

Distribution of *Wolbachia* Among Arthropods in Korea

Mi Gwang Kim, Hyun Woo Oh and Ho Yong Park

Insect Resources Laboratory,

Korea Research Institute of Bioscience and Biotechnology

Wolbachia are cytoplasmically inherited bacteria that cause a number of reproductive alternations in many arthropod species, including reproductive incompatibility, parthenogenesis and feminization of genetic males. Recent surveys have shown *Wolbachia* to be quite common, but their distribution among arthropods in Korea has not been well studied. 51 arthropod species was tested for presence of *Wolbachia* using an assay based upon PCR amplification of the *ftsZ* protein coding gene from *Wolbachia*. *Wolbachia* were detected in 9 of 37 insect species (24.3%) and 4 of 14 arachnids (28.6%); in insects, Acarina(1/1; infected/tested) Diptera (2/2), Homoptera (2/6), Hemiptera (3/7), and Othoptera (1/3) and in arachnids, Araneidae (2/6), Lycosidae(1/1), and Tetragnathidae(1/1).