

TEMPORAL PROGRESS OF WHITE ROT IN ONION GENOTYPES / Progresso temporal da podridão branca em genótipos de cebola. V. R. Oliveira¹; A. W. Moita¹; D. C. M. Mesquita²; A. C. Café Filho²; F. M. Inacio³; L. M. Pinheiro³; E. A. Lopes³; G. G. Nunes¹; <u>V. Lourenço Jr.¹</u> ¹Embrapa Hortaliças, Brasília, DF, Brazil/ ²Universidade de Brasília, DF, Brazil/ ³Universidade Federal de Viçosa, Rio Paranaíba, MG, Brazil. E-mail: valdir.lourenco@embrapa.br

Sclerotium cepivorum, the causal agent of white rot, is one of the most important plant pathogens on onion. There is no effective control method yet for this disease. The objective of this study was to evaluate the white rot temporal progress on 30 onion genotypes in the Coopadap experimental field at Rio Paranaíba, MG, Brazil. The field experiment was set up from May to October 2016 in a randomized complete block design with five replicates. Prior to onion sowing, the microsclerotia density was estimated by collecting three soil subsamples per plot. Initial inoculum densities were fairly uniform, with a mean of 15 microsclerotia per 100 cm³ of soil. Initial plant stand was determined 27 days after sowing (DAS), and the number of dead plants was quantified in five evaluations performed at 91, 109, 140, and 154 DAS and healthy harvest bulbs were weighted for each plot at the end. Data were subjected to the analysis of variance and the Scott-Knott test to determine differences among means (P<0.05). The lowest values of area under disease progress curves (AUDPC) (by incidence of dead plants) were obtained in the genotypes Juporanga (422), TX08 (407), BRS 367 (359), Baia Periforme (358), CNPH 6047 (357), Catarina (351), Crioula Mercosul (343), Valeouro IPA11 (341), Optima F1 (340), Alvorada (323), Roxa do Barreiro (309), Brisa IPA12 (274), Régia (261), Shinju F1 (239), São Paulo (232), Franciscana IPA10 (225), Sirius F1 (224), and Perfecta F1 (222). For the bulb weight (kg), the highest values were obtained in the Sirius F1 (8.6), Perfecta F1 (8.6), Optima F1 (8.0), and Régia (7.5). Thus, there is evidence that some genotypes have partial white rot resistance. These may be valuable for onion breeding or management programs.

Key words: Sclerotium cepivorum; Allium cepa L.; plant disease epidemiology; resistance.