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MULTIPLE RESISTANCE EVALUATION OF *Monilinia fructicola* ISOLATES TO THIOPHANATE METHYL, TEBUCONAZOLE AND AZOXISTROBIN AND COMPARISON OF THE PHENOTYPES FITNESS VARIABLES. P.S.S. DUTRA¹, L.L. MAY DE MIO², C.N. NUNES³. ^{1,2}Universidade Federal do Paraná (UFPR). ¹pameladutra92@gmail.com; ²maydemio@gmail.com; ³Empresa de Pesquisa Agropecuária e Extensão Rural de Santa Catarina (EPAGRI), ³cristiano@epagri.sc.gov.br

The objective of this work was to verify the multiple resistance of *M. fructicola* to the main fungicides used in Brazil to control brown rot of peach: thiophanate methyl (TM), tebuconazole (TEB) and azoxystrobin (AZO). The sensitivity to these fungicides was confirmed for 51 isolates collected from 2003 to 2015 in the states of São Paulo, Paraná and Rio Grande do Sul at discriminatory doses of 1, 0.3 and 1 $\mu\text{g}\cdot\text{ml}^{-1}$ for TM, TEB and AZO, respectively. *In vitro* fitness variables (mycelial growth, osmotic sensitivity, conidia germination and sporulation) were determined and compared among the phenotypes. The results showed a frequency of isolates resistant to TM, TEB and AZO of 41, 33 and 29%, respectively. Eight phenotypes were identified. The most recurrent were TF_S TEB_S AZO_S (33,3%), TF_R TEB_S AZO_S (21,6%) and TF_S TEB_R AZO_R (21,6%). In addition, most of the resistant phenotypes exhibited mycelial growth, conidia germination and *in vitro* sporulation greater than or equal to the sensitive phenotype (TF_S TEB_S AZO_S).