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PHYSIOLOGICAL RESISTANCE TO *Sclerotinia sclerotiorum* OF COMMON BEAN LINES SCREENED FROM VCU TRIALS. P.M.L. SILVA¹; T. C. FERREIRA²; L. R. V. SOUSA¹; A. F. F. SOUZA¹; P.H. TEIXEIRA¹; R.C. LIMA²; T. J. PAULA JÚNIOR²; R. F. VIEIRA³.
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Genetic resistance is a key component of the WM management. Since 2008, we have screened common bean lines/cultivars for WM resistance from the field trials named Value for Cultivation and Use (VCU) conducted under WM pressure. The physiological resistance of 17 lines/cultivars screened in these trials and the resistant checks (A195, G122, and Cornell 605) were assessed using straw test (WM score and lesion length) and detached leaflet test (lesion diameter). From the 17 genotypes screened in the VCU trials, 12 exhibited partial resistance to WM in the field, two exhibited moderate resistance (Pérola and BRS Estilo) and three, susceptibility to WM (Ouro Negro, Ouro Vermelho and BRSMG Majestoso). In both tests, an isolate of *S. sclerotiorum* with high aggressiveness collected in Itararé, State of São Paulo, was used. Treatments were replicated four times in a completely randomized design. In the straw test, the WM score varied from 5.0 to 6.7 and the lesion length from 2.7 (A195) to 8.9 (CNFC 11946). In the detached leaflet test, lesion diameter varied from 9.1 cm (A195) to 16.6 cm (Majestoso). The resistant checks, especially A 195, were among the genotypes with lower severity of WM. Among the genotypes screened in the VCU trials, the lines CNFC 10720, CNFP 10798, VC 17 and the cultivar Ouro Branco exhibited the highest physiological resistance. The mean values for lesion and WM score of these four genotypes did not differ from those of G122 and Cornell 605. The susceptible cultivars to WM in the field, Ouro Negro and Ouro Vermelho, exhibited some level of physiological resistance to WM. Among the most susceptible genotypes were the lines CNFC 11946, CNFC10432 and the cultivars Estilo and Majestoso.

Keywords: *Phaseolus vulgaris*; White mold; Stem rot.

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