

Development of a new remote monitoring system for insect pests¹

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Abstract

A remote monitoring system for pests which consisted of a main monitoring server and some field servers was developed and its Taiwan patent number is M339920. The sex-pheromone and methyl eugenol were used to lure the males of the tobacco cutworm and the oriental fruit fly, respectively, to enter the auto-counting trap of the field server. Data including the number of pests, microclimate, soil moisture and GPS data were transmitted to the main monitoring server and stored in database. Field tests showed that there was a 5% and 8% discrepancy between the automatic count and manual count, respectively, for the moth trap and fruit fly trap. The developed system for pests can monitor instantly the population dynamic of pests and release correct information to farmers to prevent the crop damage by harmful insects.

Key words: remote monitoring system, field server, pest

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