Introduction

In most ecosystems, the supply of nitrogen is the most limiting factor to plant growth. Nitrogen is available to plants only after it has been fixed into NH_4^+ or NO_3^-, compounds which make up a very small percentage of the total nitrogen pool in an environment. To combat this problem, leguminous plants have developed a symbiotic relationship with the nitrogen fixing bacteria, *Rhizobium* spp. Legumes form root nodules which house Rhizobium and provide the bacteria with carbon compounds, while the bacteria fix nitrogen for the plants' consumption (Adler 1995). This relationship and its mechanisms have become the center of much study, both in the physiological mechanisms and the population interactions.

The formation of root nodules by the plants has been shown to be an interactive process between the plants and bacteria, occurring especially at low level of soil nitrogen (Rhijn and Vanderleyden 1995, Schultze and Kondorosi 1998). Plant and bacteria species demonstrate host specificity in forming symbiotic relationships. These relationships begin when plants release compounds, usually flavonoids, into the soil. These compounds trigger the transcription of