September

The Ability of the Invasive Red Palm Weevil, *Rhynchophorus ferrugineus* Infesting Oil Palm in Malaysia

AHMAD BUKHARY, A K¹⁺, RUSLAN, M Y², MOHD FAUZI, M M², NICHOLAS, A S², BADROL HISHAM, F, WAN KHAIRUL ANUAR, W A⁴, NOOR HISHAM, H⁵, AND IDRIS, A B²

The red palm weevil of the species Rhynchophorus ferrugineus (RPWf) in this study has shown its capacity to infest oil palm both in laboratory and semi-field settings. Both no choice and choice laboratory experiments showed no significant differences (p>0.05) for the number of individuals and time of RPWf adults to reach both coconut palm and oil palm cabbages. Semi-field studies showed that there was a record of infestation of RPWf larvae in the oil palm host for the no choice experiment, while there was no infestation for the choice experiment. Aromatic Pandan coconut showed significant difference (p<0.05) in terms of RPWf larval abundances between no choice and choice experiments, where number of RPWf larval individuals were significantly higher in choice experiment. Overall, this study showed the capability of the RPWf to infest oil palm when there were no other suitable palm hosts. Aromatic Pandan and MATAG coconut varieties were proposed to be the most suitable 'trap-crops' in reducing the risks of RPWf infestations on oil palm on plantation scales.

Keywords: Rhynchophonus ferugineus, pest, oil palm, coconut, laboratory, semi-field, infestation, trap-crop.