

Use of *Medicago truncatula* to model the interaction between plant-parasitic nematodes and legumes

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We are using *Medicago truncatula* as a model plant for examination of the interaction between plant-parasitic nematodes and legumes. One objective of this work is to identify and characterize genes from the plant that are involved in the host response to nematodes or in host resistance. Using bioinformatics, we have identified candidate genes from cDNA library BNIR and other *Medicago* sequences. We have also characterized a number of genes involved in plant-parasitic nematode development, hatching, and sterol metabolism. We are developing molecular tools to introduce inhibitory RNA (RNAi) of plant or nematode genes into *Medicago* in order to further characterize their roles in nematode parasitism of legumes.