Jury Report
East-West Seed Thesis Award for Plant Sciences 2016

The jury assigned to evaluate the nominees of the 2016 East-West Seed Thesis Award for Plant Sciences is pleased to announce that this year the Prize will be awarded to **M.T. (Maria) Fernandéz de Bobadilla MSc.**

Excellent candidates were nominated with very high marks from their supervisors for their thesis and the jury agreed that the quality of the nominees was high enough for all. Several of them already graduated recently with a distinction cum laude. It was difficult to make a choice as all were excellent in their own way. Some conducted very fundamental molecular work, some innovative biosystematics or evolutionary research and some on complex tritrophic relations. After intense deliberations the jury made the decision to award Maria Fernandéz de Bobadilla, MSc Plant Sciences at Wageningen University.

She focused on investigating how plants cope with biotic and abiotic stresses. In her major thesis entitled *Do caterpillars prefer fungal infected leaves?*, she analyzed the chemical composition of poplar leaves infected with the poplar rust fungus (*Melampsora larica populina)* and tested how changes in chemical composition due to fungal infection influence the feeding behavior of insects. This complex tritrophic interaction in which a plant, a pathogenic fungus and a herbivorous insect meet, resembles what happens in nature where poplar trees are exposed to multiple attackers. The results showed that poplar leaves colonized with the rust fungus were the preferred feeding source for gypsy moths whereas another insect species, the poplar hawk moth, had more preference for uninfected leaves. In her minor thesis *The role of drought on the interactions between beneficial microbes, plants and herbivores* she studied yet another complex interaction with multiple players, a plant, a beneficial plant-growth promoting microbe and a herbivorous insect and analyzed how drought, a abiotic stress factor, influences this interaction.

In both studies Maria has used multidisciplinary approaches. She has used a wide variety of methods and techniques ranging from chemical analyses to behavioral studies, and from gene expression studies to statistical analyses. The extended data sets that she collected are processed in clear graphs, figures and tables and she critically evaluated the data and developed new hypotheses. In her theses Maria also showed that she is acquainted with the current state of the art of her field of research and that she has the capacity to place her own results in a broader context. The jury agrees that the distinction *cum laude* that marks her MSc diploma is fully justified. She is an independent thinker and a promising young scientist. The jury decided that she was the most outstanding of all candidates.

Pests and diseases cause enormous damage in agriculture and in natural ecosystems. The type of research performed by Maria Fernandéz de Bobadilla is instrumental to further our insights into the complex interactions between plants and their attackers. We encourage Maria to further exploit her skills and knowledge as a researcher and look forward to her contributions in the Plant Sciences in the future.

Prof. dr. ir. F.P.M. (Francine) Govers, persoonlijk hoogleraar moleculaire fytopathologie Wageningen Universiteit
Prof. dr. M.J. (Martin) Kropff, Director General CIMMYT, oud-rector magnificus Wageningen Universiteit, hoogleraar gewasecologie Wageningen Universiteit

The jury meeting took place on Oktober 31, 2016 and was chaired by Mr. R.J. graaf Schimmelpenninck, KHMW treasurer and board member. Also attended: Prof. dr. A.P. IJzerman, KHMW secretary of natural sciences and Drs. S. van Manen, secretary KHMW.