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RESEARCH PAPER

Identification of sources of resistance against boll rot complex of cotton

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Abstract : One hundred and eighteen genotypes/ varieties/ hybrids belonging to all four species of *Gossypium viz.*, *G arboreum*, *G herbaceum*, *G harbadense* and *G hirsutum* were screened against boll rot complex disease under natural epiphytotic conditions at Agriculture Research Station, Dharwad farm, University of Agricultural Sciences, Dharwad during *Kharif* 2017. Among these 118 germplasm lines tested, one line of *Gossypiumar boreum i.e.*, FDK 281and two lines of *G herbaceum* namely, ANGH-1607 and GShv 894/13 showed highly resistant reaction against the disease. In addition, five lines of *G arboreum* (CNA 2031, DLSA 17, NDLA 3086, PBD 22, PSCANOI-46), eight lines each of *G herbaceum* (DDh-11, DwDh-1601, DwDh-1602, GBhv-308, G Cot 23/ DDhc 11, GShv 898/13, GShv 907/13, Gvhv-767) and *G barbadense* (ARBHB-1601, BCS-23-18-7, DB-1602, DHB-1601, GBHV-184, LAHB-1, RHB-1008, Suvin), five lines of *G hirsutum* (ARBH- 813, LHDP 3, NNDC-10, NNDC-21, NNDC-55) and five intrahirsutum (ATM, Bindas, Dr. Brent, DHH- 11, DHH- 263) hybrid lines showed moderately resistant reaction against boll rot. Out of four species, germplasm lines of *G herbaceum* has showed better performance against the disease.

Key Words : Cotton, Boll rot complex, Resistant sources

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