

Insects as Carriers of *Ralstonia solanacearum* Phylotype IV on Kepok Banana Flowers in South Minahasa and Minahasa Districts

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Abstract : The scope of this study is the management of insects that carry the cause of banana blood disease (BBD), *Ralstonia solanacearum* Phylotype IV. The objectives of this study are: (1) to study the diversity and density of visitor insect populations to the Kepok banana flower, and (2) to identify insects in the Kepok banana flower that act as carriers of *R. solanacearum* Phylotype IV, and the population density of these bacteria was carried by each insect. Sampling of banana plantations is done based on purposive sampling method. Insect collection uses a modified insect net, and insect collection uses modified insect nets, and insects were morphologically identified. This bacterial isolation was carried out based on the spread method on NA + TZC media. Inoculation of bacterial isolates was carried out by injection method on the tip of an mature Kepok banana. Density of insects visitors banana flower per tree in South Minahasa and Minahasa regencies are as follows: *Oscinella* sp. (15.50 and 18.08 individuals), *Aphis mellifera* (0.50 and 1.58), *Chelisoche morio* (0.28 and 0.20 individuals, and *Dolichoderus* sp. (1.44 and 6.21 individuals). All insects on the Kepok banana flower in South Minahasa and Minahasa carry *Ralstonia solanacearum* Phylotype IV. *Oscinella* sp., *Aphis mellifera*, *Chelisoche morio*, and *Dolichoderus* sp. in both districts it brought 17,636.39 and 75,533.33 CFU / ml, 15,666.67 and 17,400.00 CFU / ml, 113.33 and 2,667.67 CFU / ml, and 2,400.00 CFU / ml and 21,133.33 CFU / ml.

Keywords : *Ralstonia solanacearum* Phylotype IV, density, *Oscinella* sp., *Aphis mellifera*, *Chelisoche morio*, *Dolichoderus* sp.

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