

the rate of 123 g/rai, glufosinate-ammonium at the rate of 60 g/rai and glyphosate at the rate of 82 g/rai with no significant differences in the percentage of the weed killed at 60.00 56.67 and 53.33 % respectively. Paraquat at the rate of 110.4 g/rai and brush cutter were good weed control for 15 days with the percentage of the weed killed at 66.67 and 53.33 % respectively and those applied for 45 days the efficacy were 26.67 and 6.67 % respectively.

Key words : paraquat, glufosinate-ammonium, glyphosate, brush cutter

Collection and evaluation of local Thai rice varieties *Oryza sativa* L.

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This study explored the biodiversity in Thai native rice during May 2011 to March 2013 by conducting surveys and collecting rice varieties from 4 regions of Thailand. There are altogether 89 varieties of native rice which include 16 in central region, 12 in northern region, 23 in northeastern region, and 38 in southern region. Among them are of 2 types: 21 varieties of glutinous rice and 68 varieties of non-glutinous rice. Ecological classification suggested 72 varieties of lowland rice, 10 varieties of upland rice, and 7 varieties of floating rice. These varieties of rice were cultivated in the farmer fields of Nongbondaeng sub-district in Banbueng district of Chonburi province during the rainy season and off season between 2011 and 2013 and to capture their agricultural descriptors. Results revealed germination and seedling growth in 35 varieties. The Unknow II variety yields maximum weight of 6.47grams per panicle, while Sor 6Chumpae variety gives minimum weight of 0.85grams per panicle. Ai-Kong produces highest number of 317 seeds per panicle, while the lowest is Sewkliang with 51.33seeds per panicle. Gumrai gives biggest size of seed of 0.47x 1.01mm., while Sangyod gives smallest size of 0.19x 0.97mm.

Key words: rice, Thai varieties, panicles