

SPIDERS IN PADDY FIELDS IN NORTHERN THAILAND

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ABSTRACT

A survey of spiders in the paddy fields was carried out from October 2005 to August 2006 at Tambon Mae Faek Mai (approx. 19° N, 99° E; 320 meters MSL), Amphoe San Sai, Changwat Chiang Mai, in the northern highland area of Thailand. The spider fauna thus found were *Argiope catenulata* (Doleschall) and *A. inustus* (L. Koch) (Araneidae); *Tetragnatha javana* (Thorell), *T. mandibulata* Walckenaer and, *T. maxillosa* Thorell (Tetragnathidae); *Runcinia acuminata* (Thorell), *Thomisus labefactus* Karsch and *Thomisus* sp. (Thomisidae); *Oxyopes javanus* Thorell and *O. lineatipes* (L. Koch) (Oxyopidae); *Pardosa (Lycosa) pseudoannulata* (Boesenberg and Strand) (Lycosidae); and *Atypina* (= *Calitrichia*) *formosana* (Oi) (Linyphiidae). All of these were generalist predators of the rice stem borers and rice leaf folder, the dominant lepidopterous pests of rice, and other less important and occasional pests such as rice cutworm, rice caseworm, rice skipper, green rice leafhoppers and rice brown planthopper. The population densities of these insect pests of rice were all below the economic threshold levels and not causing any observable or significant damage during the investigation. These results indicated that the spiders present in the paddy fields served as effective biological control agents.

Key words: generalist predators, biological control agents, rice pests