

近畿大学 農学総合研究所報告

第 5 号

平成 9 年 3 月

近畿大学農学総合研究所

目 次

Chemistry, Physiology and Role of Deoxynivalenol in PathogenicityYu, HUI, C.K. EVANS, E.K. KOLACZKOWSKI, R. DILL-MACKY and C.J. MIROCHA.....	1
Pathogenicity and Mycotoxin Production by <i>Fusarium graminearum</i> Isolates in Corn CultivarsYin-Won LEE.....	13
Geographic Difference in Trichothecene Occurrence in Japanese Wheat and BarleyTakumi YOSHIZAWA.....	23
Pathogenicity and Ecology of <i>Fusarium</i> Species Associated with Wheat and Barley Scab in Japan ...Shinzo KOIZUMI, Hajime KATO, Reiichi YOSHINO, Hajimu KOMADA, Masakatsu ICHINO, Yoshihiro UMEHARA and Nagao HAYASHI.....	31
Toxigenic <i>Fusarium</i> Species and Their Mycotoxins in Pre-harvest Cereals in EuropeAntonio BOTTALICO.....	47
Fumonisin-Plant InteractionsHamed K. ABBAS, R.J. SMEDA, S.O. DUKE and W.T. SHIER.....	63
Use of Biotechnology to Eliminate Aflatoxin in Preharvest CropsT.E. CLEVELAND, J.W. CARY, R.L. BROWN, D. BHATNAGAR, J. YU, P-K. CHANG, C.A. CHLAN and K. RAJASEKARAN.....	75
Breeding for Plant Resistance to Toxigenic <i>Fusarium</i> Diseases in Central and Eastern Europe. A Review of Studies in the 1990sIrena M. FRENCEL.....	91
MS によりキノコ類の機能性分子の構造を探る澤邊昭義・岡本 忠.....	105
オオムギ子葉鞘細胞における遺伝子発現解析のための基礎的研究松田克礼・豊田秀吉・田中徳夫・大内成志.....	121
Biological Purification of Eutrophied Water by Transformed Higher Plants. I. Screening of Rapid-Growth Hairy Root Lines of Melon and Their Consumption of Phosphate in MediumYoshiyuki HOSOI, Hideyoshi TOYODA, Koji KAKUTANI, Yoshinori	

MATSUDA, Masaru HIGASHIURA, Takamune NISHIMURA, Akiko
YAMAMOTO and Seiji OUCHI.....131

大麦デンプンの特性について
.....唐 漢軍・吉田豊和・渡辺克美・光永俊郎.....137

ペルオキシダーゼによる 2,4,6-トリクロロフェノールの環境からの除去
.....藤本尚利・室原千賀子・白坂憲章・村上哲男・五影 勲・吉栖 肇.....145

梅酢と化学合成配合凝固剤による豆腐の凝固能と食品物性
.....田尻尚士.....149

低温発酵法による食パン製造と添加油脂の発酵能と製品品質への影響（冷凍パン生地の食パン製造への応用—V）
.....田尻尚士.....157

CONTENTS

Chemistry, Physiology and Role of Deoxynivalenol in PathogenicityYu, HUI, C.K. EVANS, E.K. KOLACZKOWSKI, R. DILL-MACKY and C.J. MIROCHA.....	1
Pathogenicity and Mycotoxin Production by <i>Fusarium graminearum</i> Isolates in Corn CultivarsYin-WonLEE.....	13
Geographic Difference in Trichothecene Occurrence in Japanese Wheat and BarleyTakumi YOSHIZAWA.....	23
Pathogenicity and Ecology of <i>Fusarium</i> Species Associated with Wheat and Barley Scab in JapanShinzo KOIZUMI, Hajime KATO, Reiichi YOSHINO, Hajimu KOMADA, Masakatsu ICHINO, Yoshihiro UMEHARA and Nagao HAYASHI.....	31
Toxigenic <i>Fusarium</i> Species and Their Mycotoxins in Pre-harvest Cereals in EuropeAntonio BOTTALICO.....	47
Fumonisin-Plant InteractionsHamed K. ABBAS, R.J. SMEDA, S.O. DUKE and W.T. SHIER.....	63
Use of Biotechnology to Eliminate Aflatoxin in Preharvest CropsT.E. CLEVELAND, J.W. CARY, R.L. BROWN, D. BHATNAGAR, J. YU, P-K. CHANG, C.A. CHLAN and K. RAJASEKARAN.....	75
Breeding for Plant Resistance to Toxigenic <i>Fusarium</i> Diseases in Central and Eastern Europe. A Review of Studies in the 1990sIrena M. FRENCEL.....	91

Characterization of Functional Molecules Isolated from Mushrooms by Mass SpectrometryAkiyoshi SAWABE and Tadashi OKAMOTO.....	105
A Microinjection System for the Analysis of Gene Expression in Single Barley Coleoptile CellYoshinori MATSUDA, Hideyoshi TOYODA, Norio TANAKA and Seiji OUCHI.....	121
Biological Purification of Eutrophied Water by Transformed Higher Plants. I. Screening of Rapid-Growth Hairy Root Lines of Melon and Their Consumption of Phosphate in MediumYoshiyuki HOSOI, Hideyoshi TOYODA, Koji KAKUTANI, Yoshinori MATSUDA, Masaru HIGASHIURA, Takamune NISHIMURA, Akiko YAMAMOTO and Seiji OUCHI.....	131
Some Properties of Starch in Barley GrainHanjun TANG, Toyokazu YOSHIDA, Katsumi WATANABE and Toshio MITSUNAGA.....	137
Elimination of an Antifungal Agent, 2,4,6-trichlorophenol from the Environment by PeroxidasesNaotoshi FUJIMOTO, Chikako MUROHARA, Norifumi SHIRASAKA, Tetsuo MURAKAMI, Isao ITSUKAGE and Hajime YOSHIKUMI.....	145
Coagulation Ratio and Physical Properties of <i>Tofu</i> Produced with Coagulants Consisting of Ume-zu and Synthetic CoagulantsTakashi TAJIRI.....	149
Effect of Oil and Fat Additions on Fermentation Efficiency and the Quality of Final Products in Bread Making by Low Temperature Fermentation (Application of Frozen Dough to Bread Making-V)Takashi TAJIRI.....	157

近畿大学農学総合研究所報告 第5号

平成9年3月1日印刷

平成9年3月15日発行

編集発行人 大 内 成 志

発行所 近畿大学農学総合研究所
奈良市中町3327-204

印刷所 近畿大学出版広報部 印刷課
東大阪市小若江3-4-1

**Bulletin of
The Institute for Comprehensive
Agricultural Sciences
Kinki University**

No. 5

March 1997

**The Institute for Comprehensive
Agricultural Sciences
Kinki University**

Nara, Japan