



REACTION OF SOYBEAN GENOTYPES OF PEKING ORIGIN TO THE RENIFORM NEMATODE. Reação de genótipos de soja oriundos de fonte Peking ao nematoide reniforme. Verssiani, J.B.S.¹; Stutz, M.C.²; Peixoto, G.H.S.¹; Adriel, C.S.¹ Lage, D.A.C.². ¹UNICAMPO, Trindade, GO; ²BASF, Trindade, GO. E-mail: jorgebleno30@gmail.com. Apoio: BASF.

Rotylenchulus reniformis is one of the most economically important nematodes, pathogenic to more than 300 plant species. The availability of genetic resistance in soybean to this nematode is limited, although the literature recommends the potential of Soybean Cyst Nematode (SCN) resistance sources as an alternative to bring Root-Reniform Nematode (RRN) resistance. Therefore, the objective of this study was to evaluate native resistance to *R. reniformis* in commercial soybean cultivars with different SCN resistant sources. Thirty-six promising soybean genotypes, from different companies, including the standards for resistance and susceptibility were evaluated from March to June 2023 in a greenhouse trial at the BASF experimental site in Trindade, GO. The experiment was conducted in a CRD with four replications, each experimental unit being represented by a single pot with a single plant. A soil:sand mixture (2:1) previously autoclaved (2 h, 121 °C) was used as substrate. Each plant received an inoculum suspension containing 1,500 eggs and juvenile forms of *R. reniformis* 20 DAP. At 90 DAI, the nematodes were extracted and evaluated: final population in the soil and root (FP) and reproduction factor (RF). The R software was used to perform the analysis of variance and the mean grouping test. In the analysis of variance, there was a significant statistical difference between genotypes for both variables, indicating variations in resistance to RRN. Few genotypes from Peking in their genealogy behaved as susceptible. The BRSMG 250, TMG 132 RR, M 8372 IPRO, TMG 2776 IPRO, TMG 2285 IPRO genotypes obtained RF values < 1.0, being considered resistant. According to the same criteria, sixteen other genotypes with Peking in their genealogy showed potential, behaving as moderately resistant. Varieties with SCN resistance source mediated by Peking and PI 437654 can confer resistance to RRN and can be used within soybean breeding program to enhance selection of resistant germplasm.