Effect of herbicides and fungicides on N2-fixation and seed yield of soybean (cv. Williams)

Mohammad Reza Ardekani, Amir Qalawand, Aslam Mehidie Hiron, Hashem Al Hormat, and Behzad Daneshgar

Abstract

The effect of herbicides and fungicides on N2-fixation and seed yield of soybean (cv. Williams) was studied. Bradyrhizobium japonicum inoculation increased the nitrogen fixation rate and seed yield. The results showed that the herbicide 2,4-D at a concentration of 1 kg/ha did not significantly affect the nitrogen fixation rate and seed yield. The fungicide mancozeb at a concentration of 1 kg/ha significantly increased the nitrogen fixation rate and seed yield. The results also showed that the herbicide paraquat at a concentration of 1 kg/ha significantly decreased the nitrogen fixation rate and seed yield. The fungicide mancozeb at a concentration of 1 kg/ha significantly increased the nitrogen fixation rate and seed yield.