

**Host preference of bean aphid, *Aphis craccivora* under traditional agriculture**H M N M Watagodakumbura<sup>1\*</sup>, D Ahangama<sup>1</sup> and N M K K Nawarathna<sup>2</sup><sup>1</sup> Department of Biology, Faculty of Agriculture, University of Peradeniya, Peradeniya<sup>2</sup> Hardy Advanced Technical Institute, Inginiagala Road, Ampara

Under the tropical conditions, bean aphid, *Aphis craccivora* is serious among aphids. Normally, it can damage all the legumes except the most varieties of soya beans. Bean aphid directly damage by feeding on phloem sap of plants and a heavy attack on young seedlings can cause death, whereas the growth of the older plants is stunted. Leaves of the plants distorted and delay in flowering. Therefore, it is very important to find the most tolerant and susceptible food legumes to bean aphid under traditional agriculture.

Four divisional secretariats out of seven in the Monaragala District were randomly selected. The selected divisional secretariats were Badalkumbura, Monaragala, Buttala and Madulla. Four out of traditionally legume cultivating ten villages in each divisional secretariat were randomly selected. Three samples were taken from each crop in each village. The experiment was conducted in the Yala season in 2003. The duration of the experiment was six months. The selected legume species were (T1) bean (*Phaseolus vulgaris*), (T2) ma (*Vigna catieng*), (T3) cowpea (*Vigna unguiculata*), (T4) green gram (*Vigna radiata*), (T5) kollu (*Delichos biflorus*) and (T6) groundnut (*Arachis hypogea*). Mean of the number of aphids at the treatments were calculated. SAS package was used in the analysis and means were compared by LSD.

Ma (T3) was the most vulnerable plant to the attack of bean aphid. The most resistant plant was (T5) kollu. There were no differences in the host preference between T2 and T3 at  $\alpha = 0.05$ . Cowpea was the secondly most vulnerable plant to the pest attack in the treatments. The resistance to the bean aphid attack is dependent upon the phenotypic characters of the plants. Bean aphid must be controlled when above crops are cultivated.