Repellent Activity of Extracts of Wild Rice Species against Panonychus citri and Aphis citricola in Associated with Esterase Isoenzyme in Insests [PDF] WAN Shu-qing¹ LIU Xiang-fa¹ FENG Guo-zhong¹ PAN Da-jian² (1College of Resources and Environment, South China Agricultural University, Guangzhou 510642, China; 2Rice Research Institute, Guangdong Academy of Agricultural Sciences, Guangzhou 510640, China) 摘 要: Six species of wild rice with different ecophenotypes including Oryza grandiglumis (E6-1, E6-3 / 6-4), 0. minuta (E13-9, E13-13), 0. officinalis (E15-8, E15-13), 0. punctata (E16-1, E16-3, E16-13), 0. granulata (E7-4), and 0. latifolia (101392, E9-1, E9-10) were extracted with methnol and the repellent activity of the extracts against the two insects Aphis citricola and Panonychus citri were studied. The extracts of 0. officinalis E15-8 showed higher repellent rate to the two insects than those of the other species. The repellent rates of the extracts of E15-8 to P. citri and A. citricola were 83.26% and 87.86% at 5×104 µg/mL in 24 h and 87.95% and 82.43% in 48 h, respectively. The extracts of 0. officinalis E15-8 had the effect of inhibition to the esterase of the two insects.

关键词: wild rice; Panonychus citri; Aphis citricola; repellent activity; esterase isoenzyme; extracts; biol *Rice Science*. 2006, 13(2): 146-148

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