
WEED DIVERSITY OF RICE FIELDS IN FOUR DISTRICTS OF MUDA RICE GRANARY AREA, NORTH-WEST PENINSULAR MALAYSIA

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ABSTRACT

A survey was conducted to determine the major weeds of rice fields in 4 districts (District I, II, III and IV) of Muda rice granary area, Peninsular Malaysia, from 5-20 July 2003. Rice fields surveyed covering of 27 farm blocks with 579 fields. A total of 35 weed species belonging to 17 families were recorded, of which 15 species were broadleaved, 10 sedges, 6 grasses and 4 aquatics. Species diversity ranking of weed community for the districts were District-II > District-III > District-IV > District-I. Sorenson’s index of similarity indicated that at least 82.76% of the listed species occurred in 4 districts. Out of 35 infested weed species, 6 species were determined as dominant based on rating score (2 to 5) of weed infestation and percent infested fields (> 40%). Oryza sativa (weedy rice) ranked top among all districts followed by Leptochloa chinensis, Echinochloa crusgalli, Ischaemum rugosum, Ludwigia hyssopifolia, and Fimbristylis miliacea in the District II, District III and District IV, whereas, in District I Sphenoclea zeylanica was prevalent instead of Ischaemum rugosum.

ABSTRAK

Bancian telah dilakukan untuk menentukan rumpai-rumpai utama di empat daerah kawasan tanaman padi Muda, Semenanjung Malaysia dari 5 hingga 20 Julai 2003. Sebanyak 579 sawah dari 27 blok telah dibanci. Sejumlah 35 spesies rumpai dari 17 famili direkodkan iaitu 15 spesies rumpai berdaunan lebar, 10 rusiga, 6 rumput dan 4 akuatik. Kepelbagaian spesies rumpai di setiap daerah mengikut susun atur dari yang lebih tinggi kepada yang rendah ialah Daerah II>Daerah III> Daerah IV>Daerah I. Indek keserupaan Sorenson’s menunjukkan sekurang-kurangnya 82.7% spesies yang disenaraikan terdapat di ke empat-empat daerah yang dikaji. Daripada 35 spesies yang direkodkan 6 spesies dikenalpasti sebagai dominan berdasarkan skor (2 hingga 5) rumpai yang meliputi dan peratus sawah yang diliputi rumpai (> 40%). Oryza sativa (Komplek) (Padi Angin), dikenalpasti sebagai rumpai paling dominan diikuti oleh Leptochloa chinensis, Echinochloa crusgalli, Ischaemum rugosum, Ludwigia hyssopifolia.
dan
Fimbristylis miliacea
di Daerah II, III dan IV. Keadaan yang sama juga didapati untuk Daerah I juga mempunyai
susun atur yang sama kecuali rumpai
Sphenoclea zeylanica
lebih utama berbanding
Ischaemum rugosum.

Key words: weed diversity, rice, Muda rice granary, Malaysia

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