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COUNTRY-WIDE PREVALENCE OF TWO MCGs AND A LOCAL POPULATION CONTAINING RESISTANT *Sclerotinia sclerotiorum* TO THIOPHANATE-METHYL. R.A. SILVA¹; M.S. LEHNER¹; T.J. PAULA JR.²; E.S.G. MIZUBUTI¹. ¹Universidade Federal de Viçosa (UFV), Departamento de Fitopatologia, Laboratório de Biologia de Populações de Fitopatógenos. ²Empresa de Pesquisa Agropecuária de Minas Gerais (EPAMIG). E-mail: raphael.silva@ufv.br

Sclerotinia sclerotiorum, causal agent of white mold or sclerotinia stem rot, affects important cultivated as well as non-cultivated plants worldwide. The genetic structure of the pathogen population may be influenced by its host range. The objective of this study was to assess the genetic variability and the sensitivity of *S. sclerotiorum* to thiophanate-methyl (TM), fluazinam and procymidone of a collection of isolates from several hosts. The mycelial compatibility group (MCG) of 175 isolates from Brazil and the isolate Ss-1980 was determined by pairings with a set of previously characterized individuals. Fungicide sensitivity was assessed for 186 isolates using the discriminatory doses for TM (5 ug/ml), fluazinam (0.05 ug/ml) and procymidone (0.5 ug/ml). Resistant isolates were considered as those capable of growing at least 50% of the average colony diameter recorded for the control plates. Seventeen MCGs were identified and the Ss-1980 isolate, used as reference, was incompatible with all other isolates. Thus, Ss-1980 was assigned as belonging to MCG-0. There was no association between MCG and cultivated plants. Most isolates (72%) were assigned to only two MCGs which correspond to the two more frequently sampled MCGs in the Brazilian population of *S. sclerotiorum* from dry bean. Three new MCGs were found. At least 35 MCGs are present in Brazil. There was no evidence of resistance to fluazinam or procymidone. The mycelial growth of the sensitive isolates at discriminatory concentrations varied from 12% to 44%; 15% to 37%; and 15% to 41%, compared to the control for TM, fluazinam and procymidone, respectively. Thirteen isolates of MCG-2, collected in dry bean fields in the municipalities of Cabeceira Grande-MG and Unaí-MG, were resistant to TM. Similar growth patterns were observed for resistant isolates growing in both fungicide-amended and control plates. Two large MCGs are widely distributed in the country and dominate the population of *S. sclerotiorum* in Brazil. Isolates of both MCGs were found in different host crops as well as in weeds. The results support previous findings of a clonal structure of *S. sclerotiorum* in Brazil and resistance in two local populations to TM.

Keywords: Fungicide sensitivity; Population genetics; Structure.

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