P-117

Soybean genotype resistant to *Heterodera glycines* in Northwestern Argentina

Norma Coronel*, Estación Experimental Agroindustrial Obispo Colombres, Tucuman, Argentina

Mario Devani, Estación Experimental Agroindustrial Obispo Colombres, Tucuman, Argentina

Fernando Ledesma Rodriguez, Estación Experimental Agroindustrial Obispo Colombres, Tucuman, Argentina

Jose Ramon Sanchez, Estación Experimental Agroindustrial Obispo Colombres, Tucuman, Argentina

Soybean cyst nematode (SCN)*, Heterodera glycines*, is the most important phytonematode of the soybean crop in world-wide. Cultural practices and resistant cultivars are the most effective tools for managing this pest. Most of soybean cultivars in north-western Argentine are susceptible to this nematode. The objective of this research was to evaluate resistance in advanced breeding lines to *H. glycines*. The experiments were conducted under greenhouse condition in a completely randomized design with seven replicates. Eleven genotypes of soybean from the Estación Experimental Agroindustrial Obispo Colombres Soybean Breeding Program were evaluated to SCN races 5 and 6 (HG Types 2.5.7 and 5.7 respectively). Seedlings of each genotype were inoculated with 4,000 eggs and juveniles from each race. The evaluation was done 30 days after inoculation by counting the number of females on each root-system. The classification of the lines as resistant or susceptible was based on the Female Index (FI) according to Schmitt and Shannon (1992). Most of the lines tested were susceptible to both races of SCN. Only EEAOC Exp-13/182 showed resistant to both nematode races. A second trial was performed to confirm the resistance of this line. The Female Index (FI) and the Reproduction Factor (RF) were calculated. The line EEAOC Exp-13/182 was resistant to SCN race 5 (FI=2.5% - RF<1). This genotype showed moderate resistant to SCN race 6 based on the FI value (12.3%) but was resistant base on RF (<1). EEAOC Exp-13/182 presents potential to be used in areas affected by this nematode.