ACTINIDIA ARGUTA PLOIDY LEVEL VARIATION IN RELATION TO *PSEUDOMONAS SYRINGAE* PV. *ACTINIDIAE* SUSCEPTIBILITY

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Abstract

Ploidy level variation is a very common phenomena in *Actinidia sp.* and can change the genetic contribution of an individual to the next generation's gene pool. Over the years the importance of polyploidy is well documented, studies have provided interesting insights into genomic consequences of polyploidy. Emerging evidence of duplication through polyploidization in model plant has stimulated the research on the relationship between early polyploidization events, the success of the polyploidy and the long-term fate of new species. But we still know very little about the mechanisms responsible for establishing and evolutionary success of polyploid lines. One possibility is that polyploid lines are less susceptible to the pathogens than diploid progenitor species. Focusing on the potential consequences of polyploids *Actinidia arguta* and *Pseudomonas syringae* pv. *actinidiae* susceptibility, first we established the ploidy level for the *Actinidia arguta* collection, and then we artificially inoculated the bacterial pathogen in order to evaluate whether ploidy level influences host pathogen interaction obtaining useful results.

Key words: polyploidy; interspecific hybrid; flow cytometry; kiwifruit bacterial canker; host-pathogen interaction.