Industry-wide Efforts in Circumventing the Scourge of Bagworm Infestation in Malaysia - What Have Gone Wrong and What Should be Done?

NORMAN KAMARUDIN AND MOHD MAZMIRA MOHAMED

Malaysian Palm Oil Board, 6, Persiaran Institusi, Bandar Baru Bangi 43000 Kajang, Selangor Darul Ehsan, Malaysia

Bagworms have been infesting oil palm ever since the commercial planting which started more than a century ago. It was previously reported as occasional pests of other crops and ornamental trees. In the early years of commercial oil palm planting, reports of damaging incidence of bagworms, or any other leaf-eating caterpillars were almost negligible. Serious outbreaks of the bagworms began mainly in late 1950s and the scourge remains to the present day, despite the many advances in management and control of bagworms which has been developed over the years. Many of the control practices, especially in the use of broad-spectrum insecticides is believed to be the reason for the recurring bagworm outbreak. The application of these insecticides caused a direct impact in reducing the population of natural enemies (parasitoid and predators) of the bagworms, hence potentially increasing the pest numbers to an outbreak level. Bagworms outbreaks can actually be managed through established methods of census and detection, and control as it reaches a certain economic threshold level. The persistent spraying of broad-spectrum insecticides (i.e. cypermethrin), coupled with the lack of awareness on the consequential effects of a disrupted ecosystem, have possibly caused serious bagworm outbreaks currently experienced in this country. The current recommended option to conserve the natural enemies is by using Bacillus thuringiensis for spraying, or use of acephate, whenever trunk injection is required. Awareness campaign on this issue should therefore be more dynamic, continuous and follow up census should not be neglected. The formation of a task force for bagworm within the endemic regions of infestation is deemed a crucial factor for successful control. Complacency in not conducting regular census and control, lack in the establishment of beneficial plants for the natural enemies and repeated usage of broad-spectrum insecticides are deemed as prerequisites to an outbreak situation which brings serious losses to the oil palm industry.

Keywords: Bagworms, outbreaks, insecticides, Bacillus thuringiensis, natural enemies.