH; Zhang Z; (2018)

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

Identification of two isoforms of Pop in the domestic silkworm, *Bombyx mori*: Cloning, characterization and expression analysis

Gene 667:101-111 (English)

125

Fujii T; Banno Y; (2018)

(Silkworm Resource Division, Institute of Genetic Resources, Kyushu University Graduate School of Bioresources and Bioenvironmental Science, 744 Motooka, Nishiku, Fukuoka 819-0395, Japan)

Enlargement of egg size by CRISPR/Cas9-mediated knockout of a sex-linked gene in the silkworm, *Bombyx mori*

Journal of Insect Biotechnology and Sericology 87(3):71-78 (English)

126

Fujii TG; Yamamoto KN; Banno Y; (2018)

(Laboratory of Silkworm Genetic Resources, Institute of Genetic Resources, Graduate School of Bio Resources and Bioenvironmental Science, Kyushu University, Fukuoka, 812-8581, Japan)

Translucent larval integument and flaccid paralysis caused by genome editing in a gene governing molybdenum cofactor biosynthesis in *Bombyx mori*

Insect Biochemistry and Molecular Biology 99:11-16 (English)

127

Fujimoto TA; Okumura A; Yoshido A; Yuji YK; Go S; (2018)

(Division of Biocontrol and Bioenvironmental Sciences, the United Graduate School of Agricultural Sciences, Iwate University, Ueda 3-18-8, Morioka 020-8550, Japan)

Construction of a BAC library and selection of BACs containing orthologs of *Bombyx mori* genes in *Stenopsyche marmorata* (Trichoptera: Stenopsychidae)

Journal of Insect Biotechnology and Sericology 87(2):61-69 (English)

128

Gai YP; Yuan S; Zhao YN; Zhao HN; Zhang HL; Xian LJ; (2018)

Silkworm

(State Key Laboratory of Crop Biology, Shandong Agricultural University, Tai'an, China)

A Novel lncRNA, MuLnc1, Associated with Environmental Stress in Mulberry (*Morus multicaulis*)

Frontiers in Plant Science 9:669 (English)

129

Gang M; Peng YW; Qu C; (2018)

(Shaanxi Provincial key Laboratory of Sericulture, Ankang University, Ankang Shaanxi 725000, China)

Genetic diversity and phylogenetic analysis of wild silkworm (*Bombyx mandarina*) from different geographical origins based on mitochondrial CO I gene sequence

Canye Kexue 44(2):249-256 (Chinese)

130

Gao QP; Yang LG; Dai JJ; Yuan GZ; Wang L; Qian C; Zhu BJ; Liu CL; Wei GQ; (2018)

(School of Life Sciences, Anhui Agricultural University, Hefei, PR China)

Characterization and functional analysis of serpin-28 gene from silkworm, *Bombyx mori*

Journal of Invertebrate Pathology 159:18-27 (English)

131

Guo SY; Wu WM; Liu Y; Ruan ZF; Zhong YJ ; (2018)

(Guangdong Provincial Key Laboratory of Agro?animal Genomics and Molecular Breeding/Guangdong Provincial Sericulture and Mulberry Engineering Research Center, College of Animal Science, South China Agricultural University, Guangzhou, China)

20 Hydroxyecdysone upregulated proteases involved in *Bombyx* larval fat body destruction

Insect Molecular Biology 27(6):724-738 (English)

132

Harada N; Daiki IB; Asano SI; Sato MN; Bando HN; (2018)

(Laboratory of Applied Molecular Entomology, Division of Applied Bioscience, Graduate School of Agriculture, Hokkaido University, Sapporo, Japan)

Design and prototyping of a *Bombyx mori* nucleopolyhedrovirus-based genome assembly from PCR-amplified DNA fragments

Journal of Insect Biotechnology and Sericology 87(3):97-108 (English)

133

Jiang SM; Zhong YS; Lin BM; Chen FY; Yan HC; Lin JR; (2018)

(College of Animal Sciences, South China Agricultural University, Guangzhou 510642, China)

Identification and expression characteristics of 3-Hydroxy-3-methyl-glutaryl-CoA synthase gene related to *Bombyx mori* wing disc development

Canye Kexue 44(2):242-248 (Chinese)

134

Li Gang; Qian HI; Zhao GO; Xu AI; (2018)

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

The complete mitochondrial genome of the silkworm, *Bombyx mori* strain Baiyu N

Mitochondrial DNA Part B 3(1):280-281 (English)

135

Li Gang; Wu KC; Hao CF; Qian HI; Zhang YH; Zhao GD; Xu AI; (2018)

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

Diversity analysis of intestinal bacteria in *Philosamia Cynthia ricini* based on 16S rDNA sequence

Canye Kexue 44(6):867-874 (Chinese)

136

Li WC; Junyi H; Xu YZ; Xia S; (2018)

(College of Life Science, Shanghai University, shanghai 200000, China)

Expression of yeast and human splicing factor Prp5 in middle silk gland of silkworm, *Bombyx mori*

Canye Kexue 44(4):530-536 (Chinese)

137

Liu ZL; Ling L; Xu J; Zeng BS; Huang YP; Shang P; Tan AA; (2018)

(Faculty of Life Sciences, Northwestern Polytechnical University, Xi'an 710072, China)

Micro RNA-14 regulates larval development time in *Bombyx mori*

Insect Biochemistry and Molecular Biology 93:57-65 (English)

138

Luan Y; Zuo WD; Li CL; Gao R; Zhang H; Tong XL; Han MJ; Hu H; Lu C; Dai FY; (2018)

(State Key Laboratory of Silkworm Genome Biology, Key Laboratory of Sericultural Biology and Genetic Breeding, Ministry of Agriculture, College of Biotechnology, Southwest University, Chongqing 400715, China)

Identification of Genes that Control Silk Yield by RNA Sequencing Analysis of Silkworm (*Bombyx mori*) Strains of Variable Silk Yield

International Journal of Molecular Sciences 19(12):3718 (English)

139

Meng XZ; Bo L; Tang XY; He Q; Xiong TR; Fang ZY; Pan GQ; Li T; Zhou ZY; (2018)

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

Pathological analysis of silkworm infected by two microsporidia *Nosema bombycis* CQ1 and *Vairimorpha necatrix* BM

Journal of Invertebrate Pathology 153:75-84 (English)

140

Morifuji YH; Xu J; Karasaki NK; Liyama KH; Morokuma DS; Hino M; Masuda A; Yano T; Mon HA; Kusakabe TH; Lee JM; (2018)

(Laboratory of Insect Genome ScienceKyushu University Graduate School of Bioresource and Bioenvironmental Science Fukuoka Japan)

Expression, Purification, and Characterization of Recombinant Human 1-Antitrypsin Produced Using Silkworm-*Baculovirus* Expression System

Molecular Biotechnology 60(12):924-934 (English)

141

Peng J; Li Z; Yang Y; Wang P; Zhou X; Zhao TJ; Guo MP; Meng M; Zhang TL; Qian WL; Xia QY; Cheng DJ; Zhao P; (2018)

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

Comparative Transcriptome Analysis Provides Novel Insight into Morphologic and Metabolic Changes in the Fat Body during Silkworm Metamorphosis

International Journal of Molecular Sciences 19(11):3525 (English)

142

Peng XG; Qi JG; Shang RS; Zhang Z; Hongli C; Zhang YL; Shen ZG; (2018)

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

Cloning and expression characteristic analysis of Nb6PGDH gene of *Nosema Bombycis*

Canye Kexue 44(5):698-704 (Chinese)

143

Pu YX; Liu LS; Gong MX; Ran YP; Jia XF; Huang JT; Song XJ; An CM; Tang SM; (2018)

Silkworm

(Guangxi General Station for Sericulture Technology Popularization, Nanning 530007, China)

Gene cloning and spatio temporal expression analysis of hatching enzyme from *Philosamia cynthia cynthia*

Canye Kexue 44(3):382-389 (Chinese)

144

Qian P; Jiang T; Wang X; Song F; Chen C; Shen XJ; (2018)

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

bmo-miR- 275 down-regulates expression of *Bombyx mori* sericin gene 2 in vitro

Plos One 13(1):e0190464 (English)

145

Qin S; Danso B; Zhang Z; Li J; Liu N; Sun X; Hou CX; Luo H; Chen KI; Zhang GH; Li MW; (2018)

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

Micro RNA profile of silk gland reveals different silk yields of three silkworm strains

Gene 653:1-9 (English)

146

Qiu CZ; Zhou QZ; Liu TT; Fang SM; Wang YW; Fang X; Huang CL; (2018)

(School of Life Sciences, Chongqing University, Chongqing, 401331, China)

Evidence of peripheral olfactory impairment in the domestic silkworms: insight from the comparative transcriptome and population genetics

BMC Genomics 19(1):788 (English)

147

Qiu ZY; Wang PY; Xia DG; Shen XJ; Zhao QL; (2018)

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

Expression analysis of pigment metabolism-related genes in the epidermis of the 4th instar molting larvae of q-lb mutant of silkworm, *Bombyx mori*

Canye Kexue 44(6):841-848 (Chinese)

148

Shen GW; Wu JX; Wang Y; Liu HL; Zhang HY; Ma SY; Peng CY; Lin Y; Xia QY; (2018)

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

The expression of ecdysteroid UDP-glucosyltransferase enhances cocoon shell ratio by reducing ecdysteroid titre in last-instar larvae of silkworm, *Bombyx mori*

Scientific Reports 8:17710 (English)

149

Shi SG; Ying Z; Zhou JL; Liu YQ; Li Q; (2018)

(College of Bioscience and Biotechnology, Shenyang Agricultural University, Shenyang 110866, China)

Comparative analysis of codon usage pattern in Chitinase genes between baculovirus, insect and *Serratia*

Canye Kexue 44(2):264-269 (Chinese)

150

Shu XS; Sheng Z; Qin CX; Hou GH; Li ZM; (2018)

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

MicroRNA Expression Analysis of Naked Silkworms

Journal of Economic Entomology 111(6):2876-2883 (English)

151

Strickland M; Tudorica V; Eza M; Thomas NR; Goodacre SL; (2018)

(School of Life Sciences, University of Nottingham, Nottingham, NG7 2RD, UK)

Conservation of a pH-sensitive structure in the C-terminal region of spider silk extends across the entire silk gene family

Heredity 120:574-580 (English)

152

Su H; Zhan PF; Dong JM; Qian QJ; Liu YC; Xu YS; Wang HB; (2018)

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

Identification of Cytochrome P450 Genes in *Glyphodes pyloalis* and their expression in samples from different areas and after insecticide induction

Canye Kexue 44(2):196-204 (Chinese)

153

Su LY; Wang H; Xu PC; Yalan TC; Xu WH; Yusong ; (2018)

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

Cloning, Fusion expression and enzyme activity analysis of extra cellular copper zinc superoxide dismutase in mulberry pyralid, *Glyphodes pyloalis*

Canye Kexue 44(2):0188-0195 (Chinese)

154

Sun QA; Jiang L; Guo HZ; Xia F; Wang BB; Wang YM; Xia QY; Zhao P; (2018)

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

Increased antiviral capacity of transgenic silkworm via knockdown of multiple genes on *Bombyx mori* bidensovirus

Developmental Comparative Immunology 87:188-192 (English)

155

Wang DJ; Li Z; Wang D; Liu J; Yu XF; Wei Y; Zhen OA; (2018)

Transcriptome analysis and identification of key genes involved in 1-deoxynojirimycin biosynthesis of mulberry (*Morus alba* L.)

Peer Journal 6:e5443 (English)

156

Wang PY; Zhao QL; Qiu ZY; Shen XJ; Xia DG; (2018)

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

Alternative splicing and expression analysis of orckinin gene in the silkworm, *Bombyx mori*

Canye Kexue 44(6):849-858 (Chinese)

157

Wang PY; Bi SM; Wei WY; Qiu ZY; Xia DG; Shen XJ; Zhao QL; (2018)

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

Downregulation of aldose reductase is responsible for developmental abnormalities of the silkworm purple quail-like mutant (q-lp)

Gene 665:96-104 (English)

158

Wu GQ; Yi YH; (2018)

(School of Chemistry and Chemical Engineering, Guangdong Pharmaceutical University, Zhongshan 528458, China)

Transcriptome analysis of differentially expressed genes involved in innate immunity following *Bacillus thuringiensis* challenge in *Bombyx mori* larvae

Molecular Immunology 103:220-228 (English)

159

Xu J; Dong QL; Yu Y; Niu BL; Ji DF; Li MW; Huang YP; Chen X; Tan AA; (2018)

(Key Laboratory of Insect Developmental and Evolutionary Biology, Center for Excellence in Molecular Plant Sciences, Shanghai Institute of Plant Physiology and Ecology, Chinese Academy of Sciences, 200032 Shanghai, China)

Mass spider silk production through targeted gene replacement in *Bombyx mori*

Proceedings of the National Academy of Sciences, USA 115(35):8757-8762 (English)

160

Yang H; Li JW; Liu Q; Zhang Z; Gong J; Yong H; (2018)

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

Purification and characterization of two cysteine proteinase inhibitors from silkworm, *Bombyx mori*

Biochemical and Biophysical Research Communications 503(4):3108-3113 (English)

161

Yang LN; Gao QP; Dai JJ; Yuan GZ; Wang L; Qian C; Zhu BJ; Liu CL; Wei GQ; (2018)

(College of Life Sciences, Anhui Agricultural University, Hefei, P.R.China)

Comparative transcriptome analysis of silkworm, *Bombyx mori* colleterial gland suggests their functional role in mucous secretion

Plos One 13(5):e0198077 (English)

162

You ZY; Ye XG; Ye LP; Qian QJ; Wu MY; Song J; Che JQ; Zhong BO; (2018)

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

Extraordinary Mechanical Properties of Composite Silk Through Hereditary Transgenic Silkworm Expressing Recombinant Major Ampullate Spidroin

Scientific Reports 8:15956 (English)

163

Zeng WH; Liu RP; Zhang TY; Zuo WD; Yao O; Tang YY; Xu HF; (2018)

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

BmYki is transcribed into four functional splicing isoforms in the silk glands of the silkworm *Bombyx mori*

Gene 646:39-46 (English)

164

Zhang QH; Song HS; Zeng BS; Chen SQ; Xu J; Li ZQ; Zhang ZG; Chen X; (2018)

(College of Life Sciences, Shanghai University, Shanghai 201900, China)

Expanding the application of CRISPR genome editing system in *Bombyx mori* using RGR Ribozyme structure

Canye Kexue 44(2):226-232 (Chinese)

165

Zhao GD; Jian T; Tante Y; Zhou KY; Hao CF; Li YX; Heying Q; Li G; Xu AY; (2018)

(College of Biotechnology, Jiangsu University of Science and Technology, Zhenjiang Jiangsu 202018, China)

Effect of Trace Pyrethroid pesticides on transcription levels of P450 9 family genes in silkworm, *Bombyx mori*

Canye Kexue 44(4):537-543 (Chinese)

166

Zhou HX; Si HQ; Bing Z; Lu ZB; Sheng Q; Nie ZM; (2018)

(College of Life Sciences, Zhejiang Sci- Tech University, Hangzhou 310018, China)

Prediction and identification of circRNAs in silkworm, *Bombyx mori*

Canye Kexue 44(2):233-241 (Chinese)

2. 5. Silkworm Diseases

167

Anusha HG; Bhaskar RN ; (2017)

(Department of Sericulture, University of Agricultural Science, GKVK, Bengaluru 560065, India)

Impact of mixed infection of *Bacillus subtilis* and toher microorganisms on larval parameters of silkworm, *Bombyx mori* L. (PM x CSR2)

Sericologia 57(4):231-236 (English)

168

Anusha HG; Bhaskar RN ; (2018)

(Department of Sericulture, University of Agricultural Sciences, GKVK, Bengaluru-560 065 (Karnataka), India)

Identification of new pathogenic bacteria (*Alcaligenes faecalis*) and assessment of pathogenecity with mixed infection on rearing and cocoon parameters of silkworm (*Bombyx mori* L.)

Research on Crops 19(1):120-126 (English)

169

Balavenkatasubbaiah M; Kasi Reddy B; Venkateswara Rao M; Sreenivasa Rao TVS ; (2018)

(Central Sericultural Research and Training Institute, Central Silk Board, Mysuru 570 008, India)

Influence of various factors on the prevalence of and low cocoon productivity in the selected sericultural areas of Andhra Pradesh, India

Sericologia 58(2):123-131 (English)

170

Bing Z; Cao YJ; Yong Z; Qing S; Nie ZM; (2018)

(College of Life Sciences, Zhejiang Sci- Tech University, Hangzhou 310018, China)

Preparation of monoclonal antibody against BmAGO2 protein of silkworm

Canye Kexue 44(3):376-381 (Chinese)

171

Chen TT; Tan LR; Hu N; Dong ZQ; Hu ZG; Jiang YM; Chen P; Pan MH; Lu C; (2018)

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

C-lysozyme contributes to antiviral immunity in *Bombyx mori* against nucleopolyhedrovirus infection

Journal of Insect Physiology 108:54-60 (English)

172

Chenab K; Lua ZQ; (2018)

(Department of Entomology, College of Plant Protection, Northwest A F University, Yangling, Shaanxi 712100, China)

Immune responses to bacterial and fungal infections in the silkworm, *Bombyx mori*

Developmental Comparative Immunology 83:3-11 (English)

173

Das RK; Sarker B N ; (2018)

(Central Muga Eri Research and Training Institute Lahdoigarh, Jorhat, Assam, India)

Studies on occurrence of egg surface fungi in Muga and Eri silkworm during summer crops

Munis Entomology and Zoology 13(2):499-502 (English)

174

Endo H; Tanaka S; Adegawa S; Ichino F; Hiroko TN; Kikuta SG; Sato RI; (2018)

(Graduate School of Bio-Applications and Systems Engineering, Tokyo University of Agriculture and Technology, Koganei, Tokyo 184-8588, Japan)

Extracellular loop structures in silkworm ABCC transporters determine their specificities for *Bacillus thuringiensis* Cry toxins

Journal of Biological Chemistry 293:(22):8569-8577 (English)

175

Fei DQ; Yu HZ; Xu JP; Zhang SZ; Wang J; Li B; Yang LA; Hu P; Xu X; Zhao K; Shahzad TF; (2018)

(School of Life Sciences, Anhui Agricultural University, Hefei, China)

Isolation of ferritin and its interaction with BmNPV in the silkworm, *Bombyx mori*

Developmental Comparative Immunology 86:130-137 (English)

176

Guo ZJ; Ting T; Dong XY; Tang XD; (2018)

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

Research progress and developing prospect of *baculoviral polyhedra* for micro crystal preparation

Canye Kexue 44(6):952-957 (Chinese)

177

Hu ZG; Zhanqi D; Yaming J; Dong FF; Pan MH; (2018)

(State key laboratory of Silkworm genome Biology, Chongqing 400716, China)

Preparation and application test of polyclonal antibody against *Bombyx mori* nucleopolyhedrovirus polyhedron

Canye Kexue 44(3):398-403 (Chinese)

178

Hu ZW; Wei L; Deng YC; Peipei T; Qin Y; Liguohui ; (2018)

(Institute of life sciences, Jiangsu University, Zhenjiang Jiangsu - 212013, China)

Preparation and verification of Monoclonal antibody against *Bombyx mori* Bidsenovirus NS1 Protein

Canye Kexue 44(5):686-691 (Chinese)

179

Ito KS; Kurako KK; Katsuma S; Sezutsu H; Uchino K; Isao KY; Tamura T; Kimiko YM; Mita K; Shimada T; Keiko KO; (2018)

(Division of Insect Sciences, National Institute of Agrobiological Sciences, Tsukuba, Ibaraki, 305-8634, Japan)

A single amino acid substitution in the *Bombyx*-specific mucin-like membrane protein causes resistance to *Bombyx mori* densovirus

Scientific Reports 8:7430 (English)

180

Iyengar MNS ; (2018)

(Former Joint Director, Central Silk Board, Bangalore)

Bidsenovirus infecting *bombyx mori*, causes flacherie

Indian Silk 9(5-6):11 (English)

181

Li YS; Rui Z; Xia QY; Ping Z; (2018)

(Vitamin D Research Institute, Shaanxi University of Technology, Hanzhong Shaanxi 723001, China)

Effect of *beauveria bassiana* infection on hemolymph melanisation and expression of microbial protease inhibitors in silkworm, *Bombyx mori*

Canye Kexue 44(5):705-710 (Chinese)

182

Liu XK; Jiang QS; Yang Y; Jian C; He YL; Fang Y; Tang SJ; Shu JH ; (2018)

(College of Life science, Zhejiang Sci- Tech University, Hangzhou 310018, China)

Immunogenicity of chimeric protein constituting PCV2 cap and FMDV VP1 expressed by baculovirus

Canye Kexue 44(2):275-282 (Chinese)

183

Mao FA; Lei J; Enoch O; Ming W; Zhao C; Quan YP; Yu W; (2018)

(Institute of Biochemistry, College of Life Sciences, Zhejiang Sci-Tech University, Hangzhou 310018, Zhejiang Province, PR China)

Quantitative proteomics of *Bombyx mori* after BmNPV challenge

Journal of Proteomics 181:142-151 (English)

184

Nakajima H; Matsumoto Y; Sekimizu K; (2018)

(Genome Pharmaceuticals Institute Co., Ltd., Tokyo, Japan)

291 Establishment of a gnotobiotic silkworm model

Drug Discoveries Therapeutics 12(5):291-294 (English)

185

Qi JR; Ruisha S; Zhang Z; Hongli C; Yiling Z; Shen ZY; (2018)

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

Cloning and expression profile analysis of G6PDH gene of *Nosema bombycis*

Canye Kexue 44(6):884-890 (Chinese)

186

Ravikumar G; Thomas DS; Chitra M; Vijayan K; Mishra RK ; (2018)

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

Development of a sensitive real -time PCR assay for the detection of microsporidia in silkworms

Sericologia 58(2):140-143 (English)

187

Shantibala T; Frase MJ; Luikham R; Rajlakshmi Devi Y; Miranda Devi; Lokeshwari RK; Terenius O; Ponnuvel KM ; (2018)

(Animal Bioresources Division, Institute of Bioresources and sustainable development, Manipur, India)

Genetic characterization of an alphabaculovirus causing tiger band disease in the oak tasar silkworm, *Antheraea proylei* J (Lepidoptera : saturniidae)

Sericologia 58(2):91-111 (English)

188

Sik K; Bo L; Kim Y; Moo Y; Byung C; Jin R; (2018)

(Department of Applied Biology, College of Natural Resources and Life Science, Dong-A University, Busan, 604-714, Republic of Korea)

Dual role of the serine protease homolog BmSPH-1 in the development and immunity of the silkworm *Bombyx mori*

Developmental Comparative Immunology 85:170-176 (English)

189

Tang FF; Song C; Shao YL; Feng Z; Zhang YH; Bai XR; (2018)

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

Infection and Pathogenicity of BmNPV- YN1 Isolated from Yunnan to *Bombyx mori* Larvae of different instars

Canye Kexue 44(5):692-697 (Chinese)

190

Xing DG; Qiong Y; Liao ST; Lin YS; Li QR; Yang X; Xia QY; (2018)

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

Quality evaluation of muscardine silkworm by HPLC fingerprinting

Canye Kexue 44(5):810-814 (Chinese)

191

Zhao Z; Lulu Z; Liu XJ; Peng W; Li YY; Zhang ZF; Yi YZ; (2018)

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

Expression of recombinant chicken interferon - γ in *Bombyx mori* with baculovirus expression system and determination of its antiviral activity

Canye Kexue 44(6):898-904 (Chinese)

192

Zhu L; Hu XL; Dhiraj Kumar; Chen F; Feng YJ; Zhu M; Liang Z; Huang L; Yu L; Xu J; Xue R; Cao GG; Gong CL; (2018)

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

Both ganglioside GM2 and cholesterol in the cell membrane are essential for *Bombyx mori* cypovirus cell entry

Developmental Comparative Immunology 88:161-168 (English)

2. 6. Silkworm Seed Technology

193

Ghulam AB; Shah H; (2016)

(Non Timber Forest Produce, Pakistan Forest Institute, Peshawar)

Modelling of female pupal body weight and fecundity of the mulberry silkworm (*Bombyx mori* L.) strains

The Pakistan Journal of Forestry 66(1):1-12 (English)

194

Hisayoshi F; Tanaka D; Banno Y; (2018)

(Silkworm Resource Division, Institute of Genetic Resources, Kyushu University Graduate School of Bioresources and Bioenvironmental Science, 744 Motooka, Nishiku, Fukuoka 819-0395, Japan)

Application of the V-cryoplate method for the cryopreservation of silkworm embryos

Journal of Insect Biotechnology and Sericology 87(3):89-96 (English)

195

Hui Y; Liang MX; Cheng G; Yeshun Z; Zhang GZ; (2018)

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

A study of method of online discrimination of male and female silkworm pupae by near infrared spectroscopy

Canye Kexue 44(2):283-289 (Chinese)

196

Sakthivel N; (2018)

(Regional Sericultural Research Station, Central Silk Board, Government of India, Allikkuttai (Post), Salem-636 017)

Foliar constituents of cassava varieties and their effects on rearing parameters of Eri silkworm *Samia Cythia Ricini Boisduval*

Indian Journal of Entomology 80(4):1381-1388 (English)

197

Shui YX; Xu GQ; Zhao ZX; Luo SL; Yan Y; (2018)

(School of Mechanical Engineering, Chongqing University of Technology, Chongqing 400054, China)

Design of automatic cutting equipment for parent Cocoons

Canye Kexue 44(2):290-296 (Chinese)

198

Suyuan z; Wang XY; Hu ZM; Cao ZM; Zhang HC; Zhang GL; Ziwei W; Zhuo XH; Pin H; Yuwei Y; Qiu GX; Sun JC; (2018)

(Guangdong Provincial Sericultural Technology Extension Center, Guangzhou 510640, China)

Conditions of instant acid treatment and acid treatment after refrigeration of silkworm eggs posterior to treatment by double controlled dry hot air equipment and their effects on hatchability

Canye Kexue 44(4):551-559 (Chinese)

3. PEST MANAGEMENT

199

Chanda S; Manjunatha GR; Anil P; Das D; Trivedy K; (2018)

(Central Sericultural Research and Training Institute, Central Silk Board, P. O. Berhampore, District Murshidabad, West Bengal, India, Pin 742 101)

Variation in the occurrence of major sucking pests on mulberry in West Bengal, India

Bioinfolet - A Quarterly Journal of Life Sciences 15(2):207-210 (English)

200

Dar MY; Singh A; Rao RJ; Ramegowda GK ; (2018)

(Sant Baba Bhag Singh University, Khiala, Padhiana, Jalandhar)

Mites and their interaction with Mulberry Plant-A Review

Invertis Journal of Science and Technology 11(1):24-36 (English)

201

Mir AH; (2018)

(P.G., Department of Zoology, University of Kashmir, Srinagar-190 006, Jammu Kashmir, India)

Bionomics of *Batocera rufomaculata* De Geer (Coleoptera: Cerambycidae) in mulberry farms of Jammu and Kashmir, India

Journal of Entomological Research 42(2):245-254 (English)

202

Narendra Kumar JB; Manjunath D ; (2018)

(Central Sericultural Research and Training Institute, Central Silk Board, Mysuru 570 008, India)

Impact of age and size of host on the reproductive performance of an ecto-pupal parasitoid, *Trichomalopsis Uziae* Sureshan Narendra kumar

Sericologia

58(1):17-27

(English)

4. NUTRITIONAL STUDIES

203

Wang Z; Huang CS; Zhang HY; Liu JY; Kai Y; Huang XZ; Shen YH; (2018)

(State Key Laboratory of Silkworm Genome, Southwest University, Chongqing 400715, China2018)

Nutritional value of mulberry branch feed from different processing methods and degradation characteristics in rumen of beef cattle

Canye Kexue 44(4):594-600 (Chinese)

5. POST COCOON TECHNOLOGY

204

Chattopadhyay D; Khan ZMS ; (2018)

(Central Tasar Research and Training Institute, Central Silk Board, Nagri, Ranchi 835303, Jharkhand, India)

Quality characteristics and frequency distribution of filament and non broken filament length of tropical tasar cocoons

Sericologia 58(3-4):189-197 (English)

205

Gahlot M; Joshi J; Singh J; (2018)

(AICRP Home Science, Dept. of Clothing and Textiles, College of Home Science, G.B. Pant University of Agriculture and Technology, Pantnagar (U.S. Nagar) Uttarakhand)

Eco-friendly printing of silk fabric with natural dye (*Rubia cordifolia*) and starch (Mango kernel)

Journal of Progressive Agriculture 9(1):45-49 (English)

206

Haddar W; Ticha MB; Meksi N; Ahlem GS; (2018)

(University de Monastir, Unité Chimie Appliquée - Environnement UR13ES63, Monastir, Tunisia)

Application of anthocyanins as natural dye extracted from *Brassica oleracea* L. var. *capitata* f. *rubra*: dyeing studies of wool and silk fibres

Natural Product Research 32(2):141-148 (English)

207

Hamidi YK; Akif YK; Guloglu GE; Pishvar M; Mehrad AK; Altan MC; (2018)

(Mechanical Engineering Program, University of Houston?Clear Lake, Houston, TX 77058, USA)

Silk as a Natural Reinforcement : Processing and Properties of Silk/Epoxy Composite Laminates

Materials 11(11):2135 (English)

208

Han LH; Peng ZQ; Yang Z; Hu ZW; (2018)

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

An observation and analysis on morphological structure and light stable isotope ratio variation of aging cocoons and silk fabrics

Canye Kexue 44(3):413-418 (Chinese)

209

Harijaj G; Mahadevaiah BM; Singh AK; Khatoon J; (2017)

(Central Silk Technological Research and Training Institute, Central Silk Board, Bengaluru 560068, India)

Standardization of process parameters for improving the bulkiness of silk fabrics by chemical treatment using box and behnken experimental methodology

Sericologia 57(4):206-211 (English)

210

Hipparagi SA; Sreenivasa; Joseph MA; Singh AK; Subhas V Naik ; (2018)

(Central Silk Technological Research Institute, Central Silk Board, Bengaluru 560068, India)

Application of Neem leaf extract on silk as dye, print colour and finishing agent

Sericologia 58(3-4):172-180 (English)

211

Hu WE; Yao YF; Zhou TG; (2018)

(Zhejiang Sci- Tech University, Key Laboratory of Advanced Textile Materials and Manufacturing Technology, Ministry of Education, Hangzhou 310018, China)

A study on water infiltration into surface of cocoon layers with different fluorescent colors

Canye Kexue 44(2):297-301 (Chinese)

212

Jiayu W; Yubo H; Hu YI; Li CG; (2018)

(College of life science, Dalian Minzu University, Dalian Lianing 116600, China)

Process Optimization of degumming tussah cocoon through Microbial fermentation

Canye Kexue 44(5):716-722 (Chinese)

213

Jiwei H; Wane N; Ling XL; Yue XX; Lin HT; (2018)

(College of Biological and Chemical Engineering, Guangxi University of Science and Technology, Liuzhou Guangxi -545006, China)

Construction and analysis of stepwise partition model of continuous Cocoon filament

Canye Kexue 44(5):723-728 (Chinese)

214

Joseph MA; Jaganathan K; Sangappa S; Basavaraja C; Herakal; Subhas V Naik ; (2018)

(Central Silk Technological Research Institute, Central Silk Board, BTM Layout, Bengaluru 560068, India)

A Novel approach for prevention of exfoliation problems associated with imported dupion silk yarn

Sericologia 58(1):12-16 (English)

215

Kim YJ; Lee MS; Baek IC; Yoon TY; Na SG; (2018)

(Department of Mechanical Engineering, Korea University, 02841 Seoul, Republic of Korea)

Mechanically inferior constituents in spider silk result in mechanically superior fibres by adaptation to harsh hydration conditions: a molecular dynamics study

Journal of the Royal Society Interface 15(144):20180305 (English)

216

Liu C; Xing TL; Wei BJ; Chen GQ; (2018)

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

Synergistic Effects and Mechanism of Modified Silica Sol Flame Retardant Systems on Silk Fabric

Materials 11(10):1842 (English)

217

Liu QH; Wang F; Gu ZG; Ma QY; Hu X; (2018)

(Center of Analysis and Testing, Nanjing Normal University, Nanjing 210023, China)

Exploring the Structural Transformation Mechanism of Chinese and Thailand Silk Fibroin Fibers and Formic-Acid Fabricated Silk Films

International Journal of Molecular Sciences 19(11):3309 (English)

218

Prajzler V; Min KT; Kim SW; Pavla ND; (2018)

(Department of Microelectronics, Faculty of Electrical Engineering, Czech Technical University, Technicka 2, 168 27 Prague, Czech Republic)

The Investigation of the Wave guiding Properties of Silk Fibroin from the Visible to Near-Infrared Spectrum

Materials 11(11):112 (English)

219

Rajiv M; Majumder S; (2018)

(Regional Technological Research Station (RSRTS), Central Silk Technological Research Institute, CSB, Muga farm, Khanapara, Guwahati 781022, Assam, India)

Efficacy of microwave curing on water soluble chitosan treated Eri silk fabric to impart antibacterial and easy care properties

Sericologia 58(3-4):160-170 (English)

220

Sreenivasa; Bhat PN; Joseph MA; Hipparagi SA; Subhas V Naik ; (2018)

(Central Silk Technological Research and Training Institute, Central Silk Board, Bengaluru 560068, India)

An innovative ecofriendly technique for Eri cocoon degumming

Sericologia 58(3-4):198-201 (English)

221

Stokes GY; Diccico EN; Moore TJ; Cheng VC; Wheeler KY; John SG; Barber RP; Edgerly JS; (2018)

(Department of Chemistry Biochemistry, Santa Clara University, 500 El Camino Real, Santa Clara, CA 95053, USA)

Structural and wetting properties of nature's finest silks (order Embioptera)

Royal Society Open Science 5(9):180893 (English)

222

Su Su; Hong T; (2018)

(College of Fine Arts, Southwest University, Chongqing 400 715, China)

An Exploration on composition change and practicability of boundary painting illustrations of silkworm rearing and silk weaving

Canye Kexue 44(3):466-473 (Chinese)

223

Wang JL; Guan J; Hawkins NL; Fritz VR; (2018)

(Shanghai Institute of Visual Arts, Shanghai, China)

Analysing the structure and glass transition behaviour of silks for archaeology and conservation

Journal of the Royal Society Interface 15(139):20170883 (English)

224

Wu HC; Wu SR; Yang TCK; Yang JC; (2018)

(Department of Biochemical Science and Technology, National Taiwan University, Taipei 106, Taiwan)

A Facile Measurement for Monitoring Dragline Silk Dope Concentration in *Nephila pilipes* upon Spinning

Materials 11(10):1951 (English)

225

Yan S; Pan SS; Ji JL; (2018)

(School of Petrochemical Engineering, Changzhou University, Changzhou, PR China)

Silk fabric dyed with extract of sophora flower bud

Natural Product Research 32(3):308-315 (English)

6. SERICULTURE

6.1. Sericulture Economics and Statistics

226

Angelina TG; (2018)

(Cagayan State University, Lal-lo Campus, Lal-lo Cagayan, Philippines)

**Enhancing income generating projects (IGPs) in a sericulture R
D management set -up : the DMMMSU - SRDI experience**

Sericologia 58(1):64-73 (English)

227

**Das D; Bindroo BB; Mukhopadhyay SK; Santha Kumar MV; Nirmal
Kumar S ; (2018)**

(P2- Farm, Dhubulia, CSRTI, Berampore)

Perseverance and dedication show the way

Indian Silk 9(3-4):18-19 (English)

228

Goswami D; Singh NI; Das K; Giridhar K ; (2018)

(Central Muga Eri Research Training Institute, Lohdoigarh)

Production of muga cocoons: Economics

Indian Silk 9(5-6):12-14 (English)

229

Hariraj G; Subhas V Naik; Shirol M M; Nagaraj CR ; (2018)

(Central Silk Technological Research and Training Institute, Central Silk Board, BTM
Layout, Bengaluru 560068, India)

Comparative account on the techno-economics of the automatic and multiend silk reeling filatures in the present Indian context

Sericologia 58(2):132-139 (English)

230

He YZ; Song C; Liu XL; Yu TH; Shu J; Chong Z; Zuo LL; (2018)

(Liaoning Institute of Sericultural Sciences, Fengcheng Liaoning 118100, China)

Investigation on distribution and annual dynamics of ticks in Tussah garden in mountain areas of east Liaoning

Canye Kexue 44(5):792-795 (Chinese)

231

Lei W; Li JQ; Gu G; (2018)

(School of Economics, Zhejiang University, Hangzhou 310027, China)

A study on provincial differences and influencing factors of Cocoon and silk export trade in China

Canye Kexue 44(5):760-769 (Chinese)

232

Li JQ; Gu G; He ZY; Kong WJ; (2018)

(School of Economics, Zhejiang University, Hangzhou 310027, China)

Regional distribution and developing emphasis of China's Cocoon Silk industry

Canye Kexue 44(6):936-946 (Chinese)

233

Madyarov SR ; (2018)

(Institute of Bioorganic Chemistry of Uzbek academy of science 83, Mirzo Ulugbek Str., Tashkent, 100143, Uzbekistan)

Biotechnological advances in sericulture, silk processing and resource saving in Uzbekistan

Sericologia 58(3-4):144-158 (English)

234

Panda SK ; (2017)

(Tripura Skill Development Mission, ITI Road, Indranagar, Agartala, West Tripura, PIN- 799006, India)

Sericulture achieving sustainable development goals (SDG) 2030 - some experiences of India

Sericologia 57(4):237-244 (English)

235

Sashindran NK; Phaniraj HS; Srinivasa G; Kalpana PK; Mishra RK ; (2018)

(National Silkworm Seed Organization, Central Silk Board, BTM Layout, Madivala, Bengaluru 560068, India)

Cost subvention to young stage silkworm rearing entrepreneurs and the corresponding surge in bivoltine raw silk production in southern India

Sericologia 58(1):48-54 (English)

236

Shukla P; Satyanand; Sivaprasad V; (2018)

(REC Khandwa, Central Sericultural Research Training Institute, Mysuru)

Structure of economical and sustainable rearing house

Indian Silk 9(3-4):46-47 (Hindi)

237

Uktam ML; (2018)

(Doctor of historical sciences, Uzbekistan)

Security service in the central Asian routes of the Great Silk road

Asian Journal of Multidimensional Research 7(12):6-10 (English)

6.2. Sericulture Extension Management

238

Chaudhuri RS; Debaraj Y; Singh NI; (2018)

(Regional Sericultural Research Station, Central Silk Board, Mantripukhri, Imphal 795002, Manipur, India)

Impact assessment of front line demonstration of technologies on Oak Tasar cocoon yield and economics

Sericologia 58(3-4):182-187 (English)

239

Das PT; Singh PS; Handique BK; Goswami J; Goswami C; Prabhakar CJ; Bajpeyi CM; Raju PLN ; (2018)

(North Eastern Space applications centre, Department of Space, Shillong 793103, India)

Utilisation of geospatial tools and web technology for expansion of temperate Tasar Sericulture in north - east India

Sericologia 58(3-4):203-207 (English)

240

David JB; Robyn P; Kaplan DL; Perry CC; (2018)

(Interdisciplinary Biomedical Research Centre, Nottingham Trent University, Clifton Lane, Nottingham NG11 8NS, United Kingdom)

A robust spectroscopic method for the determination of protein conformational composition - Application to the annealing of silk

Acta Biomaterialia 73:355-364 (English)

241

Jian Z; Yali H; Long L; Ren YG; Ting L; (2018)

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

Structure and characteristics of expert teams in sericulture and silk industry of China

Canye Kexue 44(4):624-631 (Chinese)

242

Mahimasanthi A; Rajaram S; Daniel AGK; Vidyunmala M; Vedavyasa K; Morrison MN; Sivaprasad V ; (2018)

(Central Sericultural Research and Training Institute, Central Silk Board, Mysuru 570 008, India)

Bridging of gaps in adoption of drought management technologies in mulberry cultivation in drought prone areas of south India

Sericologia 58(1):55-63 (English)

243

Sathyanarayan K; Alam MS; Sinha AK; Mishra RK ; (2018)

(Central Silk Board, Pradan, Jharkhan, CTRTI, Ranchi, NSSO Bengaluru)

Mahila Kisan Sashaktikaran Pariyojana: Women empowerment through tasar culture

Indian Silk 9(3-4):4-11 (English)

244

Wu HM; Jin QS; Yin Y; Li W; Ye MG; (2018)

(Economic Crop Technology Promotion Station of Huzhou, Huzhou Zhejiang 313000, China)

Overview of the causes and characteristics of mulberry dyke and fish pond system in Huzhou of Zhejiang

Canye Kexue 44(6):947-951 (Chinese)

245

Yang RS; Yun TY; Junyi Z; Youbo C; Shi SL; Yiren J; Youg W; Li Q; (2018)

(College of Bioscience and Biotechnology, Shenyang Agricultural University, China)

Study on occurrence regularity and spatial distribution of *Rhynchaenus maculosus*

Canye Kexue 44(6):834-840 (Chinese)

246

Zhang JY; Yang JM; Wu LY; (2018)

(Center for Monsoon System Research, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, 100029, China)

Skillful prediction of hot temperature extremes over the source region of ancient Silk Road

Scientific Reports 8:6677 (English)

6.3. Sericulture Value Added Products

247

Anggraini B; Hermawan JW; Nayla MA; Wibowo UA; Rosadi I; (2018)

(School of Life Science and Technology ITB)

Chondrogenic differentiation of adipose-derived mesenchymal stem cells induced by L-ascorbic acid and platelet rich plasma on silk fibroin scaffold

Peer Journal 6:e5809 (English)

248

Aoyama MH; Tada M; Tatematsu KI; Hashii NT; Sezutsu H; Watabe AI; (2018)

(Division of Biological Chemistry and Biologicals, National Institute of Health Sciences, 3-25-26, Japan)

Effects of amino acid substitutions on the biological activity of anti-CD20 monoclonal antibody produced by transgenic silkworms (*Bombyx mori*)

Biochemical and Biophysical Research Communications 503(4):2633-2638 (English)

249

Aykac A; Karanlik B; Sehirli AO; (2018)

(Department of Biophysics, Nicosia, Cyprus)

Protective effect of silk fibroin in burn injury in rat model

Gene 641:287-291 (English)

250

Bibhas KB; Kaplan DL; Mandal BB; (2018)

(Biomaterial and Tissue Engineering Laboratory, Department of Biosciences and Bioengineering, Indian Institute of Technology Guwahati, Guwahati 781039, India)

Silk-based multilayered angle-ply annulus fibrosus construct to recapitulate form and function of the intervertebral disc

Proceedings of the National Academy of Sciences, USA 115(3):477-482 (English)

251

Bing Z; Liu JH; Tao W; Zhi L; Dai FG; Tianfu Z; (2018)

(College of Textile Garment, Southwest University, Chongqing 400716, China)

Preparation and property characterization of transgenic silk fibroin film

Canye Kexue 44(4):560-566 (Chinese)

252

Buitrago JO; Patel KD; Ahmed EF; Lee JH; Kundu B; Lee HH; Hae WK; (2018)

(Institute of Tissue Regeneration Engineering (ITREN), Dankook University, South Korea)

Silk fibroin / collagen protein hybrid cell-encapsulating hydrogels with tunable gelation and improved physical and biological properties

Acta Biomaterialia 69:218-233 (English)

253

Cao GG; Gong YC; Hu XL; Zhu M; Liang Z; Huang L; Yu L; Xu J; Li K; Zar MS; Xue RY; Gong CL; (2018)

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

Identification of tarsal-less peptides from the silkworm *Bombyx mori*

Applied Microbiology 102(4):1809-1822 (English)

254

Chen H; Yu WS; Chen G; Meng S; Xiang ZH; He NJ; (2018)

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

Antinociceptive and Antibacterial Properties of Anthocyanins and Flavonols from Fruits of Black and Non-Black Mulberries

Molecules (Base, Switzerland) 23(1):4 (English)

255

Chen JW; Zhan YF; Wang YB; Han D; Tao B; Luo ZL; Sai M; Wang Q; Li X; Fan L; Li CY; Deng HB; Cao F; (2018)

(Department of Cardiology, Xijing Hospital, Fourth Military Medical University, 169 Changle West Rd, Xi'an, Shaanxi Province, China)

Chitosan/silk fibroin modified nanofibrous patches with mesenchymal stem cells prevent heart remodeling post-myocardial infarction in rats

Acta Biomaterialia 80:154-168 (English)

256

Chen W; Yuxiao Z; Qian L; Saiyi Z; Sentai L; Fan L; (2018)

(Guangdong key Laboratory of Agricultural products processing, Sericultural and Agri -food Research Institute, Guangzhou -510610, China)

An investigation on composition and enrichment process of Phenolic compounds in mulberry leaf

Canye Kexue 44(5):729-737 (Chinese)

257

Dakun M; Wang YS; Dai WJ; (2018)

(Hospital of Harbin Medical University, Harbin 150001, China)

Silk fibroin-based biomaterials for musculoskeletal tissue engineering

Materials Science and Engineering: C - Materials for Biological Applications 89:456-469 (English)

258

Dhanyalakshmi KH; Nataraja KN ; (2018)

(Department of Crop Physiology, University of Agricultural Sciences, Bengaluru, India)

Mulberry (*Morus* spp.) has the features to treat as a potential perennial model system

Plant Signaling Behavior 13(8):e1491267 (English)

259

Fu HZ; Hu TG; Zou Y; Liao S; Wang SY; Qian L; (2018)

(College of Food Science and Technology, Guangdong Ocean University, Zhanjiang Guangdong 524025, China)

Study on characteristics and quality changes of fresh mulberry fruit by vacuum microwave drying

Canye Kexue 44(3):427-434 (Chinese)

260

Gao YF; Shao W; Qian W; He JX; Zhou YM; Kun Q; Lidan W; Cui SH; Wang R; (2018)

(College of Textiles, Tianjin Polytechnic University, Tianjin 300387, China)

Biomaterialized poly (L-lactic-co-glycolic acid)-tussah silk fibroin nanofiber fabric with hierarchical architecture as a scaffold for bone tissue engineering

**Materials Science and Engineering: C - Materials for Biological Applications
84:195-207 (English)**

261

Ge Q; Zhang S; Chen L; Tang M; Liu L; Kang M; Gao L; Ma SS; Yang YH; Peng L; Kong M; Yao Q; Feng F; Chen K; (2018)

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

Mulberry Leaf Regulates Differentially Expressed Genes in Diabetic Mice Liver Based on RNA-Seq Analysis

Frontiers in Physiology 9:1051 (English)

262

Ghalei S; Mohammadi JN; Solouk A; Mirzadeh H; (2018)

(Department of Life Science Engineering, University of Tehran, Tehran, Iran)

Enhanced cellular response elicited by addition of amniotic fluid to alginate hydrogel-electrospun silk fibroin fibers for potential wound dressing application

Colloids and Surfaces B: Biointerfaces 172:82-89 (English)

263

Gilotra S; Chouhan D; Bhardwaj N; Nandi SK; Mandal BB; (2018)

(Biomaterial and Tissue Engineering Laboratory, Department of Biosciences and Bioengineering, Indian Institute of Technology Guwahati, Guwahati 781039, Assam, India)

Potential of silk sericin based nanofibrous mats for wound dressing applications

**Materials Science and Engineering: C - Materials for Biological Applications
90:420-432 (English)**

264

Hao Y; Ye JJ; Wang XJ; Wu JX; Xia CL; Jun ZH; Cui WH; (2018)

(Sericultural Research Institute, Sichuan Academy of Agricultural Sciences, Nanchong Sichuan 637000, China)

Content determination of active ingredients in mulberry seed and hypoglycaemic effect on diabetic model mice

Canye Kexue 44(5):738-745 (Chinese)

265

Honda R; Ryu MY; Li JL; Mizeikis VT; Juodkasis SL; Morikawa J; (2018)

(Tokyo Institute of Technology, Meguro-ku, Tokyo, 152-8550, Japan)

Simple multi-wavelength imaging of birefringence: case study of silk

Scientific Reports 8:17652 (English)

266

Hong L; Hui M; Lirong M; Li YM; Tian Z; Bao JH; Chen XL; Sun Y; (2018)

(Yangzhou irradiation center, Yangzhou Jiangsu 225007, China)

Breeding of high yield *Cordyceps militaris* mutant strains by protoplast mutagenesis

Canye Kexue 44(3):450-457 (Chinese)

267

Hu DD; Li T; Xu ZP; Liu D; Yang MY; Zhu LJ; (2018)

(Institute of Applied Bioresource Research, College of Animal Science, Zhejiang University, Hangzhou, China)

Self-stabilized silk sericin-based nanoparticles: In vivo biocompatibility and reduced doxorubicin-induced toxicity

Acta Biomaterialia 74:385-396 (English)

268

Hu XL; Zhu M; Liu B; Zi LA; Huang L; Jian X; Yu L; Li K; Jiang MS; Xue RY; Cao GG; Gong CL; (2018)

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

Circular RNA alterations in the *Bombyx mori* midgut following *B. mori* nucleopolyhedro virus infection

Molecular Immunology 101:461-470 (English)

269

Hu YJ; Ran JH; Zheng ZF; Jin ZC; Chen X; Tang ZY; Chen Y; Huang JY; Le HH; Yan RJ; Zhu T; Wang JU; Lin JX; Xu K; Zhou Y; Zhang W; (2018)

(Dr. Li Dak Sum Yip Yio Chin Center for Stem Cell and Regenerative Medicine, Zhejiang University, Zhejiang 310000, China)

Exogenous stromal derived factor-1 releasing silk scaffold combined with intra-articular injection of progenitor cells promotes bone-ligament-bone regeneration

Acta Biomaterialia 71:168-183 (English)

270

Huang JB; Wang YP; Ying C; Liu L; Lou ZH; (2018)

(Department of Basic Theory of Traditional Chinese Medicine, College of Basic Medical Science, Zhejiang Chinese Medical University, Hangzhou, Zhejiang 310053, P.R. China)

Effects of mulberry leaf on experimental hyperlipidemia rats induced by high fat diet

Experimental and Therapeutic Medicine 16(2):547-556 (English)

271

Janani G; Nandi SK; Mandal BB; (2018)

(Biomaterials and Tissue Engineering Laboratory, Department of Biosciences and Bioengineering, Assam, India)

Functional hepatocyte clusters on bioactive blend silk matrices towards generating bioartificial liver constructs

Acta Biomaterialia 67:167-182 (English)

272

Jing Q; Wang L; Niu LX; Lin JM; Huang Q; Jiang XF; Li MZ; (2018)

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

Porous Silk Fibroin Microspheres Sustainably Releasing Bioactive Basic Fibroblast

Materials 11(8):1280 (English)

273

Jun L; Bu ZB; Tang DB; Xiao GS; Jing W; Zou B; Yuge Z; (2018)

(Guangdong Key Laboratory of Agri-food Processing, Sericultural Agri-food Research Institute, Guangzhou 510610, China)

Dosage optimization of three additives and their effects on texture and total sugar content of sugar preserved mulberry fruit

Canye Kexue 44(4):588-593 (Chinese)

274

Kheradvar SA; Mohammadi JN; Tabesh H; Bagheri B; (2018)

(Department of Life Science Engineering, University of Tehran, Tehran, Iran)

Starch nanoparticle as a vitamin E-TPGS carrier loaded in silk fibroin-poly(vinyl alcohol)-Aloe vera nanofibrous dressing

Colloids and Surfaces B: Biointerfaces 166:9-16 (English)

275

Kim DK; Sim BR; Kim JI; Khang G; (2018)

(Department of BIN Fusion Technology, BIN Research Center, Republic of Korea)

Functionalized silk fibroin film scaffold using B Carotene for cornea endothelial cell regeneration

Colloids and Surfaces B: Biointerfaces 164:340-346 (English)

276

Koh LD; Yeo JJ; Lee YY; Ong QY; Han MY; Tee BM; (2018)

(Institute of Materials Research and Engineering, A STAR, 2 Fusionopolis Way, Innovis, Singapore 138634, Singapore)

Advancing the frontiers of silk fibroin protein-based materials for futuristic electronics and clinical wound-healing (Invited review)

Materials Science and Engineering: C - Materials for Biological Applications 86:151-172 (English)

277

Kwak HW; Lee KH; (2018)

(Department of Materials Science and Engineering, The University of Sheffield, Sheffield, S1 3JD, UK)

Polyethylenimine-functionalized silk sericin beads for high-performance remediation of hexavalent chromium from aqueous solution

Chemosphere 207:507-516 (English)

278

Kwaw EU; Ma YK; Tchabo W; Apaliya MT; Sackey AS; Wu M; (2018)

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

Effect of pulsed light treatment on the phytochemical, volatile, and sensorial attributes of lactic-acid-fermented mulberry juice

International Journal of Food Properties 21(1):213-228 (English)

279

Kwaw EU; Ma YK; Tchabo W; Apaliya MT; Meng W; Sackey AS; Xiao L; Tahir HE; (2018)

(School of Food and Biological Engineering, Jiangsu University, 301 Xuefu Road, Zhenjiang 212013, PR China)

Effect of *Lactobacillus* strains on phenolic profile, color attributes and antioxidant activities of lactic-acid-fermented mulberry juice

Food Chemistry 250:148-154 (English)

280

Lee HJ; Yang GH; Kim MS; Lee JY; Tae J; Geun H; Kim H; (2018)

(Department of Biomechatronic Engineering, College of Biotechnology and Bioengineering, Sungkyunkwan University (SKKU), Suwon 440-746, Republic of Korea)

Fabrication of micro/nanoporous collagen/dECM/silk-fibroin biocomposite scaffolds using a low temperature 3D printing process for bone tissue regeneration

Materials Science and Engineering: C - Materials for Biological Applications 84:140-147 (English)

281

Li FM; Xia L; Renzhi H; Ai JW; Yan XP; Xi H; Anle L; Geng L; Long TZ; Ye TM; Li YP; (2018)

(Sericulture Science Research Institute of Hunan Province, Changsha - 410127, China)

Effects of fermented mulberry leaf feed on growth, Slaughtering performance and meat quality of Ningxiang Crossbred Pig

Canye Kexue 44(6):929-935 (Chinese)

282

Li FT; Gensheng ZB; Xu YJ; Tang DB; Yu YS; Jijun W; (2018)

(Laboratory of functional Foods, Ministry of Agricultural and Rural Affairs, Guangdong, China)

A Study on fermentation characteristics of *Lactobacillus plantarum* in mulberry pulp

Canye Kexue 44(5):746-752 (Chinese)

283

Liao S; (2018)

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

Thoughts on developing Ecological Sericulture industry

Canye Kexue 44(2):181-187 (Chinese)

284

Lixia M; Shuyue X; Li WX; Lin GY; Zou Y; Churui C; Liao ST; (2018)

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

Identification of anti proliferative activity of proteolytic products form *Bombyx mori* pupa proteins on MGC 803 tumor cells

Canye Kexue 44(4):601-607 (Chinese)

285

Luo JJ; Zhang HT; Jiangzhu; Cui XK; Gao JJ; Wang X; Xiong J; (2018)

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

3-D mineralized silk fibroin/polycaprolactone composite scaffold modified with polyglutamate conjugated with BMP-2 peptide for bone tissue engineering

Colloids and Surfaces B: Biointerfaces 163:369-378 (English)

286

Luong TH; Nguyen TT; Vo Van Toi; Khon HC; Bao BC; Niem VT; Anh MNT; Tuan A; Hai ND; Chuong PD; Hiep NT; (2018)

(Tissue Engineering and Regenerative Medicine Group, Department of Biomedical Engineering, International University, Vietnam)

Evaluation of the Morphology and Biocompatibility of Natural Silk Fibers/Agar Blend Scaffolds for Tissue Regeneration

International Journal of Polymer Science 2018:5049728 (English)

287

Ma QY; Liang TA; Cao L; Wang LJ; (2018)

(College of Material Science and Engineering, Northeast Forestry University, Harbin, PR China)

Intelligent poly (vinyl alcohol)-chitosan nanoparticles-mulberry extracts films capable of monitoring pH variations

International Journal of Biological Macromolecules 108:576-584 (English)

288

Maddinedi SB; Sonamuthu J; Yildiz SS; Han GB; Cai YR; Gao JK; Ni QQ; Yao JM; (2018)

(Institute of Fiber based New Energy Materials, The Key Laboratory of Advanced Textile Materials and Manufacturing Technology of Ministry of Education, Hangzhou 310018, China)

Silk sericin induced fabrication of reduced graphene oxide and its in-vitro cytotoxicity, photothermal evaluation

Journal of Photochemistry and Photobiology B: Biology 186:189-196 (English)

289

Magaz A; Roberts AD; Faraji S; Nascimento TRL; Eliton SM; Zhang WH; Greenhalgh RD; Mautner A; Xu L; Blaker JJ; (2018)

(Bio-Active Materials Group, School of Materials, The University of Manchester, Manchester, United Kingdom)

Porous, Aligned, and Biomimetic Fibers of Regenerated Silk Fibroin Produced by Solution Blow Spinning

Biomacromolecules 19(12):4542-4553 (English)

290

Maheshwari NR; Zumberlal CM; (2018)

(Department of Zoology, Moolji Jaitha College, Jalgaon, 425001)

Review on spider silk and its applications

Indian Journal of Entomology 80(3):816-821 (English)

291

Marta R; Fernandes MH; Marisa MB; Monteiro FJ; Ferraz MP; (2018)

(i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Porto 4200-135, Portugal)

Silk fibroin/ nanohydroxyapatite hydrogels for promoted bioactivity and osteoblastic proliferation and differentiation of human bone marrow stromal cells

Materials Science and Engineering: C - Materials for Biological Applications 89:336-345 (English)

292

Min KT; Kim SY; Kim SW; (2018)

(Department of Energy Systems Research, Ajou University, Suwon, 16499, Republic of Korea)

Silk protein nanofibers for highly efficient, eco-friendly, optically translucent, and multifunctional air filters

Scientific Reports 8:9598 (English)

293

Narges J; Hosseini HRM; Ali Sk; (2018)

(Department of Materials Science and Engineering, Sharif University of Technology, Tehran 1458889694, Iran)

Novel fluoridated silk fibroin/ TiO₂nanocomposite scaffolds for bone tissue engineering

Materials Science and Engineering: C - Materials for Biological Applications 82:265-276 (English)

294

Ning JQ; Li FH; Liang J; Gang Y; Zhang MJ; Chao S; Feng J; (2018)

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

Preparation of edible mulberry leaf crude protein powder and evaluation of protein nutrition and processing characteristics

Canye Kexue 44(3):435-441 (Chinese)

295

Nivedita S; Geetha N; Murthy; Veeranna Gowda; Sahay A; (2018)

(Central Silk Technological Research Institute, Bengaluru)

Diversification of sericulture by - products

Indian Silk 9(5-6):28-30 (English)

296

Osama I; Gorenkova N; McKittrick CM; Wongpinyochit T; Goudie A; Seib FP; Carswell HVO ; (2018)

(Strathclyde Institute of Pharmacy and Biomedical Sciences, University of Strathclyde, Glasgow, U K)

In vitro studies on space-conforming self-assembling silk hydrogels as a mesenchymal stem cell-support matrix suitable for minimally invasive brain application

Scientific Reports 8:13655 (English)

297

Park YR; Sultan MT; Park HJ; Lee JM; Hyung WJ; Lee OJ; Lee DJ; Kaplan DL; Park CH; (2018)

(Nano-Bio Regenerative Medical Institute, College of Medicine, Hallym University, Chuncheon 200-702, South Korea)

NF- κ B signaling is key in the wound healing processes of silk fibroin

Acta Biomaterialia 67:183-195 (English)

298

Peng L; Pan Y; Wang QY; Yong H; Wu YC; Qin Y; Chen YH; Chen K; (2018)

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

Effect of applying silkworm pupa peptides in animal feed

Canye Kexue 44(2):309-314 (Chinese)

299

Pignatelli C; Perotto G; Marta Nardini; Cancedda R; Mastrogiacomo M; Athanassiou A; (2018)

(Smart Materials, Istituto Italiano di Tecnologia, via Morego 30, 16163 Genoa, Italy)

Electrospun silk fibroin fibers for storage and controlled release of human platelet lysate

Acta Biomaterialia 73:365-376 (English)

300

Porntipa PD; Orawan ST; (2018)

(School of Science, Mae Fah Luang University, Tasud, Muang, Chiang Rai 57100, Thailand)

The potential use of thermosensitive chitosan/silk sericin hydrogels loaded with longan seed extract for bone tissue engineering

RSC Advances 8(70):40219-40231 (English)

301

Qiao WC; Tao J; Luo Y; Tang TH; Miao JH; Yang QW; (2018)

(Department of Environmental Engineering, Nanjing Forestry University, Nanjing, Jiangsu Province 210037, People's Republic of China)

Microbial oil production from solid-state fermentation by a newly isolated oleaginous fungus, *Mucor circinelloides* Q531 from mulberry branches

Royal Society Open Science 5(11):180551 (English)

302

Rashmi KM; Chandrasekharaiah M; Soren N M; Prasad K S; David C G; Thirupathaiyah Y; Sivaprasad V ; (2018)

(ICAR- National Institute of Animal Nutrition and Physiology, Bengaluru, Karnataka 560 030, India)

Effect of dietary incorporation of silkworm pupae meal on in vitro rumen fermentation and digestibility

Indian Journal of Animal Sciences 88(6):731-735 (English)

303

Ribeiro VP; Morais AS; Maia FR; Canadas RF; Costa JB; Oliveira AL; Oliveira JM; Reis RL; (2018)

(University of Minho, Headquarters of the European Institute of Excellence on Tissue Engineering and Regenerative Medicine, Guimaraes, Portugal)

Combinatory approach for developing silk fibroin scaffolds for cartilage regeneration

Acta Biomaterialia 72:167-181 (English)

304

Rosena AW; Thongchai KK; Eaknai WW; Phichaporn BW; Rawiwan MC; Sasitorn AY; (2018)

(Nano Safety and Risk Assessment Laboratory, National Nanotechnology Center, National Science and Technology Development Agency, Thailand Science Park, Pathum Thani, Thailand)

Protective effect of Thai silk extracts on drug-induced phototoxicity in human epidermal A431 cells and a reconstructed human epidermis model

Journal of Photochemistry and Photobiology B: Biology 188:50-59 (English)

305

Sapru S; Subhayan Das ; Mandal M; Ghosh AK; Kundu SC; (2018)

(Department of Biotechnology and Indian Institute of Technology (IIT) Kharagpur, West Bengal 721302, India)

Prospects of nonmulberry silk protein sericin-based nanofibrous matrices for wound healing - In vitro and in vivo investigations

Acta Biomaterialia 78:137-150 (English)

306

Sathyanarayana K; Vijayan K; Singhvi NR; Mishra RK ; (2018)

(Central Silk Board, Bengaluru)

By- products of silk industry: Potentials aplenty

Indian Silk 9(5-6):16-21 (English)

307

Silva MGC; Gimenes ML; Vieira MGA; (2018)

(Chemical Engineering Department State University of Maringá, Maringá Brazil)

Bioadsorption of trivalent and hexavalent chromium from aqueous solutions by sericin-alginate particles produced from *Bombyx mori* cocoons

Environmental Science and Pollution Research 25(26):25967-25982 (English)

308

Song JH; Lee D; Lee SR; Yu JS; Jang TS; Nam JW; Kim KH; Kang KS; (2018)

(Department of Medicine, University of Ulsan College of Medicine, Seoul 05505)

Identification of bioactive heterocyclic compounds from mulberry and their protective effect against streptozotocin-induced apoptosis in INS-1 cells

Molecular Medicine Reports 17(4):5982-5987 (English)

309

Tchabo W; Ma YK; Kwaw EN; Xiao L; Meng W; Apaliya MT; (2018)

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

Impact of extraction parameters and their optimization on the nutraceuticals and antioxidant properties of aqueous extract mulberry leaf

International Journal of Food Properties 21(1):717-732 (English)

310

Tchabo W; Ma YK; Kwaw E; Zhang HN; Xiao L; Apaliya MT; (2018)

(School of Food and Biological Engineering, Jiangsu University, 301 Xuefu Road, Zhenjiang 212013, PR China)

Statistical interpretation of chromatic indicators in correlation to phytochemical profile of a sulfur dioxide-free mulberry (*Morus nigra*) wine submitted to non-thermal maturation processes

Food Chemistry 239:470-477 (English)

311

Tian BQ; Song LJ; Liang T; Li ZW; Ye XX; Fu QA; Li YH; (2018)

(Department of Urology, Shanghai Jiao Tong University Affiliated Sixth People's Hospital, Shanghai 200233, P.R. China)

Repair of urethral defects by an adipose mesenchymal stem cell porous silk fibroin material

Molecular Medicine Reports 18(1):209-215 (English)

312

Wang F; Wang YC; Tian C; Sheng X; Wang RY; Hou K; Chen W; Zhao P; Ling Y; Lu ZS; Kaplan DL; Xia QY; (2018)

(State Key Laboratory of Silkworm Genome Biology, College of Biotechnology, China)

Fabrication of the FGF1-functionalized sericin hydrogels with cell proliferation activity for biomedical application using genetically engineered *Bombyx mori* (B. mori) silk

Acta Biomaterialia 79:239-252 (English)

313

Wang JG; Zhou YB; Meng LW; Liang Y; He YT; Huang LX; (2018)

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

Evaluation on service value of mulberry base fishpond ecosystem in huzhou

Canye Kexue 44(4):615-623 (Chinese)

314

Wang W; Li XW; Bao XW; Gao L; Tao YX; (2018)

(College of Food Science and Pharmacy, Xinjiang Agricultural University, Urumqi, 830052, PR China)

Extraction of polysaccharides from black mulberry fruit and their effect on enhancing antioxidant activity

International Journal of Biological Macromolecules 120, Part B:1420-1429 (English)

315

Wang WF; Yuxiao Z; Liao S; Hu TG; Lixia M; Erna L; (2018)

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

Research progress on composition, exploitation and utilization of silkworm Pupal Oil

Canye Kexue 44(2):321-328 (Chinese)

316

Wang WJ; Jun L; Tang DB; Zou B; Wu J; Jing W; (2018)

(Guangdong key laboratory of Agri-food Processing, Sericultural and Agri-Food research institute, Guangzhou 510610, China)

Brewing and quality evaluation of compound fruit wine using pitaya and mulberry fruits

Canye Kexue 44(3):419-426 (Chinese)

317

Wei HI; Liu SU; Liao YJ; Ma CH; Wang DI; Tong JY; Feng JF; Tao Y; Zhu L; (2018)

(Department of Pharmaceutical Science, Leshan Vocational Technical College, Leshan 614000, P. R. China)

A Systematic Review of the Medicinal Potential of Mulberry in Treating Diabetes Mellitus

The American Journal of Chinese Medicine 46(8):1743-1770 (English)

318

Wu JB; Wang J; Zhang J; Zheng J; Kaplan DL; Gang L; Wang XQ; (2018)

(National Engineering Laboratory for Modern Silk, Soochow University, Suzhou, China 215123)

Oral Delivery of Curcumin Using Silk Nano- and Microparticles

ACS Biomaterials Science Engineering 4(11):3885-3894 (English)

319

Xiang P; Wang SS; Meng H; Han YH; Zhou ZH; Chen DL; Min L; Ma LQ; (2018)

(College of Life Sciences, Fujian Normal University, Fuzhou, Fujian 350108, China)

The in vitro and in vivo biocompatibility evaluation of electrospun recombinant spider silk protein/PCL/gelatin for small caliber vascular tissue engineering scaffolds

Colloids and Surfaces B: Biointerfaces 163:19-28 (English)

320

Xiao X; Liang GQ; Lu CX; Zhou XL; Wu JJ; Huang ZY; (2018)

(Sericultural Research Institute, Guangxi Zhuang Automomouns Region, nanning 530007, China)

Progress in application of Silk proteins in Anti aging cosmetics

Canye Kexue 44(6):958-961 (Chinese)

321

Xie HL; Yuxiao Z; Fan L; Lin GG; Jun L; Shen WZ; Liao S; (2018)

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

Optimization of technological condition for processing semi dried mulberry leaf vegetable

Canye Kexue 44(4):573-579 (English)

322

Xirui H; Fang JC; Ruan YL; Wang XX; Sun Y; Chang Y; Ning N; Guo H; Huang LH; (2018)

(Honghui Hospital, Xi'an Jiaotong University, Xi'an 710054, PR China)

Structures, bioactivities and future prospective of polysaccharides from *Morus alba* (white mulberry): A review

Food Chemistry 245:899-910 (English)

323

Xue B; Li FC; Tian JH; Li JX; Cheng XY; Hu JH; Hu JS; Bing ; (2018)

(School of Basic Medicine and Biological Sciences, Soochow University, Suzhou, P.R. China)

Titanium nanoparticles influence the Akt/Tor signal pathway in the silkworm, *Bombyx mori*, silk gland

Archives of Insect Biochemistry and Physiology 99(1):e21473 (English)

324

Yang H; Kim M; Kang E; Kim D; Park SM; (2018)

(Food Functional Research Division, Korean Food Research Institutes, Wanju, Jeollabuk 55365, Republic of Korea)

Red mulberry fruit aqueous extract and silk proteins accelerate acute ethanol metabolism and promote the anti oxidant enzyme systems in rats

Molecular Medicine Reports 18(1):1197-1205 (English)

325

Yang Y; Ting W; Liu XK; Yulong H; Shu JH; (2018)

(College of Life Science, Zhejiang Sci- Tech University, Hangzhou 310018, China)

Quercetin, an effective component of mulberry leaves, can inhibit the activation of Microglia induced by Zidovudine

Canye Kexue 44(2):302-308 (Chinese)

326

Yao DY; Qian ZY; Zhou J; Peng G; Zhou G; Liu HF; Yubo F; (2018)

(Key Laboratory for Biomechanics and Mechanobiology of Ministry of Education, School of Biological Science and Medical Engineering, Beihang University, Beijing 100083, People's Republic of China)

Facile incorporation of REDV into porous silk fibroin scaffolds for enhancing vascularization of thick tissues

Materials Science and Engineering: C - Materials for Biological Applications 93:96-105 (English)

327

Ying XZ; Qian JJ; Peng L; Zheng Q; Zheng B; Zhu B; Jin YH ; (2018)

(Department of Ultrasound, The Children's Hospital of Zhejiang University School of Medicine, Hangzhou, Zhejiang, China)

Model research on repairing meniscus injury in rabbits using bone marrow mesenchymal stem cells and silk fibroin meniscus porous scaffold

European Review for Medical and Pharmacological Sciences 22(12):3689-3693 (English)

328

Yoko MK; Kokubo MF; Nobuo KB; Tatematsu KI; Sezutsu H; Takahashi HY; Koichi SK; Chikamatsu KA; Takeda SG; (2018)

(Division of Molecular Science, Gunma University, Kiryu, Gunma 376 8515, Japan)

Melanoma antigen family A4 protein produced by transgenic silkworms induces antitumor immune responses

Experimental and Therapeutic Medicine 15(3):2512-2518 (English)

329

Yu MH; Yang TY; Ho HH; Huang HP; Chan KC; Wang CJ; (2018)

(Institute of Biochemistry, Microbiology and Immunology, Chung Shan Medical University, No. 110, Sec. 1, Jianguo North Road, Taichung 402, Taiwan)

Mulberry Polyphenol Extract Inhibits FAK/Src/PI3K Complex and Related Signaling To Regulate the Migration in A7r5 Cells

Journal of Agricultural and Food Chemistry 66(15):3860-3869 (English)

330

Yu YF; Li HY; Zhang B; Wang JW; Shi XP; Huang JZ; (2018)

(State Key Laboratory of Food Science and Technology, Nanchang University, Nanchang, Jiangxi, China)

Nutritional and functional components of mulberry leaves from different varieties: Evaluation of their potential as food materials

International Journal of Food Properties 21(1):1495-1507 (English)

331

Zhang J; Xinpei Y; Yiping L; Xu AY; Qian HY; Renzhi H; (2018)

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

An experiment on cultivating silkworm fungus symbiont using different cordyceps militaris strains and silkworm larvae of different varieties overlaid with soil

Canye Kexue 44(4):608-614 (Chinese)

332

Zheng SY; Shuai H; Du XM; Wang JW; Xuping S; (2018)

(Jiangxi Sericulture and Tea Research Institute, Nanchang 330203, China)

An analysis on the origin of two Chinese synonymous names for mulberry fruit

Canye Kexue 44(2):342-347 (Chinese)

333

Zhou YY; Tang RC; (2018)

(National Engineering Laboratory for Modern Silk, College of Textile and Clothing Engineering, Soochow University, 199 Renai Road, Suzhou 215123, China)

Facile and eco-friendly fabrication of AgNPs coated silk for antibacterial and antioxidant textiles using honeysuckle extract

Journal of Photochemistry and Photobiology B: Biology 178:463-471 (English)

334

Zhu XY; Jun W; Yang Z; Tian L; Han JH; Yang SF; Liu JY; Hao DD; Jin XD; (2018)

(Jilin Sericultural Research Institute, Jilin 132012, China)

Food toxicological tests and safety assessment of Antherae pernyi larva powder

Canye Kexue 44(3):442-449 (Chinese)

335

Zou F; Zhou J; Zhang J; Li JL; Tang B; Chen W; Wang JF; Wang XG; (2018)

(National Engineering Laboratory for Advanced Yarn and Fabric Formation and Clean Production, Wuhan Textile University, Wuhan 430073, China)

Functionalization of Silk with In-Situ Synthesized Platinum Nanoparticles

Materials 11(10):1929 (English)

6.4. Sericulture Engineering and Miscellaneous

336

Kavitha S; Srinivasan J ; (2018)

(Kumaraguru College of Technology, Coimbatore)

Fragrance finishing of silk fabrics by Micro- encapsulation technique

Indian Silk 9(3-4):22-24 (English)

337

Mishra SN; Subhas V Naik ; (2018)

(CSTRI, Central Silk Board, Bengaluru)

Mechanized extra weft insertion for multi- colour designing on handloom

Indian Silk 9(3-4):20-21 (English)

338

Shi HK; Meng J; Linbo L; Wu JM; Ye JJ; Yong M; Hu GR; Zhang JF; (2018)

(Sericulture Research Institute, Sichuan Academy of Agricultural Sciences, Nanchong Sichuan -637000, China)

Design of young silkworm feeding machine with spiral lifting system and its production test

Canye Kexue 44(6):891-897 (Chinese)

339

Suman P; Upreti M; (2018)

(Banasthali University, Rajasthan)

Modifying dyeing and printing of silk fabric with chitosan

Indian Silk 9(3-4):25-27 (English)

340

Verma A; Manisha S; Dhiraj SK; (2018)

(Department of Farm Machinery and Power Engineering, SV College of Agricultural Engineering and Technology, IGKV, Raipur-492012, India)

Studies on Drudgery Reduction in Mulberry Cultivation through Improved Machines

Agricultural Engineering Today 42(3):41-49 (English)

Abbas MN, 055

Abdelli N, 056

Acharya A, 071

Adegawa S, 174

Afriyie AJ, 034

Ahlem GS, 206

Ahmad MN, 043

Ahmed EF, 252

Ahmed S, 010

Ai JW, 281

Akanksha C, 040

Akif YK, 207

Alam MS, 243

Ali SK, 293

Altan MC, 207

An CM, 143

Angelina TG, 226

Anggraini B, 247

Anh MNT, 286

Anil P, 199

Anle L, 281

Anli C, 115

Anusha HG, 167-168

Aoyama MH, 248

Apaliya MT, 278-279, 309-310

Arai KR, 086

Arcuri HA, 081

Asano SI, 132

Asaoka K, 085

Athanassiou A, 299

Aykac A, 249

Baek IC, 215

Bagheri B, 274

Bai XR, 189

Bajpeyi CM, 239

Balavenkatasubbaiah M, 169

Bando HN, 132

Bandyopadhyay S, 004

Bandyopadhyay UK, 041

Banno Y, 125-126, 194

Bao BC, 286

Bao JH, 266

Bao XW, 314

Barber RP, 221

Basavaraja C, 214

Bharath Kumar, 043

Bhardwaj N, 263

Bhaskar RN, 167-168

- Bhat AH, 043
Bhat PN, 220
Bhatia NK, 057
Bhuvanewari E, 089
Bi LH, 111
Bi SM, 157
Bibhas KB, 250
Bin X, 068
Bindroo BB, 041, 058, 227
Bing, 323
Bing L, 068
Bing Z, 166, 170, 251
Biswas TD, 058,
Blaker JJ, 289
Bo L, 139, 188
Bo Z, 116
Bofan W, 093
Bu ZB, 273
Buitrago JO, 252
Byung C, 188
- C**ai C, 013
- Cai YR, 288
Canadas RF, 303
Cancedda R, 299
Cao F, 255
Cao GG, 077, 192, 253, 268.
Cao L, 287
Cao Xu, 025
Cao Y, 098
Cao YJ, 170
Cao ZM, 198
Carswell HVO, 296
Chai JP, 044
Chakraborty J, 079
Chameettachal S, 079
Chan KC, 329
Chanda S, 199
Chandrasekharaiah M, 302
Chang H, 099
Chang Y, 322
Chang Z, 095
Chao S, 030, 294
Chaoyi Z, 008
Chatterjee H, 045
Chatterjee S, 041
Chattopadhyay D, 204
Chaudhuri RS, 102, 238
Chawla S, 079
Chen C, 064
Che JQ, 162
Chen, 064
Chen BW, 022
Chen C, 009, 144
Chen CJ, 096
Chen DD, 034
Chen DL, 319

Author Index

- Chen F, 192
Chen FY, 133
Chen G, 254
Chen GH, 017
Chen GQ, 216
Chen H, 254
Chen HX, 059
Chen J, 120
Chen JW, 255
Chen K, 261, 298
Chen KI, 145
Chen L, 060, 261
Chen LH, 109
Chen MJ, 117
Chen MM, 106, 116
Chen P, 122, 171
Chen RT, 118
Chen SQ, 164
Chen TT, 171
Chen W, 256, 312, 335
Chen WJ, 119
Chen X, 082, 159, 164, 269
Chen XL, 266
Chen Y, 269
Chen YH, 298
Chen ZG, 113
Chen ZH, 062
Chenab K, 172
Cheng DJ, 141
Cheng G, 195
Cheng JL, 025
Cheng L, 122
Cheng VC, 221
Cheng X, 117, 120
Cheng XY, 068, 323
Chenya J, 072
Chiaki YY, 087
Chikamatsu KA, 328
Chitra M, 186
Chong Z, 230
Chouhan D, 263
Chouhan S, 043
Chu GD, 113
Chu Y, 036
Chu YN, 037
Chuong PD, 286
Churui C, 284
Clausen CA, 010
Cohen E, 002,
Costa JB, 303
Cruz ZN, 019
Cui HJ, 100
Cui SH, 260
Cui WH, 073, 264
Cui WZ, 062
Cui XH, 013
Cui XK, 285
Cui Y, 060

Dai FG, 251

Dai FW, 008

Dai FY, 138

Dai JJ, 130, 161

Dai WJ, 257

Daiki IB, 132

Dail FW, 032

Dakun M, 257

Dandapat J, 084

Daniel AGK, 242

Danso B, 145

Dar MY, 200

Das D, 199, 227

Das K, 228

Das PT, 239

Das RK, 173

David CG, 302

David JB, 240

Debaraj Y, 238

Decker RE, 061

Deh H, 103

Deng HB, 255

Deng PY, 121

Deng XJ, 098

Deng YC, 178

Dhanyalakshmi KH, 258

Dhiraj Kumar, 192

Dhiraj SK, 340

Di DD, 007

Dicicco EN, 221

Ding TL, 036

Dohra H, 086

Dominic K, 035

Dong FF, 122, 177

Dong HL, 062

Dong JM, 152

Dong QL, 159

Dong XY, 176

Dong Z, 122

Dong ZM, 065, 099

Dong ZP, 115

Dong ZQ, 171

Du JX, 096

Du XM, 332

Dutta A, 084

Eaknai WW, 304

Edgerly JS, 221

Eliton SM, 289

Endo H, 174

Enoch O, 183

Erna L, 315

Esteves FG, 081

Eza M, 151

Author Index

Fan L, 255-256, 321

Fan T, 035

Fan W, 033

Fang JC, 322

Fang RJ, 025

Fang SM, 146

Fang W, 095

Fang X, 146

Fang Y, 182

Fang ZY, 139

Faraji S, 289

Fei C, 077

Fei DQ, 175

Feng F, 261

Feng J, 294

Feng JF, 317

Feng M, 123

Feng Q, 103

Feng QL, 060

Feng W, 049

Feng XQ, 095

Feng YJ, 077, 192

Feng Z, 189

Fernandes MH, 291

Ferraz MP, 291

Frase MJ, 187

Fritz VR, 223

Fu HZ, 259

Fu P, 124

Fu QA, 311

Fujii S, 086

Fujii T, 063, 086, 104, 125

Fujii TG, 126

Fujimoto TA, 127

Gahlot M, 205

Gai YP, 042- 128.

Galindo A, 019

Gang L, 318

Gang M, 129

Gang Y, 294

Gani M, 043

Gao Bo, 072

Gao HJ, 095

Gao J, 064

Gao JJ, 285

Gao JK, 288

Gao L, 261, 314

Gao QP, 130, 161

Gao R, 138

Gao YF, 260

Ge Q, 261

Ge ZZ, 014

Geetha N, 295

Geng L, 281

- Gensheng ZB, 282
Getachew M, 091
Geun H, 280
Ghalei S, 262
Ghosh AK, 305
Ghosh MK, 043
Ghosh S, 079
Ghulam AB, 193
Gilotra S, 263
Gimenes ML, 307
Giridhar K, 228
Girish Naik V, 038- 039,
048
Go S, 127
Gogoi SH, 004
Gong CL, 077, 192, 253,
268
Gong J, 160
Gong MX, 143
Gong YC, 253
Goodacre SL, 151
Gorenkova N, 296
Goswami C, 239
Goswami D, 228
Goswami J, 239
Goudie A, 296
Greenhalgh RD, 289
Grinan I, 019
Gu G, 231- 232
Gu ZG, 217
Guan J, 223
Guloglu GE, 207
Guo DG, 109
Guo FY, 042
Guo H, 322
Guo HY, 095
Guo HZ, 154
Guo MP, 141
Guo PC, 065, 092
Guo Q, 033
Guo SY, 131
Guo XD, 017
Guo ZJ, 176
- H**addar W, 206
- Hae WK, 252
Hai ND, 286
Haiju L, 072
Haixu B, 097
Hamidi YK, 207.
Han CM, 021
Han D, 255
Han GB, 288
Han JH, 334
Han L, 027
Han LH, 208
Han MJ, 138

Author Index

- Han MY, 276
Han WZ, 092
Han YH, 319
Handique BK, 239
Hao CF, 135, 165
Hao DD, 334
Hao H, 103
Hao JY, 009
Hao Y, 264
Harada N, 132
Hariraj G, 209
Hariraj G, 229
Harris TI, 061
Hashii NT, 248
Hassan B, 010
Hawkins NL, 223
He FM, 078
He HW, 065
He JX, 260
He JY, 066
He NJ, 016, 254
He Q, 139
He YL, 182
He YT, 313
He YZ, 230
He ZY, 232
Heng W, 034
Herakal, 214
Hermawan JW, 247
Hernandez Y, 019
Heying Q, 165
Hiep NT, 286
Hino M, 140
Hipparagi SA, 210, 220
Hirayama C, 067
Hiroko TN, 174
Hisayoshi F, 194
Ho HH, 329
Honda R, 265
Hong L, 266
Hong T, 222
Hong Z, 034
Hongli C, 142, 185
Hosseini HRM, 293
Hou CX, 145
Hou GH, 150
Hou K, 119, 312
Hou Y, 016
Hu BY, 031
Hu DD, 267
Hu DW, 011
Hu F, 035
Hu GR, 338
Hu H, 138
Hu JH, 068, 117, 120, 323
Hu JS, 068, 117, 323
Hu N, 171
Hu P, 175

- Hu RZ, 009
Hu TG, 259, 315
Hu WE, 211
Hu WJ, 016
Hu X, 217
Hu XL, 077, 192, 253, 268
Hu YI, 212
Hu YJ, 269
Hu ZA, 122
Hu ZG, 171, 177
Hu ZM, 109, 198
Hu ZW, 208
Hu ZY, 178
Huan W, 097
Huang CL, 146
Huang CS, 203
Huang GQ, 052
Huang HP, 329
Huang J, 032
Huang JB, 270
Huang JT, 143
Huang JY, 269
Huang JZ, 026, 330
Huang L, 122, 192, 253, 268
Huang LX, 313
Huang P, 109
Huang Q, 272
Huang RZ, 001, 012, 029
Huang WW, 002
Huang XZ, 203
Huang YP, 105, 112, 137, 159
Huang ZY, 320
Huanga LH, 322,
Hui M, 266
Hui Y, 195
Huili Q, 093
Huiling D, 073
Huimin C, 024
Hyung WJ, 297
- I**chiki RT, 086
- Ichino F, 174
Iizuka T, 067
Isao KY, 179
Ishii M, 069
Ishii T, 090
Ishizuna F, 085
Ito K, 063
Ito KS, 104, 179
Iyengar MNS, 180
- J**aganathan K, 214
- James AA, 105, 112
Janani G, 271
Jang TS, 308

Author Index

- Jayarama Raju P, 023
Jena RK, 004
Ji DF, 112, 159
Ji JL, 225
Ji WJ, 116
Ji XL, 042
Jia CH, 012
Jia H, 015
Jia XF, 143
Jian C, 182
Jian T, 165
Jian X, 268
Jian Z, 050, 115, 241
Jiang JH, 013
Jiang L, 154
Jiang MM, 015
Jiang MS, 268
Jiang QS, 182
Jiang S, 092
Jiang SM, 001, 012, 029, 133
Jiang T, 144
Jiang XF, 272
Jiang XJ, 044
Jiang XL, 100
Jiang YB, 001, 012, 029
Jiang YI, 122
Jiang YM, 171
Jiangzhu, 285
Jiao F, 030
Jiao P, 118
Jiayu W, 212
Jijun W, 282
Jin QS, 244
Jin R, 188
Jin XD, 334
Jin YH, 327
Jin ZC, 269
Jine C, 070
Jing Q, 272
Jing H, 074
Jing W, 273, 316
Jiping L, 074
Jiwei H, 213
John SG, 221
Jones JA, 061
Joseph MA, 210, 214, 220
Joshi J, 205
Jun KY, 086
Jun L, 273, 316, 321
Jun W, 334
Jun ZH, 264
Junji TB, 086
Junyi H, 136
Junyi Z, 245
Juodkazis SL, 265
Jyotipragyan M, 071

Kai Y, 203

Kainoh YC, 086

Kalpan DL, 002

Kalpana PK, 235

Kang E, 324

Kang KS, 308

Kang L, 082

Kang M, 261

Kanzaki R, 063

Kaplan DL, 066, 240, 250,
297, 312, 318

Karanlik B, 249

Karasaki NK, 140

Kasi Reddy B, 169

Katsuma S, 085- 086, 179

Kausar S, 055, 064

Kavitha S, 336

Keiko KO, 179

Keping C, 056

Khalifa I, 014

Khan ZMS, 204

Khang G, 275

Khatoon J, 209

Kheradvar SA, 274

Khon HC, 286

Kikuta SG, 174

Kim D, 324

Kim DK, 275

Kim H, 280

Kim JI, 275

Kim KH, 308

Kim M, 324

Kim MS, 280

Kim SW, 218, 292

Kim SY, 292

Kim Y, 188

Kim YJ, 215

Kimiko YM, 179

Kirker GT, 010

Kiuchi T, 085

Kiuchi TS, 086

Kluge JA, 066

Kogure S, 087

Koh LD, 276

Koichi SK, 328

Kokubo MF, 328

Kong M, 261

Kong WJ, 232

Kotoka DK, 034

Kour RN, 108

Kouzuma YA, 087

Krishnan CR, 047

Kuang S, 077

Kuang ZS, 032

Kun Q, 260

Kun X, 072

Author Index

- Kundu B, 252
Kundu SC, 305
Kurako KK, 179
Kusakabe TH, 140
Kwak HW, 277
Kwaw E, 310
Kwaw EN, 309
Kwaw EU, 278- 279
- L**
Lai J, 124
- Lalitha N, 045
Lan FJ, 073
Lang WC, 076
Lang Y, 105
Le HH, 269
Lee D, 308
Lee DJ, 297
Lee HH, 252
Lee HJ, 280
Lee JH, 252
Lee JM, 140, 297
Lee JY, 280
Lee KH, 277
Lee MS, 215
Lee OJ, 297
Lee SR, 308
Lee YY, 276
Lei J, 183
Lei S, 021
Lei W, 231
Lei Y, 050
Lele C, 074
Lewis RV, 061
Li RN, 013
Li X, 028
Li Z, 032, 141
Li ZG, 036-037, 049
Li ZY, 008
Li AB, 066
Li B, 117, 120, 175
Li CG, 212
Li CK, 121
Li CL, 138
Li CM, 014
Li CY, 255
Li FC, 323
Li FG, 070
Li FH, 294
Li FM, 281
Li FT, 282
Li G, 165
Li Gang, 134 -135
Li H, 101.
Li HY, 026, 330
Li J, 028, 145
Li JL, 265, 335
Li JQ, 231-232

Li JW, 160	Li YS, 181
Li JX, 068, 117, 120, 323	Li YX, 165
Li K, 112, 253, 268	Li YY, 191
Li KK, 014	Li Z, 155
Li L, 009, 034 -035, 118	Li ZI, 006
Li MW, 112, 145, 159	Li ZL, 030
Li MZ, 272	Li ZM, 150
Li Q, 149, 245	Li ZQ, 164
Li QA, 095	Li ZW, 311
Li QR, 075, 190	Liang GQ, 320
Li QU, 101	Liang J, 294
Li QY, 115	Liang MX, 195
Li RF, 034	Liang QQ, 015
Li RX, 035	Liang S, 103
Li S, 042	Liang T, 311
Li T, 139, 267	Liang TA, 287
Li W, 244	Liang X, 106
Li WC, 136	Liang Y, 313
Li WU, 076	Liang Z, 077, 106, 110, 116, 192, 253
Li WX, 284	Liao PF, 115
Li X, 255	Liao S, 020, 259, 283, 315, 321
Li XE, 078	Liao ST, 190, 284
Li XH, 106, 116	Liao YJ, 317
Li XW, 314	Lidan W, 260
Li Y, 012	Liguohui, 178
Li YH, 121, 311	Lihua H, 070
Li YI, 029	Lin BM, 133
Li YM, 266	
Li YP, 281	

Author Index

- Lin C, 016, 053
Lin GG, 321
Lin GY, 020, 284
Lin HT, 213
Lin JM, 272
Lin JR, 133
Lin JX, 269
Lin M, 076
Lin Y, 148
Lin Ye, 099
Lin YJ, 060
Lin YS, 190
Linbo L, 338
Ling L, 137
Ling W, 052
Ling XL, 213
Ling Y, 312
Liqun Q, 083
Lirong M, 266
Liu B, 268
Liu C, 216
Liu CL, 055, 064, 130, 161
Liu CY, 027
Liu D, 267
Liu F, 020
Liu G, 052
Liu HF, 326
Liu HL, 148
Liu HW, 092
Liu J, 155
Liu JH, 251
Liu JY, 203, 334
Liu L, 261, 270
Liu LS, 143
Liu M, 033, 101
Liu N, 145
Liu Q, 160
Liu QH, 217
Liu RP, 163
Liu SG, 053
Liu SJ, 036
Liu SU, 317
Liu TT, 146
Liu XJ, 191
Liu XK, 182, 325
Liu XL, 230
Liu XQ, 033
Liu Y, 117, 131
Liu YC, 152
Liu YM, 078
Liu YQ, 059, 097, 149
Liu Z, 118
Liu ZH, 115
Liu ZL, 114, 137
Lixia M, 284, 315
Lixian W, 082
Liyama KH, 140
Lokeshwari RK, 187

Long DP, 111

Long L, 076, 094, 241

Long TZ, 281

Long ZG, 033

Lou LI, 114

Lou ZH, 270

Lu C, 111, 138, 171

Lu CX, 320

Lu HL, 016

Lu QY, 050

Lu Y, 118

Lu YH, 077

Lu ZB, 166

Lu ZS, 119, 312

Lua ZQ, 172

Luan Y, 138

Lubec G, 081

Luikham R, 187

Lulu Z, 191

Luo GQ, 008, 032

Luo H, 145

Luo JJ, 285

Luo SL, 197

Luo Y, 301

Luo YJ, 044

Luo ZL, 255

Luong TH, 286

*M*_a CH, 317

Ma HY, 053

Ma LQ, 319

Ma QQ, 017

Ma QY, 217, 287

Ma SS, 261

Ma SY, 148

Ma XL, 070

Ma YK, 278, 279, 309- 310

Ma Yue, 007

Maddinedi SB, 288

Madyarov SR, 233

Magaz A, 289

Mahadeva A, 018

Mahadevaiah BM, 209

Maheshwari NR, 290

Mahimasanthi A, 242

Maia FR, 303

Maji C, 041

Majumder S, 219

Man H, 073

Mandal BB, 250, 263, 271

Mandal M, 305

Manisha S, 340

Manjunath D, 202

Manjunatha GR, 199

Mankowski ME, 010

Author Index

- Mao FA, 183
Mao TT, 120
Maria JR, 002
Marisa MB, 291
Marta Nardini, 299
Marta R, 291
Mary Josepha AV, 047
Mase K, 067
Mastrogiacomo M, 299
Masuda A, 140
Masunaga H, 090
Matsui KJ, 086
Matsumoto Y, 184
Matsumoto YH, 069
Mautner A, 289
McKittrick CM, 296
Mehrad AK, 207
Meksi N, 206
Memmott DR, 061
Meng H, 319
Meng J, 338
Meng L, 028
Meng LW, 313
Meng M, 141
Meng S, 254
Meng W, 279, 309
Meng XM, 106, 110
Meng XZ, 139
Meng Z, 070
Miao JH, 301
Miao YG, 118
Midha S, 079
Mijie L, 072
Min KT, 218, 292
Min L, 319
Ming QY, 098
Ming W, 183
Mir AH, 201
Miranda Devi, 187
Mirzadeh H, 262
Mishra RK, 186, 235, 243, 306
Mishra SN, 337
Mita K, 179
Mizeikis VT, 265
Mogili T, 003
Mohammadi JN, 262, 274
Mohanty N, 071
Mon HA, 140
Monteiro FJ, 291
Moo Y, 188
Moore TJ, 221
Morais AS, 303
Morifuji YH, 140
Morikawa J, 265
Morokuma DS, 140
Morrison MN, 242
Mukhopadhyay SK, 227

Murakami M, 104

Murthy, 295

N_a SG, 215

Nagaraj CR, 229

Nagaveni V, 018

Naika R, 080

Nakajima H, 184

Nalwandikar PK, 088

Nam JW, 308

Nan X, 028

Nandi SK, 263, 271

Narendra Kumar JB, 202

Narges J, 293

Nascimento TRL, 289

Nataraja KN, 258

Naveen DV, 080

Nayla MA, 247

Negi K, 046

Nguyen TT, 286

Ni QQ, 288

Nie RG, 014

Nie ZM, 166, 170

Niem VT, 286

Ning JQ, 294

Ning N, 322

Nirmal Kumar S, 045, 058,
227

Nishitha Naik V, 048

Nithya BN, 080

Niu BL, 112, 113, 159

Niu LX, 272

Nivedita S, 295

Nobuo KB, 328

Numata K, 090

Ohnishi TY, 086

Okada E, 067

Okumura A, 127

Olatunji OJ, 059

Oliveira AL, 303

Oliveira JM, 303

Omenetto FG, 002, 066

Ong QY, 276

Orawan ST, 300

Osama I, 296

Ouyang Z, 059

Ozawa R, 086

Padmini P, 003

Padua S, 004

Palma MS, 081

Pan G, 059

Pan GQ, 139

Pan MH, 074, 122, 171, 177

Author Index

- Pan SS, 225
Pan Y, 298
Panda SK, 234
Park CH, 297
Park HJ, 297
Park SM, 324
Park YR, 297
Patel KD, 252
Patra GC, 071
Pavla ND, 218
Peipei T, 178
Peng CY, 148
Peng G, 326
Peng J, 141
Peng L, 056, 261, 298, 327
Peng W, 191
Peng XG, 142
Peng YW, 129
Peng ZQ, 208
Perez MC, 019
Perotto G, 299
Perry CC, 240
Peterson CJ, 061
Phaniraj HS, 235
Phichaporn BW, 304
Pignatelli C, 299
Pin H, 198
Ping H, 036- 037
Ping Z, 181
Pinto JRAS, 081
Pinto MV, 038- 039
Pishvar M, 207
Ponnuvel KM, 187
Poorani J, 045
Poornima HS, 038- 039
Porntipa PD, 300
Prabhakar CJ, 239
Pradhan J, 084
Prajzler V, 218
Prasad K S, 302
Prasanta Kumar, 071
Pu YX, 143
- Q**
Qi JG, 142
- Qi JR, 185
Qian C, 130, 161
Qian HI, 134- 135
Qian HY, 331
Qian JJ, 327
Qian L, 256, 259
Qian P, 144
Qian QJ, 152, 162
Qian W, 260
Qian WH, 114
Qian WL, 141
Qian Y, 077
Qian ZY, 326

- Qiang J, 082
Qiao WC, 301
Qin CX, 150
Qin S, 145
Qin Y, 178, 298
Qin ZLJ, 012
Qing S, 170
Qiong K, 072
Qiong Y, 075, 190
Qiu CZ, 146
Qiu GX, 198
Qiu JF, 062
Qiu XY, 016
Qiu ZY, 114, 147, 156- 157
Qu C, 129
Qu SN, 083
Quan YP, 183
- R**
Rajaram S, 242
- Rajiv M, 219
Rajlakshmi Devi Y, 187
Raju PLN, 239
Ramachandran S, 004
Ramegowda GK, 200
Ramesh Kumar, 017
Ran JH, 269
Ran R, 037, 049
Ran RL, 006
Ran YP, 143
Rao RJ, 200
Rashmi KM, 302
Ravikumar G, 023, 186
Rawiwan MC, 304
Ray DK, 084
Ray P, 004
Ray SK, 004
Reis RL, 303
Ren FF, 098, 123
Ren J, 006
Ren YG, 241
Renyu X, 077
Renzhi H, 281, 331
Ribeiro VP, 303
Roberts AD, 289
Robyn P, 240
Rodriguez P, 019
Rodr IP, 019
Rodriguez Y, 019
Rosadi I, 247
Rosena AW, 304
Roy DP, 004
Ruan YL, 322
Ruan Z, 082
Ruan ZF, 131
Rui Z, 181
Ruifa R, 036
Ruisha S, 185

Author Index

Ruiz A, 019

Rukmangada MS, 039

Ryu MY, 265

Sackey AS, 278- 279

Sah KD, 004

Saha AK, 058

Sahay A, 295

Sahu S, 084

Sai M, 255

Saiyi Z, 256

Sakae K, 107

Sakthivel N, 054, 196

Sakura TT, 086

Sakurai T, 063

Sangappa S, 214

Santha Kumar MV, 041,
045, 227

Sapru S, 305

Sarker B N, 173

Sashindran NK, 235

Sasitorn AY, 304

Sathyanarayana K, 243,
306

Sato RI, 174

Sato MN, 132

Satoshi NM, 086

Satyanand, 236

Sehirli AO, 249

Seib FP, 296

Sekimizu K, 184

Sekimizu KH, 069

Sentai L, 074- 075, 256

Sezutsu H, 179, 248, 328

Shah H, 193

Shahzad TF, 175

Shang CQ, 025

Shang P, 137

Shang RS, 142

Shantibala T, 187

Shao W, 260

Shao YL, 189

Shao YY, 029

Sharma DD, 005

Sharma GK, 004

Shen CM, 024

Shen G, 053

Shen GW, 148

Shen GX, 016

Shen Q, 025

Shen WF, 070

Shen WZ, 020, 321

Shen XJ, 144, 147, 156- 157

Shen YH, 124, 203

Shen ZG, 142

Shen ZY, 185

Sheng L, 082

- Sheng Q, 166
Sheng S, 051
Sheng X, 119, 312
Sheng Z, 150
Shi HK, 338
Shi SG, 149
Shi SL, 245
Shi XP, 026, 330
Shi XQ, 073
Shimada T, 085- 086, 179
Shinde PR, 088
Shirol MM, 229
Shree MP, 018
Shu J, 230
Shu JH, 182, 325
Shu XS, 150
Shuai H, 332
Shui YX, 197
Shukla P, 236
Shuyue X, 284
Si HQ, 166
Sik K, 188
Silva MGC, 307
Sim BR, 275
Sima YH, 062
Singh A, 200
Singh AK, 209- 210
Singh H, 108
Singh J, 205
Singh NI, 228, 238
Singh PS, 239
Singh SK, 004
Singhvi NR, 023, 306
Sinha AK, 243
Sivaprasad V, 003, 038, 047-048, 089, 236, 242, 302
Solouk A, 262
Somaprakash DS, 047
Sonamuthu J, 288
Song C, 037, 189, 230
Song F, 144
Song HS, 164
Song J, 162
Song JH, 308
Song LJ, 311
Song SF, 083
Song WM, 051
Song XJ, 143
Soren NM, 302
Sori W, 091
Sowmya P, 048
Sreenivasa, 210, 220
Sreenivasa Rao TVS, 169
Srinivasa G, 235
Srinivasan J, 336
Srivastava RP, 040, 046
Stokes GY, 221
Strickland M, 151

Author Index

- Su GM, 106, 110
Su H, 152
Su LY, 153
Su Su, 222
Su YS, 101
Su ZG, 044
Subhas V Naik, 210, 214, 220, 229, 337
Subhayan Das, 305
Subramanya G, 102
Sultan MT, 297
Suman P, 339
Sun CG, 011
Sun GY, 028, 031
Sun JC, 123, 198
Sun JS, 096
Sun QA, 154
Sun R, 021
Sun RJ, 034
Sun W, 124
Sun X, 145
Sun Y, 064, 266, 322
Sun YU, 064
Sun YX, 055
Suresh Kumar N, 108
Suyuan Z, 198
Suzuki YH, 087
- T**
abesh H, 274
- Tada M, 248
Tae J, 280
Tahir HE, 279
Takahashi HY, 328
Takai H, 085- 086
Takao KD, 086
Takasu Y, 067
Takeda SG, 328
Takei M, 087
Tamura T, 179
Tan AA, 105, 112, 137, 159
Tan HH, 078
Tan LR, 171
Tanaka D, 194
Tanaka S, 174
Tang B, 335
Tang CM, 008, 032
Tang DB, 273, 282, 316
Tang FF, 189
Tang M, 261
Tang RC, 333
Tang SJ, 182
Tang SM, 143
Tang TH, 301
Tang XD, 176
Tang XY, 139

- Tang YY, 163
Tang ZY, 269
Tante Y, 165
Tao B, 255
Tao H, 062
Tao J, 301
Tao W, 251
Tao Y, 317
Tao YE, 113
Tao YL, 022
Tao YX, 314
Tatematsu KI, 248, 328
Tchabo W, 278- 279, 309-310
Tee BM, 276
Temak GD, 088
Terenius O, 187
Thirupathaiiah Y, 089, 302
Thomas AD, 002
Thomas DS, 186
Thomas NR, 151
Thongchai KK, 304
Tian BQ, 311
Tian C, 119, 312
Tian J, 064
Tian JH, 068, 323
Tian JW, 055
Tian L, 334
Tian Z, 266
Tianfu Z, 251
Tianmo W, 097
Ticha MB, 206
Ting L, 241
Ting T, 176
Ting W, 325
Tong JY, 317
Tong XL, 138
Tong XO, 103
Trivedy K, 004, 199
Triveni R, 039
Tsuchiya K, 090
Tuan A, 286
Tudorica V, 151
- U**chino K, 179
- Uefune MY, 086
Uktam ML, 237
Umer B, 091
Upreti M, 339
- V**aijyanthi PV, 003, 089
- Vedavyasa K, 242
Veeranna Gowda, 295
Venkatachalapathi V, 080
Venkateswara Rao M, 169
Verma A, 340

Author Index

Vidyunmala M, 242

Vieira MGA, 307

Vijayan K, 023, 186, 306

Vineet Kumar, 089

Vo Van Toi, 286

Wane N, 213

Wang BB, 154

Wang CJ, 329

Wang D, 155

Wang DI, 155

Wang DJ, 317

Wang F, 119, 217, 312

Wang FC, 116

Wang GJ, 121

Wang H, 120, 153

Wang HB, 152

Wang J, 051, 175, 318

Wang JF, 335

Wang JG, 313

Wang JL, 223

Wang JU, 269

Wang JW, 026, 330, 332

Wang L, 101, 130, 161, 272

Wang LJ, 287

Wang N, 031

Wang P, 141

Wang PY, 147, 156- 157

Wang Q, 065, 092, 255

Wang QI, 015

Wang QY, 298

Wang R, 260

Wang RY, 119, 312

Wang SS, 319

Wang SY, 259

Wang TC, 035

Wang W, 314

Wang WB, 059

Wang WF, 315

Wang WJ, 316

Wang WR, 094

Wang X, 123, 144, 285

Wang XG, 335

Wang XH, 101

Wang XJ, 052, 264

Wang XQ, 318

Wang XX, 073, 322

Wang XY, 109, 198

Wang Y, 015, 148

Wang YB, 255

Wang YC, 119, 312

Wang YI, 035

Wang YM, 154

Wang YN, 015

Wang YP, 270

Wang YQ, 070

Wang YS, 257

- Wang YW, 146
Wang YZ, 093
Wang Z, 065, 092, 203
Wang ZA, 008
Wang ZH, 096
Wang ZJ, 032
Watabe AI, 248
Wei BJ, 216
Wei C, 011
Wei D, 036- 037
Wei GQ, 130, 161
Wei HI, 317
Wei J, 016
Wei L, 178
Wei W, 111
Wei WY, 157
Wei Y, 121, 155
Weng LJ, 013
Wheeler KY, 221
Wibowo UA, 247
Wongpinyochit T, 296
Wu F, 051
Wu GH, 009, 076, 094
Wu GQ, 158
Wu HC, 224
Wu HM, 114, 244
Wu J, 316
Wu JB, 318
Wu JJ, 320
Wu JM, 338
Wu JX, 148, 264
Wu KC, 135
Wu LY, 246
Wu M, 278
Wu MY, 162
Wu SR, 224
Wu WM, 131
Wu Y, 110
Wu YC, 298
- X**_i H, 281
- Xia QY, 312
Xia CL, 052, 264
Xia DG, 114, 147, 156- 157
Xia F, 154
Xia JF, 103
Xia L, 281
Xia QY, 092, 099, 119, 141, 148, 154, 181, 190
Xia S, 136
Xian LJ, 128
Xiang P, 319
Xiang WH, 024
Xiang ZH, 027, 254
Xiao GS, 273
Xiao L, 279, 309- 310
Xiao SY, 049

Author Index

- Xiao WW, 007
Xiao X, 320
Xiao Y, 118
Xiaotong, 101
Xie HL, 321
Xie JH, 011
Xin D, 070
Xin S, 050
Xing DG, 075, 190
Xing TL, 216
Xinpei Y, 331
Xinyu JA, 113
Xiong J, 285
Xiong M, 007
Xiong TR, 139
Xirui H, 322
Xu AI, 134- 135
Xu AY, 165, 331
Xu GQ, 197
Xu HF, 163
Xu J, 137, 140, 159, 164, 192, 253
Xu JF, 098
Xu JP, 175
Xu K, 269
Xu L, 289
Xu LA, 110
Xu PC, 153
Xu SI, 073
Xu SQ, 062
Xu WH, 153
Xu X, 175
Xu Y, 051, 011
Xu YJ, 282
Xu YS, 152
Xu YY, 094
Xu YZ, 136
Xu ZP, 267
Xue B, 117, 120, 323
Xue Li, 062
Xue QW, 017
Xue R, 192
Xue RY, 253, 268
Xuping S, 332
- Y**
alan TC, 153
- Yali H, 241
Yamamoto KK, 067
Yamamoto KN, 126
Yamashiki N, 107
Yaming J, 177
Yan D, 105
Yan H, 007
Yan HC, 133
Yan L, 070
Yan RJ, 269
Yan S, 225

Yan XP, 012, 029, 281
Yan Y, 197
Yan Z, 103
Yang WY, 098
Yang G, 095
Yang GH, 280
Yang H, 160, 324
Yang JC, 224
Yang JJ, 093
Yang JM, 246
Yang LA, 175
Yang LG, 130
Yang LN, 161
Yang MY, 267
Yang QJ, 106, 110
Yang QW, 301
Yang RS, 245
Yang SF, 334
Yang TCK, 224
Yang TY, 329
Yang W, 037
Yang WK, 115
Yang WY, 072
Yang X, 075, 190
Yang Y, 006, 141, 182, 325
Yang YH, 261
Yang Z, 208, 334
Yano T, 140
Yao DY, 326
Yao JM, 288
Yao O, 163
Yao Q, 261
Yao XH, 009
Yao YF, 211
Yaru D, 096
Yavuz B, 066
Ye JJ, 264, 338
Ye LP, 162
Ye MG, 244
Ye TM, 281
Ye XG, 162
Ye XX, 311
Yeo JJ, 276
Yeshun Z, 195
Yi HY, 098
Yi W, 009
Yi YH, 158
Yi YZ, 191
Yildiz SS, 288
Yiling Z, 185
Yin CR, 025
Yin Hao, 052
Yin Y, 244
Yin Z, 028
Ying C, 033, 093, 270
Ying XZ, 327
Ying Z, 149
Yining W, 028

Author Index

- Yiping L, 331
Yiren J, 245
Yoko MK, 328
Yokoyama T, 063, 104
Yong H, 160, 298
Yong M, 338
Yong Z, 170
Yoon TY, 215
Yoshido A, 127
You ZY, 162
Youbu C, 245
Youg W, 245
Yu HZ, 175
Yu JS, 308
Yu L, 119, 192, 253, 268
Yu LY, 024
Yu MD, 027
Yu MH, 329
Yu SF, 016, 053
Yu TH, 230
Yu W, 183
Yu WS, 254
Yu XB, 122
Yu XF, 155
Yu XQ, 098
Yu Y, 159
Yu YF, 026, 330
Yu YS, 282
Yu ZB, 103
Yuan GZ, 130, 161
Yuan S, 128
Yuan SS, 042
Yubo F, 326
Yubo H, 212
Yue XX, 213
Yuge Z, 273
Yuji YK, 127
Yukio IK, 086
Yulong H, 325
Yun TY, 245
Yusong, 153
Yuwei Y, 198
Yuxiao Z, 074, 256, 315, 321
- Z**ar MS, 253
- Zeng BS, 137, 164
Zeng WA, 027
Zeng WH, 163
Zeng YH, 052
Zeng Z, 052
Zeyu L, 094
Zhai JJ, 117
Zhan PF, 152
Zhan YF, 255
Zhang B, 026, 330
Zhang CP, 053

Zhang DG, 033
Zhang DY, 009, 051, 094
Zhang GH, 007, 111, 145
Zhang GL, 109, 198
Zhang GZ, 195
Zhang H, 016, 078, 138
Zhang HC, 198
Zhang HH, 028
Zhang HL, 128
Zhang HN, 310
Zhang HT, 285
Zhang HY, 148, 203
Zhang J, 029, 318, 331, 335
Zhang JF, 338
Zhang JG, 097
Zhang JY, 246
Zhang L, 035
Zhang MH, 006
Zhang MJ, 030, 294
Zhang MM, 031
Zhang N, 123
Zhang QH, 164
Zhang RN, 098
Zhang S, 028, 261
Zhang SX, 062, 073
Zhang SY, 103
Zhang SZ, 175
Zhang TL, 141
Zhang TY, 163
Zhang W, 269
Zhang WH, 289
Zhang X, 099
Zhang Y, 099
Zhang YH, 007, 135, 189
Zhang YL, 111, 142
Zhang YS, 092
Zhang YX, 103
Zhang Z, 124, 142, 145, 160, 185
Zhang ZF, 191
Zhang ZG, 112, 164
Zhanqi D, 177
Zhao WG, 035
Zhao AH, 027, 111
Zhao C, 183
Zhao CS, 116
Zhao DC, 099
Zhao DX, 096
Zhao E, 100
Zhao GD, 135, 165
Zhao GO, 134
Zhao HN, 042, 128
Zhao HP, 095
Zhao K, 175
Zhao MY, 113
Zhao P, 065, 092, 099, 119, 141, 154, 312
Zhao QL, 114, 147, 156-157

Author Index

- Zhao TJ, 141
Zhao WG, 009, 034
Zhao XA, 033
Zhao XI, 032
Zhao YN, 042, 128
Zhao Z, 191
Zhao ZX, 197
Zhen OA, 155
Zheng B, 327
Zheng J, 318
Zheng Li, 007
Zheng Q, 327
Zheng S, 027
Zheng SN, 113
Zheng SY, 332
Zheng XD, 011
Zheng ZF, 269
Zheng ZY, 006
Zheshi K, 074
Zhi L, 251
Zhong BO, 162
Zhong HX, 028
Zhong SU, 109
Zhong YJ, 131
Zhong YS, 133
Zhou CB, 098
Zhou G, 326
Zhou HX, 166
Zhou J, 326, 335
Zhou JL, 149
Zhou KY, 165
Zhou L, 027
Zhou PF, 074
Zhou QZ, 146
Zhou TG, 211
Zhou X, 141
Zhou XL, 320
Zhou Y, 101, 269
Zhou YB, 313
Zhou YH, 123
Zhou YM, 260
Zhou YY, 333
Zhou ZH, 319
Zhou ZY, 139
Zhu B, 327
Zhu BJ, 055, 064, 130, 161
Zhu BS, 042
Zhu D, 051
Zhu F, 049
Zhu HQ, 052
Zhu L, 192, 317
Zhu LJ, 267
Zhu LU, 077
Zhu M, 192, 253, 268
Zhu T, 269
Zhu W, 028
Zhu XY, 334
Zhu Y, 060

Zhuo XH, 109, 198

Zi LA, 268

Zihan SN, 017

Ziwei W, 198

Zou B, 273, 316

Zou F, 335

Zou XG, 029

Zou Y, 259, 284

Zou YX, 020

Zumberlal CM, 290

Zuo LL, 230

Zuo WD, 138, 163

Subject Index

1- deoxynojimycin, 029

1-antitrypsin recombinant
protein silkworm, 140

1-deoxynojimycin, 264

1-deoxynojirimycin, 009, 073,
155

1-deoxynojirimycin (dnj)
059

16s rdna, 135

16s rrna gene, 031

3d porous structure, 280

3d printing, 276

3d-structure, 081

6-phosphogluconate
dehydrogenase, 142

A-glucosidase, 264

A4 (mage a4), 328

Abiotic stress, 033-034

Abts, 009, 314

Abundant microporous
structure, 327

Acid-treatment, 198

Actin, 093

Actin3, 032

Actinobacteria ,031, 062

Active, 331

Acute toxicity, 078, 094

Adhesion mechanisms, 095

Adhesive coatings, 174

Adhesiveness, 013

Adipose-derived
mesenchymal stem cells , 247

Adipose-derived stem cells,
285

Adsorption, 001

Adult moth, 041

Aflp, 102

markers, 039

Subject Index

- Age, 241
 of plants, 196
- Aggregation index, 245
- Agricultural ecosystems, 313
 machinery, 197
- Air purification filter, 292
- Alcaligenes faecalis, 168
- Aldose reductase, 157
- Alfalfa, 031
- Alginate, 262
- Alternative splicing, 124, 156
- Amino acid, 015, 174, 273, 298
 composition, 281
 substitution, 248
 transport and
 metabolism, 161
- Amniotic fluid, 262
- Amps, 130
- Anatomical traits, 030
- Ancient silk road, 246
- Angiotensin, 124
- Animal farming; aquafeed,
 298
 trial, 334
- Anisohydric plants, 019
- Annual dynamics, 230
- Annulus fibrosus, 250
- Antennae, 146
- Anterior cruciate ligament,
269
- Antheraea assamensis, 173
 mylitta, 071, 186
 pemyi, 116
 pernyi, 064, 097,
 106, 265
 proylei, 187
- Anthocyanins, 254
- Anti-aging, 320
- Antibacterial, 018, 098, 219,
 254, 305, 335
- Antibacterial activity, 333
 mechanism, 092
 peptide, 092
- Antibody, 093
- Antifungal substances, 018
- Antimicrobial properties, 210
- Antinociceptive, 254
- Antioxidant, 017, 101, 263,
 320, 021, 084
- Antioxidant activity, 026, 330,
 333
- Antioxidase, 025
- Antipaluria urichi, 221
- Antiradical capacity, 309
- Antitermitic, 010
- Antiviral activity, 191
 capacity, 154

- therapy, 122
- Antivirus, 171
- Apolipoprotein d, 101
- Apoptosis, 072, 249
- Aposthonia ceylonica, 221
- Appropriate control period, 053
- Araneus diadematus, 090
- Argyroneta aquatica, 151
- Aril breakdown, 013
- Arjuna, 071
- Aromatic treatments, 336
- Articular cartilage, 303
- Artificial ageing, 223
 diet, 233, 062
 diet rearing, 073
- Artocarpus heterophyllus, 047
- Ascorbic acid, 071
- Automatic silk reeling, 229
- Automation, 197
- Autophagy, 060, 072
- Autophagy-related protein 5, 072
- Autotetraploid mulberry, 037
- Autumn tussah, 110
- B**-galactosidase, 013
- B-fructofuranosidase, 065
- Bmori nucleopolyhedrovirus 175
- Bacillus thuringiensis, 174
- Bacteria, 069, 172
- Bacterial artificial chromosome, 127
 community, 097
 isolates, 167
- Bacteriostatic activity, 051
- Bacterium, 075
- Bacteroidetes, 031, 062
- Baculovirus, 149, 182
 expression, 140
- Baculovirus expressic system, 191
 encoded protein, 148
- Basic fibroblast growth factor, 272
- Batocera rufomaculata, 201
- Beauveria bessiene, 181
- Beef cattle, 203
- Behavior response, 116
- Bending length, 209
- Benzofuran, 018
- Benzylaminopurine, 036
- Beta carotene, 275
- Bidensovirus, 180
- Binding free energy, 121

Subject Index

- Bio-chemical composition, 091
- Bioactive components, 309
- Bioactivity, 291, 293
- Bioadsorption, 307
- Bioartificial liver, 271
- Bioavailability, 318
- Biocompatibility, 293
- Bioinformatics analysis, 166
- Biological activities, 290
 - characteristic, 044
 - process, 183
- Biologically, 002
- Biologics, 066
- Biology, 088
- Biomass production, 019
- Biomaterial, 312
- Biomimetic designs, 095
- Bionomics, 201
- Biopolymer, 280
- Biosorbent, 277
- Biosynthesis, 333
- Biosynthetic pathway, 086
- Bivoltine, 108, 204
 - hybrids, 235
 - raw silk fabric, 209
 - silkworm races, 088
- Black mulberry fruit, 314
- Blanching, 321
- Blastokinesis, 104
- Blood, 073
 - lipid levels, 270
- Bmabcc2, 174
- BmAGO2 protein, 170
- Bmbdv diseases, 180
- Bmdhodh, 100
- Bmesr 16, 098
- Bmfib-h, 060
- Bmhmg gene, 133
- Bmiao1, 087
- Bmn cell line, 164
- Bmnpv, 122, 171, 183
- Bmnpv-based, 132
- Bmok gene, 156
- Bmp5cr1, 067
- Bmphyhd1, 125
- Bmser-2, 144
- Body remodelling, 141
- Body weight, 193
- Bombykal, 121
- Bombykol, 063
- Bombyx cysteine protease, 131
- Bombyx mandarina, 085
 - menderine, 129
- Bombyx mori*, 060, 065, 070, 072, 077, 085, 093, 094, 101, 109, 111,

- 122,157, 166, 171,
177, 186
- Bidensovirus, 154, 78
genome editing, 164
embryos, 194
- Bombyx mori* l, 193
nucleopolyhedrovirus, 134,
268
silk fiber, 286
proteases, 131
- Bone marrow, 327
regeneration, 257, 91
tissue engineering, 260
- Borrowed character, 332
- Botryodiplodia theobromae,
048
- Boundary painting, 222
- Brain application, 296
- Brass foggers, 054
- Break even point (bep), 229
- Breeding, 023
resource materials, 108
- Bridging of gaps, 242
- Bromodeoxyuridine, 311
- Brown quail-like mark, 147
spot disease, 049
- Cadmium, 001
- Caffeic acid derivative, 051
- Calibration, 007
- Calmodulin-like protein gene
cm l27- 128
- Cambodia sang, 027
- Camp response, 064
- Cancer vaccines, 328
- Capping agent, 288
- Carrier, 290
- Cartilage regeneration, 257
- Caspase, 249
- Catalysis, 335
- Caterpillar, 041
- Cationic, 339
- Cause, 244
- Cell activation, 325
apoptosis, 101
cycle arrest, 100
dissociation, 082
encapsulation, 252
proliferation, 077, 100
wall structure, 013
- Change in main component,
282
- Chawki rearing centres, 235
- Chemical composition, 006
control, 053
mutagenesis, 037
treatment, 209
- Chicken interferon- γ , 191
- Chilling treatment, 016

Subject Index

- Chitinase gene, 149
- Chitosan, 219
- Chlorantraniliprole, 078
- Chlorogenic acid, 009
- Chlorophyll fluorescence, 028
- Chlorpromazine, 304
- Chromatography, 314
- Chromosome doubling, 037
- Chromosome-derived, 105
- Chronic wounds, 263
- Circular rna, 268
 rna (circrna), 166
- Classification, 075
- Clc 03, 109 , 004, 109
- Climate, 236
- Climatic conditions, 108
- Cluster analysis, 027, 129
- Co-immunoprecipitation, 170
- Cocoon, 208, 226
 silk export, 231
 flowers, 295
 layer, 211
 parameters, 168
 production, 110
 silk industry, 232
 yield, 169
 filament, 213
- Codon usage pattern, 149
- Collagen, 252
- Colloidal stability, 267
- Color, 310
 fastness, 339
- Coloration, 335
- Colour fixative, 316
- Comprehensive utilization,
 315
- Combined toxicity, 078
- Commercial, 173
 crops, 243
- Comparative transcriptome,
 253
- Composition change, 222
- Compost, 005
- Compound fruit wine, 316
- Computational simulation,
 213
- Conditional value method,
 313
- Conformational change, 240
- Conjugated bmp-2 peptide,
 285
- Content of fatty acids, 281
- Continuous backcross, 103
- Controlled release, 272, 299
- Conventional air filters, 292
- Copigmentation effects, 014
- Cordyceps militaris
percentage, 266, 331

- Cornea endothelial cells, 275
- Correlation, 091, 110
- Correlation analysis, 008
- Cost subvention, 235
- Crease recovery angle, 209
- Crimp, 209
- Crispr, 112
- Crispr/cas9, 060, 122, 125-126, 137
system, 164
mediated, 105
- Crispr/cpf1 system, 164
- Crop of cocoon, 005
- Cross-linking, 219
- Crude fiber, 008
- Cryopreservation, 194
- Cryoprotectant, 267
- Crystalline sequence, 215
- Cultivar identification, 038
- Culture condition, 044
- Curcumin, 318
- Cuticle thickness, 030
- Cuttage methods, 036
- Cutting plantlet, 025
preparation
machine, 340
- Cyanobacteria, 062
- Cysteine proteinase
inhibitors, 160
- Cytochrome p450, 152, 165
- Cytokine, 249
- Cytoplasmic polyhedrosis
virus, 192
- Da 10 in field, 006
- Day-3 silkworm larvae, 144
- Dechorionated eggs, 194
- Defatted silkworm pupae
meal, 302
- Degradation enzyme, 013
- Degumming machine, 220
- Densovirus type 1, 179
- Derivative, 007
- Derived growth factor, 119
- Detoxification enzyme, 120
- Developing emphasis, 232
- Development pattern, 283
- Diabetes mellitus, 317
- Diabetic complications, 157
- Different expression genes,
158
- Differential gene expression,
077
- Differentially expressed
genes, 147
- Diradius vandykei, 221
- Disease free layings, 235
- Dispersion stabilizer, 267
- Diversity of intestinal
bacteria, 135,

- Environmental pollution assessment, 056
 reasons, 005
 stress, 128
- Enzymatic activity, 153
 hydrolysispercentage, 284
- Enzyme activity, 124
- Epitope, 178
- Epoxy, 207
- Eri cocoon, 220
- Eri silkworms, 091
- Ests, 102
- Ethanol extract, 051
- Ethanol extract of mulberry, 324
- Ethyl carbamate, 022
- Excellent quality, 114
- Exfoliation, 214
- Exogenous proteins, 159
- Expert structure, 241
- Expression analysis, 152
 characteristic, 133, 143
- Expression function, 163
 phase, 177
 profile, 065, 101, 268
 stability, 115
- Extraction, 206
- F 1 hybrid silkworm eggs, 198
- Facile incorporation, 326
- FAK signalling, 329
- Fastness properties, 205, 210
- Fat body, 082, 141, 165
- Fc- mediated effector function, 248
- Fecundity, pupa, 193
- Feed, 074
- Feeding, 080
- Fenvelerate, 165
- Fermentation, 278, 279, 316
 treatment, 074
- Fermented mulberry leaf feed, 281
- Ferritin, 175
- Fertilizer production, 006
 treatment, 003
- Fib h, 068
- Fib l, 068
- Fibroin, 306
 protein, 320
 synthesis, 068
- Field preparation, 005
- Filament length, 204
- Firmicutes, 031
- Fish freshness, 287
- Flacherie, 180
- Flagelliform spider silk, 081
- Flame retardancy, 216

Subject Index

- Flavonols, 254
- Fluorescent cocoon, 211
- Fluorine, 293
- Foam pad, 058
- Folate metabolism, 117
- Foliar constituents, 196
- Follicular epithelial cells, 125
- Food material, 026, 330
- Food safety; toxicology, 334
- Foot- and -mouth disease virus vp1, 182
- Foreign protein, 176
- Formation rate, 331
- Frap, 009
- Freeze-drying, 267, 303
- Front line demonstration, 238
- Fruit body percentage cordycepin, 266
- Fruit mulberry planting, 006
- Ftir, 217, 286
- Ftir spectroscopy, 240
- Full-length cdna sequence, 115
- Functional active ingredient, 259
 constraint, 146
- Fungi, 172
- Fusarium oxysporum, 043
 solani fsp mori, 018
- Fusion expression, 153
- Gal4/uas, 137
- Gallic acid, 300
- Galling insects, 087
- Ganglioside gm2, 192
- Gastric cancer cell, 284
- Gemmatimonadetes, 031
- Gene and promoter cloning, 034
 cloning, 143, 153, 185
 identification, 152
 ontology, 118
 transcription level, 165
- Genetic analysis, 038
 diversity, 026, 129, 330
 map, 106
 variability, 048
- Genome, 123
 editing, 126
- Genotoxicity, 319
- Genotyping, 038
- Geo spatial tools, 239
- Geoportal, 239
- Germplasm material, 109
- Gibson assembly, 132
- Girdling, 047
- Glass transition, 217, 223
- Gloverin, 092
- Glucose spike, 069

- tolerance, 264
- 6-phosphate dehydrogenase, 185
- Glutathione, 022, 071
- Glyceraldehyde-3-phosphate dehydrogenase (gapdh), 093
- Glycoprotein, 179
- Glyoxal, 219
- Gnotobiotic animals, 184
- Gpvgx motif, 081
- Grafted mulberry, 028
- Gram-negative bacteria, 092
- Greenwood cuttings, 025
- Grinding, 203
- Growth index, 096
- Growth performance, 281
- Gustatory senses, 085
- Gut microbiota, 062
- protozoa, 010
- Gutmicrobiota, 089
- G/yphodes pyioetis, 152
- H tarsalis, 221
- Hand-woven suksuk designed fabric, 226
- Haploembia solieri, 221
- Hatchability, 198
- Hatching, 173
- Hatching enzyme, 143
- Health food, 315
- property, 279
- Healthiness, 114
- Heat aging, 208
- shock protein gene, 116
- Heat stress, 266
- Heavy metal, 001, 033
- content, 294
- Hedgehog/parathyroid signaling, 079
- Hemocompatibility, 319
- Hemolymph of silkworm, 083
- Hepatocytes, 271
- Heterocyclic compounds, 308
- Heterogametic sex, 112
- Heterologous protein, 136
- Hexavalent chromium (cr(vi)), 277, 307
- Hierarchical architecture, 260
- High pressure, 310
- productivity, 103
- temperature, 117
- temperature stress, 116
- throughput sequencing, 135
- yield, 037
- throughput - sequencing, 166

Subject Index

- Histopathology, 094
- Homologous organ, 131
- Homozygote, 111
- Honeysuckle extract, 333
- Horizontal gene transfer, 149
- Horseradish peroxidase-mediated crosslinking, 303
- Host age, 202
 - plant selection, 085
 - plants, 071, 084
 - size, 202
 - tissue response, 319
- Hot air drying, 321
- Hplc fingerprinting, 190
 - ms/ms, 009
- Hthp degumming, 214
- Human adipose-derived stem cells, 303
 - platelet, 119
 - platelet lysate, 299
- Humid regions, 030
- Humidifiers, 054
- Humidity, 236
- Husang 32, 037
- Huzhou, 244
- Hybrid combination, 109
 - combinations, 008
 - mulberry sha 2xlun
 - 109, 029
- Hybridization, 037
- Hybrids, 193
- Hydrogel, 252, 312
- Hydrogen bonding, 240
- Hydrolytic activity, 065
- Hydroxyecdysone, 148
- Hypercholesterolemia, 270
- Hyperglycemia, 069
- Hypoglycemic effect, 264
 - Ibn battuta, 237
- Identification, 052, 225
- Illustrations of silkworm, 222
- Imidacloprid, 078
- Imidacloprid, 083
- Iminosugars, 024
- Immune response, 064
- Immunity, 130, 172, 188
- Immuno fluorescence, 099
- Impact assessment, 238
- Improved machines, 340
- In vitro antioxidant activity,
 - 282
 - culture, 133
 - digestibility, 302
 - model, 079
- Inbred strains, 193
- Indian sericulture, 234
- Indole-3 -acetaldoxime (iaox),
 - 087

- acetaldehyde, 087
- Inducible substans, 036
- Industrial characteristics, 283
- Industry orientation, 232
- Infected plants, 042
- Infection, 172
rate, 331
- Infectivity, 192
- Inflammation, 249
- Influence, 278
- Inhibitory activity, 325
- Initial blooming stage, 053
- Innate immunity, 055, 158
- Inorganic ion transport, 161
- Insect, 171
- Insect larval-pupal, 131
- Insecticide resistance, 152
- Insecticides, 046
- Instar larvae, 099
- Intelligent film, 287
- Inter provincial differences,
231
- Interaction, 175
mechanisms, 014
- Internal reference gene, 115
- Invertase, 065
- Ion absorption, 028
- Isolation, 256
- Isoquercitrin, 009
- Issr, 102
- Istp, 243
- l-alanine (l- or
t-poly a), 090
- Jack fruit tree, 047
- Jialing 16, 027
- L-ascorbic acid, 247
- Lactic acid bacteria, 184,
278-279
- Lactobacillus ptenterum, 282
- Lambda-cyhalothrin, 078
- Large size design, 337
- Larval parameters, 167
- Lavender, 336
- Leaf color chart, 003
- Leaf biochemical contents,
019
position, 029
quality, 003
thickness, 030
webber, 041
- Leflunomide, 100
- Lepidopteran, 102
model, 112
- Lepidopterous, 193
- Life history, 245
- Ligament and tendon
regeneration, 257
derived stem cells, 269

- infection, 130
lipid, 301
Microencapsulated, 336
Microgli, 325
Micropropagation, 023
Microrna, 145, 150, 268
Microscale resolution, 002
Micro RNA-14, 137
Microscopy, 030
Microspheres, 272
Microwave curing, 219
Middle silk gland, 136
Midgut, 070, 097, 165, 268
 columnar, 180
 contents, 097
Migration, 329
Mineralization, 260, 285
Miseq sequencing, 031
Mitochondria, 070
Mitochondrial co i gene, 129
 dysfunction, 022
Mitogenome, 134
Mixed infection, 167-168
 sperm fertilization,
 111
Mkcs1, 016
Mmpip2, 034
Mmsk gene, 035
Model system, 258
Moisture, protein, 008
Molecular docking, 014, 121
Molecular dynamics, 121
 function, 183
 genetic, 102
 mechanism, 059
Molybdenum enzyme, 126
Monoclonal antibodies, 178
 antibody, 170, 248
Moraceae, 023
Moracin, 018
Mordanting, 206
Mordants, 210
Mori cortex, 322
 folium, 322
 fructus, 322
 larvae, 179
 ramulus, 322
Morus, 033, 254
 alba, 015, 040, 046
Motif, 166
Msod1, 016
Mt-rich cytoplasm, 107
Muscardine silkworm, 190
Muga cocoon, 228
 garden, 228
 silk, 228
Mulberry, 001, 043, 045, 048,
 080

Subject Index

- anthocyanins, 014
bark, 306
base fishpond
ecosystems, 313
branch feed, 203
branches, 301
brown spot disease,
044
buds, 008
crinkle leaf virus
(mclv), 050
cultivation percent,
242, 340
cuttings, 005
extract, 287
farms, 201
fruit, 021, 259, 273,
282, 306, 316, 332
fruit hypertrophic
sclerote disease, 053
fruit sclerotiniose
pathogen, 052
juice, 279
leaf, 017, 024, 076,
256, 309, 325
leaf crude protein,
294
leaf vegetable, 321
seed, 264
stem, 306
tree, 012
varieties, 012, 023,
294
waste, 306
xiangsang 6, 029
dyke and fish-pond,
244
- Multiend silk reeling, 229
Multiple reaction monitoring,
024
Multiple strains, 138
Mul- miR3954, 128
Myeloid- 2
Myocardial infarction, 255
N-glycosylation 248
N clavipes spider, 081
Nabard, 243
Naci stress, 025
treatment, 025
Naked silkworm, 150
Nano zinc, 080
Nanofiber fabric, 260
Nanofibers, 263
Nanofibrous matrices, 305
Nanohydroxyapatite, 291
Nanoparticles, 318
Native predators, 045
Natural dyeing, 206

- Natural fiber composites, 207
- Navinya, 043
- Near infrared spectroscopy,
195
- Neem leaf powder, 210
- Nephila clavipes, 159
- Nephila pilipes, 224
- Nerve injury, 290
- Neuropeptide, 156
- New variety, 114
vitamin e, 274
- Next-generation sequencing,
134
- Nf-b, 297
- Nih3t3 cells, 297
- Nine strains, 193
- Ningxiang crossbred pig, 281
- Nitric oxide, 096
- Nitrite, 074
- Non- broken filament-
segment, 213
- Non-mulberry silk, 271
- Non-mulberry silk protein
sericin, 305
- Nongsang 14- 012, 037
- Nosema bombycis, 142, 185
bombycis cq1, 139
- Npv, 123
- Ns 1 protein, 178
- Nsd-1 and nid-1, 179
- Nuclei acid spot
hybridization (nash), 050
- Nucleopolyhedrovirus, 177,
187, 189
- Nucleotide transport, 189
- Nutrient, 026, 330
content, 203
index, 004
metabolism, 062
- Nutrition biotechnology, 233
- Nutritional components, 008
- Oak tasar culture, 238
- Occurrence, 049
- Odour compound, 298
- Oleaginous fungi, 301
- Olfactory adaptation, 146
- Oligotoma nigra, 221
- Open source gis, 239
- Optical losses, 218
planar waveguides, 218
- Optimization, 309
- Orange fluorescence, 113
- Organic acids, 015
- Organism in toxicological,
056
- Original character, 332
- Orthogonal experiment, 273
- Oscillation, 246

Subject Index

- Osmoregulation, 019
- Osmotic regulative, 025
- Osmotic regulative substance, 025
- Osteoblast differentiation, 291
- Osteogenesis, 079
- Ovary development, 082
- Oxidative burden, 084
stress, 011, 022, 117
- Palisade tissue thickness, 030
- Palmitic acid, 011
- Paracoccus marginatus, 045
- Pararhagadochir trinitatis, 221
- Parasitism, 202
- Partitioning factor, 302
- Pasteurization, 278
- Path analysis, 110
- Pathogen challenge, 055
- Pathogenesis, 261
- Pathogenicity, 048
- Pathological comparation, 139
- Patterning, 276
- Pca, 138
- Pcdna30, 144
- Pcl, 319
- Pcr (qrt-pcr), 032
- Pebrine disease, 198
- Pectinesterase, 013
- Penetrant, 211
- Pentose phosphate pathway, 142
- Percentage adenosine, 266
vacuum microwave dryingpercentage, 259
- Peritrophin (cpap), 099
- Permeability of water, 211
- Permeation uniformity, 211
- Persistent toxicity, 040, 046
- Pesticide residue, 083
tolerance, 165
- Ph sensitivity, 287
- Phaseolus vulgaris, 040, 046
- Phenolics, 310
- Pheromone binding protein, 121
gland, 063
- Philosamia cynthia cynthiam, 143
ricini, 135
- Phloem-mobile, 042
- Phloeospora mecutens, 044
- Phosphate- solubilizing, 075
- Phoxim, 117, 120
- Phyhd1, 125

Subject Index

- Processing characteristics
percentage, 294
- Processing technology, 321
- Proinflammatory cytokine,
325
- Proliferation centers, 107
- Prolinylflavonols, 067
- Prolyl oligopeptidase, 124
- Propolis residue, 051
- Protease inhibitor, 181
- Proteasome, 060
- Protein 182
fibres, 206
kinase b, 323
nutrition, 294
- Proteobacteria, 031, 062
- Proton induced x-ray
emission (pixe), 084
- Protoplast mutagenesis
percentage, 266
- Prp5, 136
- Pseudomonas, 031
- Pt value, 040
- Puffing, 203
- Pulp, 013
- Pulsed light, 278
- Pupae discrimination, 113
- Pupal stage, 107, 118
- Pura of leaf webber, 041
- Purification, 160, 256
- Purple quail-like, 157
- Putative single tagged site
(sts), 127
- Pva, 287
- Qiaojia, polyploidy, 037
- Qrt-pcr, 142, 185
- Qtls, 102
- Quality, 190
- Quantitative 1h-nmr, 015
proteomics, 183
- Quercetin, 325
- Rad-seq, 106
- Ralstonia solanacearum, 051
- Random frog method, 007
- Rapd, 048, 102
- Raw material proportion, 316
- Raw silk, 226
silk production, 235
- Rdna-its, 052
- Reactive oxygen species (ros),
028
- Real-time pcr, 186
- Rearing house, 227
parameters, 196
performance, 091
shed, 054
- Recombinant expression, 119
- Recombinant spider silk
protein, 319
- Recycling, 225

- Red cabbage, 206
 mulberry (morus -
 alba) fruit, 324
- Redox active metals, 084
- Reduced graphene oxide, 288
- Redv, 326
- Reelabilitytasar, 204
- Refine processing, 315
- Regenerated silk fibroin, 289
- Regeneration ,269
- Regenerative medicine, 299
- Regional distribution, 232
- Regression analysis, 110
- Reinecke salt colorimetric
method, 029
- Reproductive performance,
 202
- Resorcinol, 010
- Response surface method,
 036
- Reticulitermes, 010
- Return on investment (roi),
 229
- Revealed comparative
advantage, 231
- Reyes salt colorimetry, 020
- Rflp, 102
- Rgr (Riboxyme gRNA
Ribozyme) structure, 164
- Rhe model, 304
- Rhizosphere soil, 001
- Rhynchaenus maculosus, 245
- Rinses and autoclaving, 061
- Rmsecv, 007
- Rna, 066
 seq, 138
 sequencing, 145, 150
- Rnai, 154
- Roadside facilities, 237
- Root rot disease, 039
 rot, 043
- Rosellinia necatrix, 018
- Rp-hplc, 029
- Rt-pcr, 155
- Ruminal degradability, 203
- Rutin, 009
- S-transferase sigma, 059
- Saccharides, 015
- Salt stress, 028
 tolerance of plant, 025
 leaching, 303
- Samia cynthia ricini, 196
- Samia ricini, 173
- Sarbaza, 237
- Sasamayu cocoons, 067
- Saturniid silkworm, 187
- Saussurembia calypso, 221
- Scaffold, 275

Subject Index

- Scanning electron microscope, 017, 286
- Sdf-1 releasing silk scaffold, 269
- Security service, 237
- Seed cocoons, 193
germination, 096
- Selection, 108
- Sensilla, 085
- Sephadex gel chromatography, 284
- Sequencing, 052
- Sericin, 263, 304, 306, 312
alginate, 307
protein, 320
- Serine protease homolog, 188
- Serpin, 130
- Service system, 237
value, 313
- Sex chromosome systems, 112
discrimination, 195
pheromone - biosynthesis, 063
separation methods, 112
limited cocoon color, 109
- Shelf-life, 299
- Shennongjia, 027
- Shorea robusta, protein, 071
- Shotgun mass spectrometry, 133
- Silk, 216, 225, 335
archaeology, 223
bionanotechnology, 233
extract, 304
fabric, 208, 339
fbres, 162, 306
fibers, 207- 208
fibroin, 217-218, 249, 252, 257, 272, 275, 285, 293, 297, 303, 311, 326, 327
fibroin film, 251
fibroin protein, 159
gland, 065, 119-120, 145, 150, 163, 323
gland bioreactor, 136
hydrogels, 296
protein, 099, 295, 320
protein synthesis, 323
reeling, 213
seed, 193
sericin, 277, 300
yield, 138, 145

- weaving, 222
welling, 209
Silkworm, 055, 069, 080, 088,
146, 158, 160, 191
cocoon cutting, 197
egg production, 197
excrement, 074, 075
larvae to pupa, 148
model organism
toxicity, 056
pupae, 113, 195, 295
pupa peptides, 298
pupa -
proteinpercentage, 284
pupal oil, 315
rearing, 168, 222, 338
variety, 331
variety for summer and
autumn rearing, 103
fungus symbiont, 331
Silver nanoparticles, 333
Similarity, 190
Simple sequence repeats, 038
Simulated digestion, 011
Sirna, 128
Siyu No.2 (silkworm), 114
Skeletal muscle regeneration,
257
Small open reading frames,
253
Snp, 102
marker, 106
Soalu, 041
Soap, 220
Socs6, 055
Soda, 220
Sodium nitroprusside, 096
Soil fertility monitoring, 007
fertility status, 004
fertility test, 005
taxonomy, 004
Sol-gel processes, 216
Solid-state fermentation, 301
Soluble sugar, 006, 008
Solution blow spinning, 289
Som, 007
Sophora flower bud, 225
Sorbitol, 157
Spad, 003
Spatial distribution, 245
Speckle sex-limited marking,
103
Sphingolipid metabolism
passway, 161
Spider, 290
dragline silk protein,
090, 162

Subject Index

- silk, 095, 215, 224
- Spidroin, 251
- Spidroin1, 162
- Spilosoma obliqua, 040
- Splicing factor, 136
- Splicing isoforms, 163
- Spodoptera litura, 046
- Sponge tissue thickness, 030
- Ssr, 048, 102
- Stabilization, 066
- Stable isotope, 208
- Starch tolerance, 264
- Stem cell nano-patch, 255
- Stenopsyche marmorata, 127
- Stiffness, 095, 252
- Stigma, 053
- Stress tolerance, 023
 - strain, 217
- Structure, 251
- Structure and activity, 160
- Subcellular localization, 177
- Sucrose, 273
 - induced, 069
- Sulfite oxidase, 126
- Surface appearance, 251
 - display, 182
- Surgical thread, 290
- Symptom, 050
 - of infestation, 041
- Synchronization of muga, 228
- Synergisms, 216
- Synonymous name, 332
- Synthesis of spider silk, 151
- Synthesizes silk proteins, 118
- Synthetic spider silk proteins, 061
- System characteristics, 244
- Tannins hcn, 196
- Tar-ivlp, 227
- Tarsal-less, 253
- Tasar culture, 243
 - sericulture, 239
- Taste evaluation, 008
- Tdf, 243
- Technology adoption gaps, 242
- Tendon, 290
- Terminalia tomentosa t, 071
- Test-crossing, 111
- Tetraploid mulberry variety, 037
- Texture, 273
- The code of temur, 237
- Thermosensitive, 300
- Thick tissues, 326
- Thickener, mordants, 205
- Thioflavin t, 240
- Three mulberry varieties, 025

- Thrips, 199
- Tick, 230
- Time-dose-mortality model,
189
- Tip portion, 047
- Tissue culture, 023
 engineering, 269,
 271, 275
 organization, 250
 of yu, 025
- Titanium dioxide, 293
- Titrateable acid, 021
- Toxic metals, 307
- Traceability, 332
- Track protection, 237
- Transcriptome, 060, 141, 146
 analysis, 158
- Transgenesis, 023
- Transgenic, 122, 154
 mulberry, 035
 silk, 251
 silkworm, 136, 248,
 312
- Transglutaminase, 273
- Treatment of diabetes, 261
- Triglycerides synthesis, 011
- Trivalent chromium, 307
- Trivoltine, 204
- Tropical tasar culture, 057
- Tub2, 032
- Tubulin, 093
- Tumor antigen, 328
- Tunable properties, 252
- Tussah breeding, 106
 cocoon, 212
 garden, 230
 silk fibroin, 260
 silkworm larva, 334
- Ubi4, 032
- Ultra filtrationpercentage,
284
- Ultrasound, 310
- Uric acid, 126
- Uv irradiation, 266
- V-1 mulberry variety, 003
- Vairimorpha necatrix bm, 139
- Vascular smooth muscle cell,
329
- Vascularization, 326
- Vector system serpin, 140
- Vegetable mulberry variety,
008
- Ventricular remodeling ,255
- Vessel diameter, 030
- Vigna radiata, 046
- Vigs, 035
- Viral genome, 187
- Virus overlay assay, 175

Subject Index

- Viscosity, 017
mulberry extract, 010
- Vitality, 103
of newly-hatched -
larva, 198
- Vitamin c, 008, 021
- Wall-materials, 014
- Wan feng xxia- hui, 103
- Warp sualkuchi, 337
- Water activity reducing
agent, 321
extraction, 309
relations, 019
temperature, 211
soluble silk sericin,
267
- Wavelength optimization,
007, 195
- Weather factors, 199
- Web sewn, 041
technology, 239
insertion device, 337
- Wet-electrospinning, 285
- White cocoon color, 109
- Whitefly, 199
- Wild silk moth, 057
- Wine, 310
- Wing disc of *bombyx mori*,
133
- Wing disc size, 077
- Wound dressing, 262-263
healer, 290
healing, 297, 305
- Y-minobutyric acid, 076
- Ye and green cocoon, 109
- Yellow cocoon, 109
- Yield components, 110
- Yki, 163
- Yorki, 077
- Young silkworm feeding
machine, 338
- Yuesang 11, 012
- Yunnan, 049
- Zenillia dolosa (tachinidae),
086