Fortification of farm residue and pest management in coconut

Wastes are definitely resources out of place and are therefore need to be recycled effectively and reused successfully. Farm residues, organic debris, fallen trees and cow dung pits are major feeding and breeding sites of coconut rhinoceros beetles (*Oryctes rhinoceros*). Immature stages of this pest, especially grubs feed on these debris and adult beetles cause significant damage on juvenile and mature coconut palms. In order to outreach an ICAR-CPCRI technology at grass root level, dairy farmers in Ward 13 Vallikunam panchayat was sensitized on the potential use of green muscardine fungus, *Metarhizium majus* in the management of coconut rhinoceros beetle on 12-10-2021. This programme was linked to the National Programme of AICRP on Biological Control entitled "**Converging biological suppression approaches for area-wide management of coconut rhinoceros beetle"** conducted as a part of **'Special National Swachhta campaign".**

Farmers in the region were sensitized about the breeding zones of the cosmopolitan pest, *O. rhinoceros* and the farm hygiene strategies to be adopted to subdue the pest attack. This also marks an activity which is farmer participatory in nature conducted in collaboration with State Department of Agricultural Development and Farmer's welfare and local farmer's group. Damage symptoms of the pest and the prophylactic measures to be undertaken were empowered to the farming community. Field level production of the entomopathogen *M. majus* using semi-cooked rice was also oriented to the participant farmers to take up the production at village level. In addition, farmers were distributed with *M. majus* packets to inoculate the cow dung pits with the entomopathogen and avoid breeding of coconut rhinoceros beetle. Farmers were also exposed on the use of entomopathogenic nematodes (*Steinernema* sp.) in capsule formulation as a prophylactic tool in coconut pest management. This programme will distribute the potential entomopathogen to all dairy farmers of the village and make the village tackle the pest through fortifying the farm residues especially cow dung pit with *M. majus* and reduce the impact of coconut rhinoceros beetle in coming days.

Dr KM Anes, Scientist and Dr A Joseph Rajkumar, Principal Scientist, ICAR-CPCRI, Regional Station, Kayamkulam coordinated the outreach programme on area-wide bio-suppression of coconut rhinoceros beetle.