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Soybean cultivar evaluation to frog-eye leaf spot (causal agent: *Cercospora sojina* Hara): disease intensity and yield losses

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The use of resistant varieties is the main controlling measure for frog-eye leaf spot. The response to frog-eye leaf spot of 151 cultivars of maturity groups (MG) II to VII included in Argentinean National Network for the Evaluation of Soybean Cultivars, were evaluated in 2009/10 in a field infested with *C. sojina* in three locations in Córdoba province (Argentina). The intensity of the disease was evaluated with a scale of six grades: grade 1: leaves without spots; grade 2: 1 to 25% of incidence, severity among <1 to 5%; grade 3: 100% of incidence, severity of 6 to 15%; grade 4: 100% of incidence, severity from 16 to 35%, grade 5: 100% of incidence, severity from 36 to 50%, and grade 6: 100% of incidence and more than the 50% of the foliate area affected. To evaluate yield, in one of the cities were placed two equal trials. Upon one of the trials it was made chemical control of the disease. As fungicide it was used a mixture of strobilurin with triazole in three moments during the cycle of the crop. The intensity of frog-eye leaf spot varied between 4,75 and 6 depending on the city. The 16,6% of the cultivars had grade 1; 7,3%, grade 2; 58,3%, grade 3; 17,2%, grade 4 and the 0,6%, grade 5. The fungicide applications achieved differences in yield statistically significant in the 49% of the cultivars, that showed grades of intensity of the disease >3,4. The significant losses of yield were increased with the grades of intensity. The losses of susceptible crop yields were reduced with the application of the foliate fungicide. Some cultivars showed intensities above the 3,5 and did not show significant losses of yield, which could be associated with a tolerable behavior.