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Coconut Leaf Miner (CLM) infestation in Oil Palm

The coconut leaf miner (CLM) (*Promecotheca papuana* Csiki) is a pest of coconut. CLM also feeds on many palm species like beetlenut palm (*Areca cathecu*), sago palm (*Metroxylon sagu*), nipa palm (*Nypa fruticans*) and African oil palm (*Elaeis guineensis*). It feeds on the leaf's mesophyll and cause sever defoliation that subsequently have a direct impact on the yield.

CLM damage turn green leaflets to brown as if were scorched by fire.

Leaflets turned brown and curled inwards from the tip.

Damage due to feeding; adults make scraps parallel to the vein and larvae make blotches on the underside of the leaflets.

CLM is native to Papua New Guinea (PNG) and West New Britain (WNB). CLM damage on oil palm was reported by OPIC to PNGOPRA for the first time in WNB in 2019 at Kapore LSS. In 2021 pest spread was reported across many sites in WNB. CLM feeding's Damage symptoms include leave grooves on the lower epidermis caused by CLM adults and multiple blotches on the upper epidermis caused by the larvae feeding. Both damages are parallel to the vein of the leaflet, but blotches can be found closest to the midrib. As a result, leaflets curl in from the tips and turn brown and look like fronds are scorched by heat or fire. The damage is likely to be mistaken for fungal infection or mineral deficiency so it is advised that a frond or few should be cut and inspected for damage identification.

Current control recommended by PNGOPRA on mature palm is the targeted trunk injection (TTI) treatment using Dimehypo. Additionally, good sanitation and upkeep is highly recommended.

The Crop Protection - Entomology Unit at PNGOPRA has commenced a study investigating the biology of the pest. Continuous awareness and training are conducted to all stakeholders on the pest identification and reporting. PNGOPRA Entomology Unit is embarking on all stakeholders for a collaborative effort to combat this new pest of oil palm.

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