

Evaluation of virulence of *Phakopsora pachyrhizi* monourediniais isolates collected in Brazil. Darben, LM^{1,2}; Yokoyama, A^{1,3}; Parmezan, TR^{1,3}; Kuwahara, MK¹; De Carvalho, MCCG⁴; Gonela, A²; Soares, RM¹; Almeida, AMR¹; Godoy, CV¹; Marcelino-Guimarães, FC¹.¹Embrapa Soja, Londrina, Brasil; ²Universidade Estadual de Maringá, Maringá, Brasil; ³Universidade Estadual de Londrina, Londrina, Brasil; ⁴Universidade Estadual do Norte do Paraná, Bandeirantes, Brasil. E-mail: francismar.marcelino@embrapa.br. *Avaliação da virulência de isolados monourediniais de Phakopsora pachyrhizi coletados no Brasil*

Asian soybean rust (ASR) caused by the obligate biotrophic fungus *Phakopsora pachyrhizi* is a major disease limiting soybean production in many producer areas in the world. Thus, knowledge of the spectrum of virulence in populations of *P. pachyrhizi* is essential for breeding programs can perform an efficient strategic planning against the fungus that causes ASR. Therefore, the aim of this study was to determine the virulence of six Brazilian monourediniais isolates by evaluating the response of 13 differential soybean lines, using the quantitative parameters: sporulation level, number of uredinia per lesion and frequency of lesions that had uredinia. Phenotypic analysis revealed the presence of at least six different pathotypes, being isolated L.LD112, collected in Londrina-PR, the most virulent, causing susceptibility reaction in seven of the 13 genotypes tested (PI200492, PI230970, PI200526, PI567102B, PI587855, PI506764 and BRS 184). Conversely, L.UB112 and L.CA4B12 isolates, collected in Uberlândia-MG and Conceição das Alagoas-MG, respectively, were less virulent, with the highest number of resistance responses observed. These results indicate a diverse virulence pattern present in soybean fields in Brazil, so that development of resistant cultivars must be based on more durable resistance mechanisms, either by horizontal resistance or by pyramiding vertical resistance genes.

Keywords: Asian soybean rust, obligate biotrophic fungus, resistance.