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Александр Липенский



**ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ НАУЧНОЕ УЧРЕЖДЕНИЕ  
«ЦЕНТРАЛЬНАЯ НАУЧНАЯ СЕЛЬСКОХОЗЯЙСТВЕННАЯ БИБЛИОТЕКА»**

### China National Knowledge Infrastructure




- Ведущее национальное научно-исследовательское и информационно-издательское учреждение Китая
- Ключевой проект национальной информационной структуры Китая
- В 1996 г. проект инициирован Университетом Цинхуа и Цинхуа Тунфан Холдинг Групп
- Поддерживается правительством КНР, ЦК КПК, Министерством образования, Министерством Науки и Технологий, Главным управлением по печати и публикациям и Национальным управлением по авторскому праву.
- Продвижение крупномасштабной оцифровки знаний Китая и создание ресурсов и платформы для глобального распространения контента и дополнительных сервисов
- Китайские цифровые библиотечные технологии собственной разработки и онлайн-платформа обмена ресурсами CNKI на передовом международном уровне
- Полномасштабная система информационных ресурсов КНР “China Integrated Knowledge Resources Database”

 **15,016,724**  
Abstracts

 **262**  
English Journals

 **164**  
Translated Journals

 **930**  
English Books

## Resources

**11,916,709** articles  
Journal article

**420,377** articles  
Doctoral dissertation

**3,251,728** articles  
Master's thesis

**1,232,104** articles  
Conference paper

**66,735** chapters  
Book chapter

**988,945** items  
Bilingual Glossary

**1,223,539** articles  
Yearbook entry

Включает 1,5 миллиона полнотекстовых статей и 15+ миллионов аннотаций на английском языке по различным дисциплинам и охватывает журналы, материалы конференций, электронные книги, ежегодники, докторские и магистерские диссертации и т. д.

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Petrov

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CONTENT TYPE

- Journal article (287)
- Conference paper (66)
- Doctoral dissertation (89)
- Master's thesis (83)

DISCIPLINES

- Mathematics/ Physics/ Mechanics/ Astronomy
- Chemistry/ Metallurgy/ Environment/

525 results for "Petrov"

Order by Relevance

Journal article Abstract Only

1. On Meshless Natural Neighbour Petrov-Galerkin Method for Stable Heat Conduction Problem

Journal of Hunan University of Technology , Issue06,2007

Li Qinghua, Chen Shenshen, YuYang Qin, Ou Manli(Hunan University of Technology,Zhuzhou Hunan 412008,China)

▶ Abstract Full text (in Chinese)

Journal article Abstract Only


2. A Meshless Local Petrov-Galerkin Method for the Solution of Nonlinear Boundary Value Problems

Journal of Hunan University(Natural Sciences) , Issue02,2007

HU De-an1, LONG Shu-yao2, HAN Xu1(1.College of Mechanical and Automotive Engineering, State Key Laboratory of Advanced Design and Manufactur...


▶ Abstract Full text (in Chinese)

Journal article Abstract Only

Chen Shenshen X  [Advanced Search](#)



0 results for "Chen Shenshen"

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PUBLICATION YEAR



1901 ~ 2023

wine waste

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 Abstract only Full text

## CONTENT TYPE

 Journal article (9) Conference paper (4) Master's thesis (7)

## DISCIPLINES

 Mathematics/ Physics/ Mechanics/  
Astronomy

20 results for "wine waste"

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*Conference paper*    *No access*

1. Recovery of Tartaric Acid and Added-Value Phenolics from Wine Wastes Towards an Integrated Treatment and Commercial Valoris...

Proceedings of 2015 5th International Conference on Environment Science and Engineering, 2015

Alexandra Moschona;Maria G.Ziagova;Mahendra Aryal;Aliko Iliadou;Maria Liakopoulou-Kyriakides;Dimitrios A.Kyriakidis;Department of Chemical Engine...

▶ Abstract



PDF

*Journal article*    *Abstract Only*

2. Analysis of Nutrition and Extraction of Pectin of Wine Waste

Journal of Hebei Normal University of Science &amp; Technology ,Issue04,2008

ZHANG Gui-rong,CAI Ai-jun,LIU Yan-fang,DU Jin-you(Dept of Life Science,Hebei Normal University of Science &amp; Technology,Qinhuangdao Hebei,06660...

▶ Abstract



Full text (in Chinese)

*Journal article*    *Abstract Only*

AM fungi

X



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Abstract only

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CONTENT TYPE

Journal article (1,111)

Conference paper (106)

Doctoral dissertation (143)

Master's thesis (508)

DISCIPLINES

Mathematics/ Physics/ Mechanics/

1,868 results for "AM fungi"

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Journal article Abstract Only

1. Inoculation of AM Fungi Improves the Cold Resistance Physiology of Longan Seedings

Journal of Southwest University(Natural Science Edition) ,Issue02,2023

XIE Xueman;WANG Kaiyuan;YU Lan;HAN Gang;YANG Zhiyou;LIN Jun;SONG Minghua;LUO Xuefeng;YANG Xiaohong;College of Horticulture and Land...

▶ Abstract



Full text (in Chinese)

Journal article Abstract Only

2. Responses of AM fungi diversity in Camellia oleifera rhizosphere to season, soil depth and cultivar types

Journal of Central South University of Forestry & Technology ,Issue01,2023

HUANG Yuxuan;LI Xiaoyue;ZHANG Linping;LIN Yulan;WU Fei;ZHANG Yang;HU Dongnan;

▶ Abstract



Full text (in Chinese)

Journal article Abstract Only

KH<sub>2</sub>PO<sub>4</sub>

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 7,993 results for "KH<sub>2</sub>PO<sub>4</sub>"

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## AVAILABILITY

 Abstract only

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## CONTENT TYPE

 Journal article (4,734)

 Conference paper (210)

 Doctoral dissertation (423)

 Master's thesis (2,626)

## DISCIPLINES

 Mathematics/ Physics/ Mechanics/

*Journal article*   *Abstract Only*

1. Purification of KH<sub>2</sub>PO<sub>4</sub> as a phosphate glass raw material with high performances

Journal of Huazhong University of Science and Technology(Nature Science Edition) ,Issue05,2007

Liu Changlin Zhang Lina Bai Liwei Xue Dingjiang(Department of Chemistry,Huazhong University of Science and Technology,Wuhan 430074,China)

▶ Abstract



Full text (in Chinese)

*Journal article*   *Abstract Only*

2. Application of CaO+KH<sub>2</sub>PO<sub>4</sub> in treatment of high fluorine groundwater

Water Resources Protection ,Issue04,2007

YIN Guo-xun1,ZHENG Ming-kai1,ZHU Li-xia2 (1.Institute of Resources &amp; Environment,He'nan Polytechnic University,Jiaozuo 454000,China;2.Departme...

▶ Abstract



Full text (in Chinese)

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KH<sub>2</sub>PO<sub>4</sub>

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YIN Guo-xun1,ZHENG Ming-kai1,ZHU Li-xia2 (1.Institute of Resources & Environment,He'nan Polytechnic University,Jiaoz...

▶ Abstract



Full text (in Chinese)

*Journal article*   *Abstract Only*

### 3. Effect of KH<sub>2</sub>PO<sub>4</sub> on Sugar Accumulation and Sucrose-metabolizing Related Enzyme Activities in Nect...

Acta Agriculturae Boreali-Sinica ,IssueS2,2007

## AVAILABILITY

- Abstract only
- Full text

## CONTENT TYPE

- Journal article (4,734)
- Conference paper (210)
- Doctoral dissertation (423)
- Master's thesis (2,626)

## DISCIPLINES

- Mathematics/ Physics/  
Mechanics/ Astronomy
- Chemistry/ Metallurgy/  
Environment/ Mine Industry
- Architecture/ Energy/  
Traffic/ Electromechanics,  
etc
- Agriculture
- Medicine & Public Health

*Conference paper*      *No access*

### 7961. A new crystal with nonlinear optical properties:CsV\_2O\_5

中国化学会第五届全国结构化学学术会议论文摘要集, 2007

Jianguo Pan~\* Gongjun Zhang Xiaoli Liu Faculty of Materials Science & Chemical Engineering,Ningbo University,Ningbo,Z...

► Abstract  PDF

*Conference paper*      *Abstract Only*

### 7962. Determination of Cyclic-nucleotide in Chinese Jujube by HPLC

Abstracts of the 5th Annual Meeting of Chinese Institute of Food Science and Technology(CIFST) & the 4th East-West Foo...

Wang Xianghong Sang Yaxin Cui Tong Liu Mengjun Wang Shuo (1Food Science Department,Agriculture University ofHebe...

▼ Abstract  Full text (in Chinese)

In order to analyse cyclic-nucleotide in jujube,high-performance liquid chromatographic methods was applied.Chromatographic condition?reversed phase column(4.6mm×200mm)filled with 5µm HYPERSIR C18 BDS as the solid phase?mobile phase was 20 mmol/L KH<sub>2</sub>PO<sub>4</sub>:CH<sub>3</sub>OH (90:10,V/V);flow rate was 0.6 mL/min and at room  
[More>>](#)

*Conference paper*      *Abstract Only*

### 7963. Effect of Nutritional Conditions on Fusaric Acid Production of Cucumber Fusarium wilt Pathogen

中国植病、菌物学会杭州联合年会论文集, 2008

YAO Yan-ping WANG Jian-ming ZHANG Zuo-gang (College of Agriculture,Shanxi Agricultural University,Taigu Shanxi 0308...

▼ Abstract  Full text (in Chinese)

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57 results for "Pinus sibirica"

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#### AVAILABILITY

 Abstract only

 Full text

#### CONTENT TYPE

 Journal article (43)

 Conference paper (1)

 Doctoral dissertation (2)

 Master's thesis (11)

#### DISCIPLINES

 Mathematics/ Physics/ Mechanics/

*Journal article* *No access*

1. Genetic variation and selection of introduced provenances of Siberian Pine(*Pinus sibirica*) in frigid regions of the Greater Xing'an R...  
林业研究(英文版) ,Issue03,2014

Xiyang Zhao;Cheng Wang;Shuchun Li;Wei Hou;Shiqing Zhang;Guijie Han;Deng Pan;Ping Wang;Yufei Cheng;Guifeng Liu;State Key Laboratory of Tree ...

[▶ Abstract](#)  PDF

*Journal article* *No access*

2. Study on the physiological indices of *Pinus sibirica* and *Pinus koraiensis* seedlings under cold stress  
林业研究(英文版) ,Issue04,2019

Fang Wang;Deyang Liang;Xiaona Pei;Qinhui Zhang;Peng Zhang;Jianqiu Zhang;Zhimin Lu;Yuchun Yang;Guifeng Liu;Xiyang Zhao;State Key Laboratory ...

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## DISCIPLINES

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Environment/ Mine Industry*Conference paper* *No access*1. Climate Risk and Climate Analogies in Hungarian **Viticulture**

Proceedings of 2012 International Conference on Future Environment and Energy, 2012

Károly Szenteleki 1,Levente Horváth 2 and Márta Ladányi 1 1 Corvinus University of Budapest,H-1118 Budapest,Villányi út...

▶ Abstract



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*Conference paper* *No access*2. Repetitive movements of upper limbs in **viticulture**:set up

Proceedings of 17th World Congress on Ergonomics, 2009

E.álvarez-Casado,Centre Específic de Recerca per a la millora i In

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*Conference paper* *No access*3. An Environment Modified **Viticulture** System for Spring G

The Second Asian Horticultural Congress Program&amp;Abstracts, 201

M.T.Lu;M.C.Lin;M.H.Liu;J.Z.Chen;Crop Science Division,Taiwan Ag

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429 results for "winemaking"

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## CONTENT TYPE

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北京周报(英文版),Issue20,2016

Palden Nyima;

▶ Abstract



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*Conference paper* *No access*2. **New Trends in Non-Saccharomyces(Schizosaccharomyces and Lachancea)Use fo**

Conference Abstract Book of BIT's 8th Annual World DNA and Genome Day-2017——BIT's 2nd

Santiago Benito Saez;Polytechnic University of Madrid Spain;

▶ Abstract



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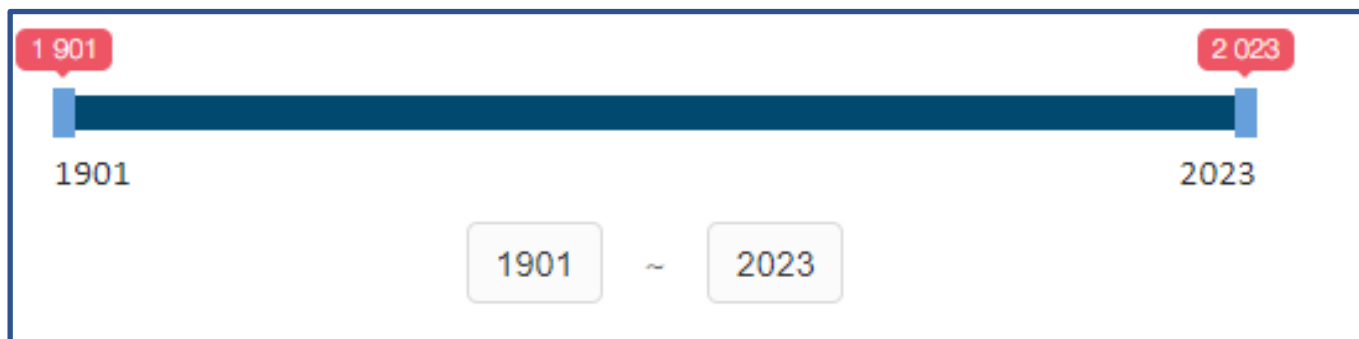
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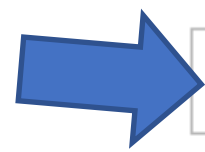
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## CONTENT TYPE

 Journal article (11,916,709) Conference paper (1,232,104) Doctoral dissertation (420,377) Master's thesis (3,251,728) Book chapter (66,735)[View more >>](#)*Journal article*   *Abstract Only*

## 1. Application and prospect analysis of artificial intelligence in grape and wine industry

Sino-Overseas Grapevine &amp; Wine , Issue05,2020

LIU Xunju;ZHENG Zhixin;JIU Songtao;XU Yan;ZHANG Caixi;School of Agriculture and Biology, Shanghai Jiao Tong University;UM-SJTU Joint Institute, ...

▶ Abstract



Full text (in Chinese)

*Journal article*   *Abstract Only*

## 2. Study on Climatic Zoning for Wine-grape Growing in Huabei Regions

Acta Horticulturae Sinica , Issue06,2001

Luo Guoguang, Wu Xiaoyun, and Leng Ping (Department of Fruit sciences, China Agricultural University, Beijing 100094)

▶ Abstract



Full text (in Chinese)

*Doctoral dissertation*   *Abstract Only*

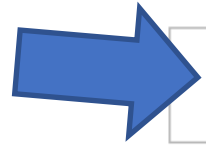


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Book chapter (66,735)

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*Journal article*      *No access*

### 1. Immobilized Cells Fermentation Using Al-alginate Beads for Red Bayberry (*Myrica rubra*) **Winemaking**

Liquor-Making Science & Technology ,Issue06,2007

HUANG Guo-qing<sup>1,2</sup>, XIAO Zi-jun<sup>1,2</sup>, ZHONG Rui-min<sup>2</sup> and ZENG Qing-xiao<sup>1</sup> (1. College of Light Industry and Food Scie...

▶ Abstract



PDF

*Journal article*      *Abstract Only*

### 2. Effects of Frost Indexes Change on Chinese **Viticulture** Zone in Recent 45 Years

Liquor-Making Science & Technology ,Issue07,2007

LI Hua<sup>1</sup>, YOU Jie<sup>1</sup>, HUO Xing-san<sup>1</sup> and WANG Yao-qi<sup>2</sup> (1.College of Enology; 2 College of Information and Engineering, ...

▶ Abstract



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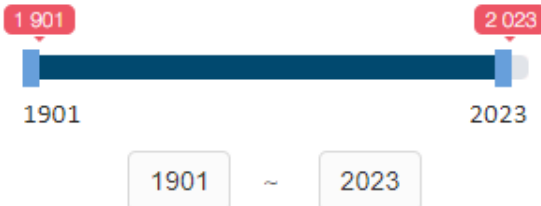
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## PUBLICATION YEAR



673. Development of the Wine Grape Materials Assessment System

Abstracts of the 5th Annual Meeting of Chinese Institute of Food Science and Technology(CIFST) & the 4th East-West Food Summit Forum, 2007

Li Hua ShaoJianhui (College of Enology, Northwest Sci-Tech University of Agriculture and Forestry, Yangling 712100)

► Abstract



Full text (in Chinese)

*Conference paper*

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### 674. Research of the grapevine-winter-buried mechanized technology

纪念中国农业工程学会成立30周年暨中国农业工程学会2009年学术年会 (CSAE 2009) 论文集, 2009

FengXin (Tianjin Agricultural Machinery Research Institute Tianjin 300193, China)

► Abstract



Full text (in Chinese)

*Conference paper*

*Abstract Only*

### 675. The analysis of Inner Mongolia Wuhai City grape industry development

创新驱动发展 提高气象灾害防御能力——S5应对气候变化、低碳发展与生态文明建设, 2013

Sui Jianli (Inner Mongolia Meteorological Service Center, Inner Mongolia Hohhot 010051)

► Abstract



Full text (in Chinese)

*Conference paper*

*Abstract Only*

### 676. Basic Study of Brett off Flavor Inhibition in Chinese Red Wine by Chitosan

Abstracts of the 11th Annual Meeting of CIFST, 2014

Lin Wenhua; Xie Kelin; Feng Tao; School of Aroma and Perfume Technology, Shanghai Institute of Technology;

► Abstract



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Károly Szenteleki 1,Levente Horváth 2 and Márta Ladányi 1 1 Corvinus University of Budapest,H-1118 Budapest,Villányi út...

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*Conference paper* *No access*2. Repetitive movements of upper limbs in **viticulture**:set up

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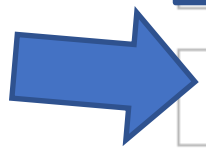
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#### 1. Embedded System in the Application of Remote Monitoring and Controlling

*Journal of Wuhan University of Technology* ,Issue04,2008

LIU Zhen-yong1,GAO Heng-zhi2 (1.Department of Electrification and Information Project,Shijiazhuang College,Shijiazhuang 050035,China;2.Departmen...

[▶ Abstract](#)[Full text \(in Chinese\)](#)*Journal article*     *Abstract Only*

#### 2. A Method and Fuzzy Control Scheme for Killing Pests of Stored Grain by Expansion under High-Pressure Drop

*Journal of the Chinese Cereals and Oils Association* ,Issue06,2009

Wang Binrui Cai Meng Liang Jialin Zhou Weiyi(School of Mechanical and Electrical Engineering,China Jiliang University, Hangzhou 310018)

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## DISCIPLINES

 Mathematics/ Physics/ Mechanics/*Journal article*    *Abstract Only*

1. The design of a multi-point **grain storage** temperature measurement system based on microcontroller

Microcomputer Information ,Issue20,2009

SUN Xue-yong LI Ye-de

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2. Application Research of **Grain** Stock Quantity Monitoring Based on 3D Laser Scanning Technology

Journal of Henan University of Technology(Natural Science Edition) ,Issue03,2019

DING Xiaoyin;XIAO Zhaoran;XU Qikeng;LIU Zhaohua;College of Civil Engineering and Architecture,Henan University of Technology;School of Information Engineering...

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Shandong University 2018

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Journal of Hunan University of Technology ,Issue06,2007

Li Qinghua, **Chen Shenshen**, OuYang Qin, Ou Manli(Hunan University of Technology,Zhuzhou Hunan 412008,China)

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2. LOWER BOUND LIMIT ANALYSIS BY USING THE ELEMENT-FREE GALERKIN METHOD WITH ORTHOGONAL BASIS

Chinese Journal of Theoretical and Applied Mechanics ,Issue05,2007

**Chen Shenshen** Liu Qinghua~(2)) Cen Zhangzhi (Department of Engineering Mechanics,Tsinghua University,Beijing 100084,China)

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# Фильтры

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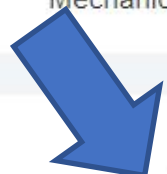
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#### 1. Harm of Environmental Pollution to Plant Leaves

Chemical Education ,Issue02,2007

XIA Zhiqing LI Hui(College of Chemistry and Environmental Science,Henan Normal University,Xinxiang Henan Province 453007)

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Full text (in Chinese)

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#### 2. Study of typical organochlorine pesticides bioaccumulation and influence factors in Daya Bay

Acta Oceanologica Sinica ,Issue02,2007

QIU Yao-wen1,2,ZHANG Gan1,GUO Ling-li1,LI Xiang-dong3,LI Jun2(1.Key Laboratory of Tropic Marine Environmental Dynamics,South China Sea Institut...

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#### 3. Discussion on the Harmonious Development of the Fishing Freedom Principle in High Seas——Also Discussion on the Developme...

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4. The Present Status of Water-cultivated Flower and Its D

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5. Effects of Supplemental UV-B Radiation on Photosynthe

Sci-Tech Information Development & Economy ,Issue07,2007

LI Ya-min, YUE Ming

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## DISCIPLINES

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2. Diversity analysis of bacteria capable of removing nitrate/nitrite in a shrimp pond

Acta Ecologica Sinica ,Issue05,2007

WANG An-Li 1, ZHENG Gui-Li 3, LIAO Shao-An 1., HUANG Hong-Hui 2, SUN Ru-Yong11 College of Life Science, South China Normal University

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3. Analysis of the Genetic Diversity in Suzhou and Yixing Cultivated Populations of Topmouth Culter

Biotechnology ,Issue02,2007

LI Jian-lin,WU Ting-ting (Freshwater Fisheries Research Center,Chinese Academy of Fishery Sciences,Wuxi 214081,China)

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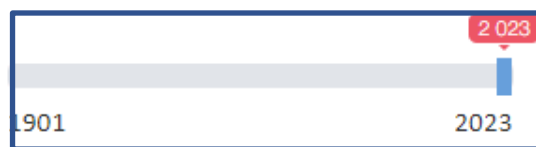
4. Research Progress in Pigment Mutants of Porphyra

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Materials Reports ,Issue05,2023

LIN Fangmin;XING Mei;TANG Lizhi;WU Xuejun;ZHANG Xiaofeng;HUANG Zhenyi;

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### 4. Research Progress on Polyhydroxyalkanoates(PHAs)-Based Hemostatic Materials

Materials Reports ,Issue03,2023

WU Yuandong;ZHENG Weishaung;LI Yuanju;DU Beining;ZHANG Xingru;LI Jialong;YU Shengyang;XIAO Yanan;LAI Chen;SHENG Liyuan;HUANG Yi;

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### 5. First-principles study on S-N doped polyethylene glycol for Li-S batteries

Materials Reports ,Issue03,2023

SONG Lihong;ZHANG Mingang;CAO Xiangyu;GUO Jin;YAN Xiaoyan;

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### 6. Research Progress on standard system of mold fluxes for continuous casting

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ZHANG Fei;HAN Fuman;LU Youyu;WEN Guanghua;TANG Ping;

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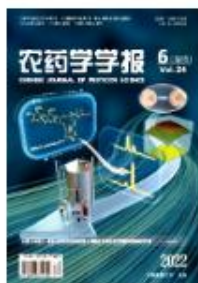
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## 1. Identification and expression analysis of CYP79 gene family, a key enzyme for cyanogenic glycoside synthesis in flax

Acta Agronomica Sinica ,Issue03,2023

QI Yan-Ni;LI Wen-Juan;ZHAO Li-Rong;LI Wen;WANG Li-Min;XIE Ya-Ping;ZHAO Wei;DANG Zhao;ZHANG Jian-Ping;Institute of Crop Sciences, Gansu ...

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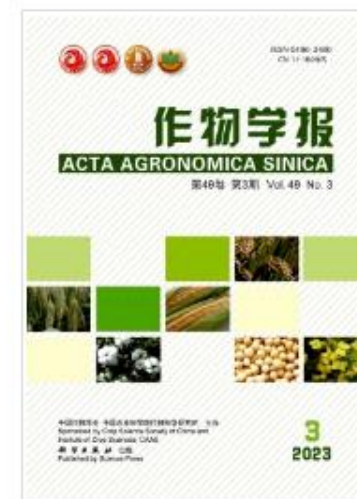
## 2. Research progress on the formation of large panicles in rice and its regulation

Acta Agronomica Sinica ,Issue03,2023

LIU Li-Jun;ZHOU Shen-Qi;LIU Kun;ZHANG Wei-Yang;YANG Jian-Chang;Jiangsu Key Laboratory of Crop Genetics and Physiology/Jiangsu Co-Innovati...

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## 3. Identification of sheathed panicle mutant sui1-5 and screening of OsPSS1 interaction protein in rice(Oryza sativa L.)



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### 1. Effect of Lodging on Maize Grain Losing and Harvest Efficiency in Mechanical Grain Harvest

Acta Agronomica Sinica ,Issue12,2018

XUE Jun;LI Lu-Lu;XIE Rui-Zhi;WANG Ke-Ru;HOU Peng;MING Bo;ZHANG Wan-Xu;ZHANG Guo-Qiang;GAO Shang;BAI Shi-Jie;CHU Zhen-Dong;LI Sh...

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### 2. Effect of Split Application of Nitrogen Fertilizer on Yield, Quality, and Nitrogen Use Efficiency of Sweet Potato

Acta Agronomica Sinica ,Issue12,2018

AN Jian-Gang;JING Fu;DING Yi;XIAO Yi;SHANG Hao-Hao;LI Hong-Li;YANG Xiao-Lu;TANG Dao-Bin;WANG Ji-Chun

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### 3. Morpho-physiological Responses of Cotton Shoot Apex to the Chemical Topping with Fortified Mepiquat Chloride

Acta Agronomica Sinica ,Issue12,2018

AN Jing;LI Fang;ZHOU Chun-Jiang;TIAN Xiao-Li;LI Zhao-Hu

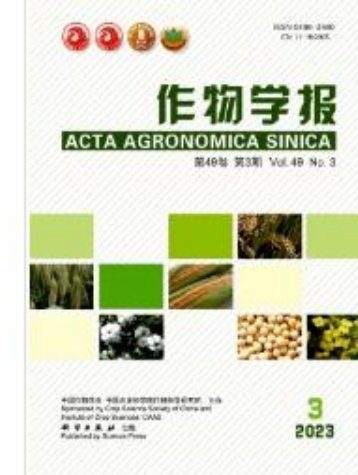
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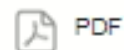
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## DISCIPLINES

 Mathematics/ Physics/ Mechanics/  
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Mine Industry Architecture/ Energy/ Traffic/  
Electromechanics, etc Agriculture Animal Husbandry and Veterinary Crop Forestry*Journal article* No access**1. Prokaryotic expression of vp3 gene of Muscovy duck parvovirus, and its antiserum preparation for detection of virus multiplication**

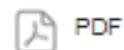
Chinese Journal of Biotechnology , Issue01, 2015

Yu Huang; Yumin Zhu; Shijuan Dong; Ruisong Yu; Yuanshu Zhang; Zhen Li

[▶ Abstract](#) Bilingual*Journal article* No access**2. Rescuing Bombyx mori bidensovirus in BmN cells in vitro**

Chinese Journal of Biotechnology , Issue01, 2015

Miaoniao Zhang; Ying Ma; Xiaoli Pan; Zhaoyang Hu; Guohui Li; Yayun Si; Yali Xing; Keping Chen; Qin Yao

[▶ Abstract](#) Bilingual*Journal article* No access**3. Construction and Characterization of an Epitope-mutated Asia 1 Type Foot-and-mouth Disease Virus**

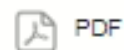
Chinese Journal of Biotechnology , Issue01, 2015

ZHANG Yan; HU Yonghao; YANG Fan; YANG Bo; WANG Songhao; ZHU Zixiang; ZHENG Haixue

[▶ Abstract](#) Bilingual*Journal article* No access**4. A new and edible species of Hygrophoropsis (Boletales, Basidiomycota) from North China**

Mycosystema , Issue02, 2022

YANG Hongpeng; ZHOU Meng; WU Gang; BAN Litong

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## 24. Characteristics and influencing factors

Acta Agronomica Sinica ,Issue12,2019

MA Chun-Yue;Mamat Sawut;Ershat Ablet;Y...

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## 25. Growth habit identification and diversification

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### 1. Prokaryotic expression of vp3 gene of Muscovy duck parvovirus, and its antiserum preparation for detection of virus multiplication

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### 2. Rescuing Bombyx mori bidensovirus in BmN cells in vitro

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### 3. Construction and Characterization of an Epitope-mutated Asia 1 Type Foot-and-mouth Disease Virus

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### 4. A new and edible species of Hygrophoropsis (Boletales, Basidiomycota) from North China

Mycosystema , Issue02, 2022

YANG Hongpeng; ZHOU Meng; WU Gang; BAN Litong

## The role of time preferences in contract breach: Evidence from Chinese poultry farmers participating in contract farming

HOU Jing,ZHOU Li,Jennifer IFFT,YING Rui-yao,Business School,Jiangsu Normal University,College of Economics and Management,Nanjing Agricultural University,Department of Agricultural Economics,Kansas State University;

Business School,Jiangsu Normal University,College of Economics and Management,Nanjing Agricultural University;Department of Agricultural Economics,Kansas State University;

DOI: CNKI-SUN.ZGNX.0.2023-02-024

### Keywords

Time preferences; contract breach;;contract farming;;economic field experiments;;China

### Abstract

Farmers' contract breach behavior is cited as one of the major stumbling blocks in the sustainable expansion of contract farming in many developing countries. This paper examines farmers' contract breach decisions from the perspective of time preferences. The empirical analysis is based on a household survey and economic field experiments of poultry households participating in contract farming conducted in Jiangsu Province, China. A discounted utility model and a maximum likelihood technique are applied to estimate farmers' time preferences and the effect of time preferences on contract breach in the production and sales phases are explored with a bivariate probit model. The results show that, on average, the poultry farmers in the sample are generally present biased and impatient regarding future utility. The regression results show that farmers with a higher preference for the present and a higher discount rate are more likely to breach contracts, and time preferences play a greater role in the production phase than in the sales phase. When considering heterogeneity, specific investments and transaction costs promote contract stability only for farmers with a low degree of impatience. Moreover, compared with large-scale farmers, small-scale farmers' contract breach decisions are more significantly affected by their time preferences. These results have implications for contract stability policies and other issues that are impacted by the linking of behavioral preferences to agricultural decisions.

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## CAPABILITY OF ABSCISIC ACID ACCUMULATION IN RELATION TO OSMOTIC POTENTIAL IN MAIZE LEAVES AND ROOTS

Wensuo Jia, Jianhua Zhang and Jiansheng Liang(College of BioSciences and BioTechnology, Yangzhou University, Jiangsu, China ;Permanent address: College of Plant Science and Technology, China Agricultural University, Beijing, China.; To whom correspondence should be addressed. FAX: +852 2339 5995. E-mail:jzhang@hkbu.edu.hk)

中国植物学会植物生理与分子生物学专业委员会、中国植物生理学会植物分子生物学专业委员会、中国细胞生物会、中国遗传学会

### Keywords

Polyethylene glycol (PEG); ethylene glycol;; abscisic acid (ABA); water relations; maize (Zea mays).

### Abstract

The capability of water stress-induced ABA accumulation and its relationships with water relation parameters in maize roots and leaves were investigated. While polyethylene glycol (PEG) treatment led to a significant increase of ABA content in both root and leaf tissues, ethylene glycol (EG), a permeable monomer of PEG, had no effect on the ABA accumulation at similar or much lower osmotic potentials. A rapid and massive accumulation of ABA in leaf tissues occurred at a specific threshold of PEG 6000 concentration, about 20% (w/v), and closely coincided with the starting of

## Keywords

Recombinant inbred lines, Quantitative trait loci (QTL), Epistasis, Yield-related traits in rice

## Abstract

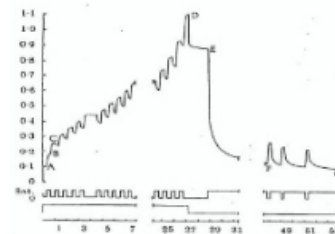
Having yield potential in rice depends largely on morphological improvement and heterosis utilization. Roles of grain yield advances through plant breeding programs have apparently declined in recent years. It may partly be because that understanding of morphological and physiological bases for crop growth and yield are rather limited. New information and methodologies such as QTL analysis are employed to approach the grain yield problem and search yield genes in cereals. In the study, a recombinant inbred population derived from ZS97x MH83 cross (P10, F11) was employed for morpho-physiological analyses and molecular dissection of yield-related traits in 1999 and 2000 at International Rice Research Institute (IRRI). The main results are as follows: 1 Strong seedling vigor are desirable for crop establishment in rice. Germination rate and seedling growth were measured to quantify seedling vigor. Total amylase activity,  $\alpha$ -amylase activity, reducing sugar content, root activity, and seed weight were determined. Overall, correlation was observed between the seedling vigor traits (germination rate, seedling dry weight, and root maximum length etc) and physiological traits (amylase activity, root activity, reducing sugar content etc). QTL analysis reveals that the intervals of RZ403-C1087-RG393 on chromosome 3, C1447-M28-C248 and C734b-RG380-R3188 -R830 on chromosome 5, and C352-Waxy-C1498 on chromosome 6 are the four main chromosomal regions controlling seedling vigor. Several QTLs for amylase activities, reducing sugar content, and root activity were localized in the similar region as the QTLs for seedling vigor, respectively. The results show that it is common that single marker, QTL, and digenic interaction have pleiotropic effects, suggesting that pleiotropy of detected single marker, QTL, and digenic interaction should be the molecular basis for relationship among amylase and seedling vigor. Six interactions between QTLs within a trait were detected (one for root dry weight, one for total amylase activity, two for reducing sugar content, two for seed size). 2 Plant height, tiller number, and heading date are agronomic traits of importance. We mapped quantitative trait locus (QTLs) for plant height (at seedling stage, at 35 days after transplanting, and at maturity stage) and tiller number (at 35 days after transplanting, and at maturity stage), and for heading date using a recombinant inbred (RI) population. Negative correlations between plant height and tiller number were observed at two growth stages (35 days after transplanting and at maturity stage). Heading date significantly correlated with tiller number and plant height at maturity. At p<0.01, a total of 85 single markers associated with studied traits but the seedling height were detected simultaneously in 1999 and 2000. Some markers were observed to be associated with at least two traits. A total of 32 QTLs were detected, 11 of which were identified simultaneously in two years. Several QTLs had pleiotropic effects. Three QTLs for seedling height were located in the similar regions with QTLs for 100 0-grain weight, and significantly positive correlation between seedling height and 1000-grain weight were observed, suggesting that seedling height may be closely associated with seed size. The interval of RG424-RZ887 showed its large effects on heading date, plant height and tiller numbers at maturity. Delay of heading date for approximately 8 days due to the effect of the region may result in a reduction in living tiller numbers at maturity by one and an increase in ultimate plant height by approximately 8 cm. A total of 549 digenic interactions for all traits but the seedling height were detected simultaneously in two years by two-way ANOVA. Among them, 55 combinations had pleiotropic effects by simultaneously affecting two or more traits. The results show that different QTLs and digenic interactions affect plant height and tiller number at different developmental stages, respectively, suggesting selective expression of genes for

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from the wood surface to the center. Therefore, at the initial stage of desorption, the activated water molecules are less and they are released from the bonds from other molecules. At this stage, the water molecules are in a good order since most of them have not been activated. With the progress of desorption, the activated water molecules become more and more, which results in a lower bonding effect and a worse regularity of the surrounding molecules and the regularity of water molecules both decline to minimum while reaching equilibrium state, because the water molecules are subjected to activated condition. 26. The sorption hysteresis of wood includes two respects, that is, moisture sorption hysteresis and thermodynamic sorption hysteresis. At lower temperatures, moisture sorption hysteresis is very obvious; at higher temperatures, the sorption hysteresis is not so obvious. The effective hydrogen bonding theory seems reasonable in explaining the mechanism of both moisture sorption hysteresis and thermodynamic sorption hysteresis.

## Figures &amp; Tables



含水率变化对木材弯曲蠕变的影响

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DOI: 10.1007/s11676-007-0005-0

## Comparative analysis of some selected macronutrients of soil in orange orchard and degraded forests in Chittagong Hill Tracts, Bangladesh

Mohammad Shaheed Hossain Chowdhury<sup>1\*</sup>, Shampa Biswas<sup>2</sup>, Md. Abdul Halim<sup>1</sup>, S. M. Sirajul Haque<sup>3</sup>, Nur Muhammed<sup>4</sup> and Masao Koike<sup>4</sup>

<sup>1</sup> *Department of Forestry, School of Agriculture and Mineral Science, Shahjalal University of Science and Technology, Sylhet-3114, Bangladesh*

<sup>2</sup> *Department of Mountain Forestry, University of Natural Resources and Applied Life Sciences-BOKU, Vienna, Austria*

<sup>3</sup> *Institute of Forestry and Environmental Sciences, Chittagong University, Chittagong-4331, Bangladesh*

<sup>4</sup> *Forest Policy Laboratory, Department of Forest Science, Faculty of Agriculture, Shinshu University, 8304 Minamiminowa-Mura, Nagano-Ken 399-4598, Japan*

**Abstract:** Status of organic carbon (C), total nitrogen (N), available potassium (K), calcium (Ca) and phosphorus (P) in three different depths (0–5 cm, 5–15 cm and 15–30 cm) on two hill slopes of 35% and 55% in orange orchard cultivated by the *Mro* tribe of Chittagong Hill Tracts (CHTs) were evaluated and compared with those in degraded bush forests, through digging three profiles in each land use. The content of all the five nutrients was found to be higher in the soil of orange orchard than in the soil of forest. But the variation was not consistent for both the slopes. The content varied depth wise also, having the highest value in surface soil in case of both the land uses on both the slopes. A mean available K content was significantly higher in orange orchard than in forest on 55% slope, while it was lower on 35% slope. Surface soil contained the nutrients of K and Ca with the amount of 0.2905-mg·g<sup>-1</sup> soil and 3.025-mg·g<sup>-1</sup> soil respectively in the orchard, while 0.1934-mg·g<sup>-1</sup> soil and 1.6083-mg·g<sup>-1</sup> soil were respectively in the forest. Organic carbon and total nitrogen were found more or less similar in surface soil on both the land uses showing a slight difference. Available P was found only in orange orchard, and in forest it was too little in amount to detect by the spectrophotometer. The degraded forests were poor in nutrient content due to high rate of soil erosion, which would be possible to be improved by bringing it under tree cover as proved by the adaptation of orange orchard



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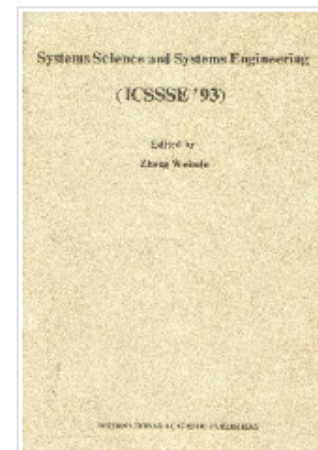
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## DEDUCTION OF THE TRANSFORMATION EQUATIONS OF NUMERICAL DISTRIBUTION STRUCTURES OF THE FOREST

Zheng Zhigang Academy of Forest Inventory and Planning Ministry of Forestry, Beijing 100T14, P.R. China  
Zhou Shulin Department of Mathematics, Peking University, Beijing 100871, P.R. China  
Systems Engineering Society of China

### Keywords

DEDUCTION OF THE TRANSFORMATION EQUATIONS OF NUMERICAL DISTRIBUTION STRUCTURES OF THE FOREST;

### Abstract

Based on the fact set forth in [1],[2] and [3] that the forest is composed of various numerical distribution structures dominated by the transformation regulation, we will deduce a class of partial differential equations describing the transformation regulation and properties of numerical distribution structures in a general form as below: These equations furnish a good description for various models of numerical distribution structures, such as those in [1],[2] and [3] and unify the equations of one-dimensional, two-dimensional and n-dimensional numerical distribution structures.

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3. Zheng Zhigang, Zhou Meike, Chen Xinfu, The transformation equation of distribution structures of stand diameter, Theory and Practice of System Engineering, vol. 12# 3 (1992).
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## DEDUCTION OF THE TRANSFORMATION EQUATIONS OF NUMERICAL DISTRIBUTION STRUCTURES OF THE FOREST\*

Zheng Zhigang

*Academy of Forest Inventory and Planning Ministry  
of Forestry, Beijing 100714, P.R.China*

Zhou Shulin

*Department of Mathematics, Peking University,  
Beijing 100871, P.R.China*

### ABSTRACT

Based on the fact set forth in [1],[2] and [3] that the forest is composed of various numerical distribution structures dominated by the transformation regulation, we will deduce a class of partial differential equations describing the transformation regulation and properties of numerical distribution structures in a general form as below:

$$\frac{\partial P(x_1, \dots, x_n, t)}{\partial t} + \sum_{i=1}^n \frac{\partial}{\partial x_i} [(\psi_i(x_1, \dots, x_n, t)P(x_1, \dots, x_n, t))] = -\mu(x_1, \dots, x_n, t)P(x_1, \dots, x_n, t).$$

These equations furnish a good description for various models of numerical distribution structures, such as those in [1],[2] and [3] and unify the equations of one-dimensional, two-dimensional and n-dimensional numerical distribution structures.

2. When age is asynchronous with time, i.e.  $\Delta\tau \neq \Delta t$ , but  $\frac{\Delta t}{\Delta\tau} = l$ , then the equation is

$$\begin{cases} \frac{\partial P(\tau, t)}{\partial t} + l \frac{\partial P(\tau, t)}{\partial \tau} = -\mu(\tau, t)P(\tau, t), \\ P(\tau, 0) = P_0(\tau), \\ P(0, t) = \varphi(t) = \gamma(t)\beta(t) \int_0^{\tau} (\tau, t)P(\tau, t)dr; \end{cases} \quad (2)$$

where  $t$  represents time,  $\tau$  age,  $\tau_m$  the maximum age.  $P(\tau, t)$  the density function denoting the total stand area with age  $\tau$  at time  $t$ ,  $\mu(\tau, t)$  the mortality function (exploitation, withering etc) denoting the mortality percentage of the stand with age  $\tau$  in a time unit at time  $t$ .  $P_0(\tau)$  is an initial value,  $\varphi(t)$  is a boundary value (the regeneration area at time  $t$ ).  $\gamma(t)$  is the survival percentage while  $\beta(t)$  is the regeneration percentage.

In [2] we have acquired the transformation equation of stand diameter distribution structure as follows:

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– 110% +

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Doctoral dissertation (80)

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### 1. Genetic Studies and Improvement of Pinus Caribaea Morelet

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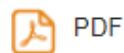
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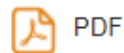
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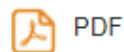
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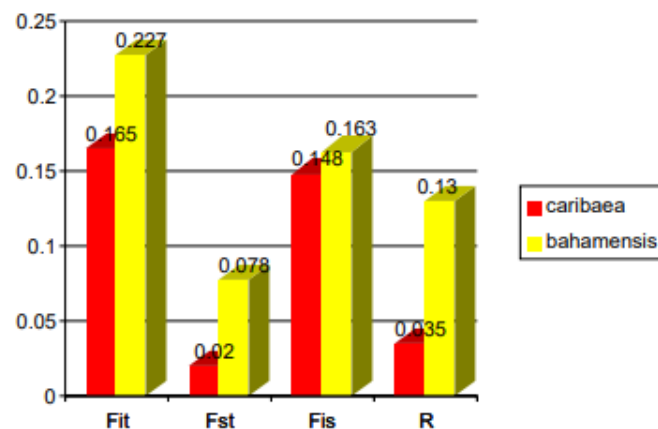
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**Genetic Studies and Improvement of *Pinus Caribaea* Morelet**

(Figure 2.4). Both values were significantly ( $P < 0.01$ ) larger than zero indicating significant population differentiation within both varieties. The values of  $F_{st}$  within var. *bahamensis* was nearly as large as 4 times of that within var. *caribaea*, indicating that stronger population differentiation occurred in *bahamensis* than in *caribaea*. This may also be attributed to the isolated distribution of var. *bahamensis*.



**Figure 2.4 Comparisons of  $F$ -statistics for the two varieties based on 8 loci**

#### 2.3.3.3.2 Genetic distance

Genetic distances were calculated by pooling the natural populations together to look at the genetic relationships among the natural and *ex situ* populations and between the two varieties (Table 2.15). It is clear that the natural and *ex situ* populations of var. *bahamensis* were most similar to each other (smallest distance 0.009), and that the Chinese population was very different from the natural populations. The Chinese population was also very different from the var. *bahamensis*. Visualisation of these difference is presented in the Figure 2.5. The difference between the two varieties is clear although the genetic distance between them is not too far. The UPGMA cluster tree of unbiased genetic distance (Nei, 1978) well matches the taxonomic classification. Chinese material is however an exception.

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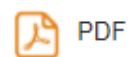
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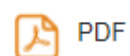


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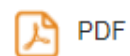


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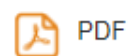


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### *Provinces, Autonomous Regions & Municipalities*

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regeneration, forest fire prevention, pest prevention and control, old tree protection and nature reserve management. With these laws and regulations to go by, forestry was promoted and managed in a legal way.

### *Making Supporting Policies, Raising Money from All Channels and Increasing Investment in Forestry*

The municipal authorities have issued many subsidizing policies for the development of village and town forests, water-resource protection forests and non-wood forests. Activities such as closing hillsides to facilitate afforestation, tending young plantations, afforestation with larch (*Larix*), and afforestation through explosion were also subsidized. The subsidy standard was raised on key plain projects and afforestation schemes on barren hills. Investment increased in both forestry and the construction of water conservation works. Additionally, many village workers (either voluntary or paid by the hours or times of presence) were utilized in an attempt to improve and regulate the contract and responsibility system for barren hills. Efforts were also made to soften the terms so as to encourage state-owned or collective enterprises and institutions as well as individuals to exploit and manage barren hills.

### *Strengthening the Grassroots Units*

The Beijing Forestry Bureau has initiated activities such as 'the management year' and 'the transformation year'. Forestry stations were set up in 268 towns and villages with fixed employees, manning quotas and responsibilities and all the stations attempted to reach the set standard. Forestry administration and management institutions were also established in forestry-connected departments such as railways, water conservation and highway. Twelve timber inspection stations were set up at all the main highway crossings leading to other towns or cities.

*(Beijing Forestry Bureau)*

## **Tianjin**

Located to the northeast of the North China Plain, Tianjin embraces the Bohai Sea with Yan Mountain at its back, covering an area of 11 305 km<sup>2</sup>. The landforms within the city include hilly areas, hills, plains, low lying land and the coastal area, among which the plains account for 94%. The



# Дополнительные сервисы

## In vitro and in silico studies of salicylic acid on systemic induced resistance against bacterial leaf blight disease and enhancement of crop yield

Wannaporn THEPBANDIT;Narendra Kumar PAPATHOTI;Jayasimha Rayulu DADDAM;Nguyen Huy HOANG;Toan LE THANH;Chanon SAENGCHAN;Kumrai BUENSANTEAI;School of Crop Production Technology,Suranaree University of Technology;Department of Animal Science,Agriculture Research

Organization;Department of Plant Protection,Can Tho University;

School of Crop Production Technology,Suranaree University of Technology;Department of Animal Science,Agriculture Research Organization;Department of Plant Protection,Can Tho University;

DOI: CNKI:SUN:ZGNX.0.2023-01-013

### Keywords

bacterial leaf blight;;crop yield;;in vitro;;in silico;;rice defense;;salicylic acid

### Abstract

Salicylic acid (SA) is an effective elicitor to promote plant defenses and growth. This study aimed to investigate rice (*Oryza sativa* L.) cv. Khao Dawk Mali 105 treated with salicylic acid (SA)-Ricemate as an enhanced plant protection mechanism against bacterial leaf blight (BLB) disease caused by *Xanthomonas oryzae* pv. *oryzae* (Xoo). Results indicated that the use of SA-Ricemate as a foliar spray at concentrations of more than 100 mg L<sup>-1</sup> can reduce the severity of BLB disease by 71%. SA-Ricemate treatment also increased the hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) content of rice leaf tissues over untreated samples by 39–61%. Malondialdehyde (MDA) in rice leaves treated with SA-Ricemate also showed an increase of 50–65% when comparing to non-treated samples. The differential development of these defense compounds was faster and distinct when the SA-Ricemate-treated rice was infected with Xoo, indicating plant-induced resistance. Besides, SA-Ricemate elicitor at a concentration of 50–250 mg L<sup>-1</sup> was correlated with a substantial increase in the accumulation of total chlorophyll content at 2.53–2.73 mg g<sup>-1</sup> of fresh weight which suggests that plant growth is

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Chinese Agricultural Science Bulletin , Issue10, 2008

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## In vitro and in silico studies of salicylic acid on systemic induced resistance against bacterial leaf blight disease and enhancement of crop yield

Wannaporn THEPBANDIT;Narendra Kumar PAPATHOTI;Jayasimha Rayulu DADDAM;Nguyen Huy HOANG;Toan LE THANH;Chanon SAENGCHAN;Kumrai BUENSANTEAI;School of Crop Production Technology,Suranaree University of Technology;Department of Animal Science,Agriculture Research Organization;Department of Plant Protection,Can Tho University;

School of Crop Production Technology,Suranaree University of Technology;Department of Animal Science,Agriculture Research Organization;Department of Plant Protection,Can Tho University;

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## Expression of the N-terminal 99 Amino Acids of Yeast Ribosomal Protein L3 in Transgenic Wheat Confers Resistance to Fusarium Head Blight

R. Di1\* A. Blechl2 R. Dill-Macky3 A. Tortora1 N.E. Tumer1 1 Biotechnology Center for Agriculture and the Environment, College for Agriculture and Environmental Sciences, Rutgers University, New Brunswick, NJ 08901-8520, USA; 2 Western Regional Research Center, United States Department of Agriculture, Agricultural Research Service, Albany, CA 94701-1105, USA; 3 Department of Plant Pathology, University of Minnesota, St. Paul, MN 55108-6030, USA

Western Regional Research Center United States Department of Agriculture Agricultural Research Service,Albany CA 94701-1105 USA,Department of Plant Pathology University of Minnesota,Biotechnology Center for Agriculture and the Environment College for Agriculture and Environmental Sciences Rutgers University New Brunswick NJ 08901-8520 USA ,Biotechnology Center for Agriculture and the Environment College for Agriculture and Environmental Sciences Rutgers University New Brunswick NJ 08901-8520 USA,,St. Paul MN 55108-6030 USA

DOI: CNKI:SUN:FZZW.0.2007-02-104

### Keywords

Fusarium head blight, Wheat disease, Genetic engineering, DON, Ribosomal protein L3

### Abstract

< 1E >Fusarium head blight (FHB) is a worldwide disease for wheat or barley. The contamination of important agricultural products with the trichothecene mycotoxins such as deoxynivalenol (DON) or 4,15-diacetoxyscirpe-

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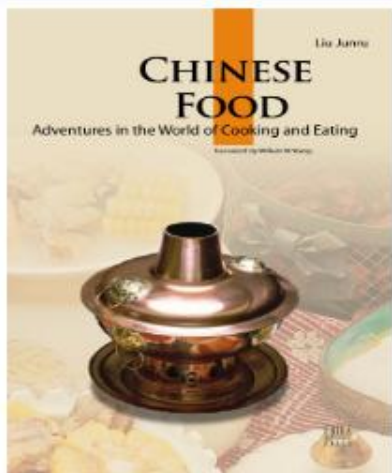
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just about anything edible with very few tabs. The Chinese, who see eating as a fortune and life as an art, not only created various kinds of regional food styles in its own vast lands, but have also spread Chinese food culture to far across the seas. Today, in this world where even the farthest corners can seem as close as one's back yard, Chinese food can be enjoyed in each and every metropolitan throughout the world.

Like many other countries with a vast territory, Chinese cuisines are differentiated largely by its northern and southern regional tastes. Although the best quality rice in China is grown in its northeastern regions, people in those regions, however, just as other northerners, prefer to eat pasta or pastry instead. In the north, classic



Vegetable sections in supermarkets that supply all kinds of fresh seasonal vegetable. (Photo by Huiming Shi, provided by Imagechina)

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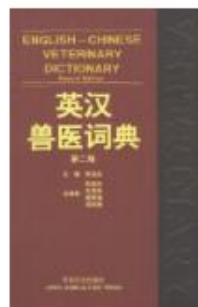
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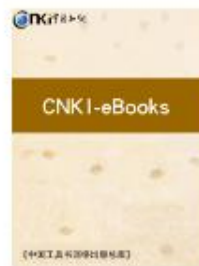
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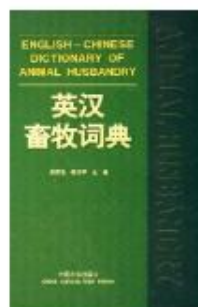
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2006



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Photographic Guide to F...  
甘西, 蓝家湖, 吴铁军, ...  
河南科学技术出版社  
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Fig 3-1 Yellowing



Fig 3-2 Mosaic



Fig 3-3 Albinism



Fig 3-4 Vein banding



Fig 3-5 Vein clearing



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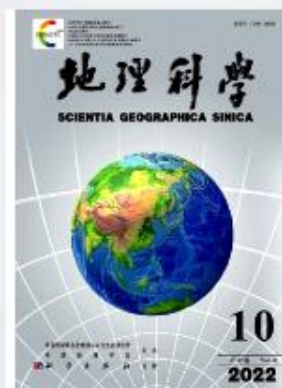


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**zooyasu@int.cnki.net**



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