Evaluation of pigeonpea germplasms against Sterility Mosaic Disease (SMD) caused by the mite vector (*Aceria cajani*)

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ABSTRACT: The pigeonpea germplasms/genotypes were evaluated to identify the sources of resistance to sterility mosaic disease. Screening of pigeonpea germplams under field condition during Kharif season 2014-15. AKTE 10-12, AKTE 12-01, AL 1758, AL 1932, AL 1933, BDN 2004-1, BDN 2010-1, BDN 2011-1, BRG 3, BRG 4, BRG 5, BRG 14-1, BRG 14-2, BSMR 2, BSMR 243, BSMR 571, BSMR 853, BWR 133, CO-6, CORG 9701, CRG 2010-11, CRG 2013-10, GRG K-1, GRG 82, GRG 140, GRG 160, GRG 2009-1, ICPHL 4989-7, IPA 13-1, IPA 15F, IPA 204, JKM 189, KPL 43, KA 12-2, KA-3, MA 6, MAL 13, Mahajeb 105, PA 419, PA 426, PUSA 2014, PUSA 2014-3, RVSA 07-10, RVSA 07-29, RVSA 07-31, RVSA 2014-2, WRG 242, WRG 244, WRG 246, WRG 248, WRG 252, WRG 256, WRG 292, Bahar, ICP 11376, ICP 12012, ICP 12728, ICP 12752, ICPL 20095, ICPL 20123, ICPL 20124, ICPL 20135, ICPL 87051, ICPL 96053, ICPL 96061, ICPL 99009, ICPL 99044, ICPL 99055, ICPL 99095, ICPL 99098, ICPL 99099, ICPL 99100 were found resistant and 27 germplasm viz., BAU 13-1, BDN 2, BSMR 579, JSA 28, PT 257, PUSA 2014-2, RVSA 07-22, RVSA 2014-1, TJT 501, Vipula, WRP 1, WRG 223, WRG 287, WRG 288, WRG 289, WRG 293, WRG 297, WRG 65, ICP 13361, ICPL 94062, ICPL 20119, ICPL 20136, ICPL 20137, ICPL 99008, ICPL 99048, BRG 1 and ICPL 99091 were recorded moderately resistant among 140 germplasms and having resistant to moderately resistant may either be used as donor parent in breeding programme for development of resistant varieties or if yield level is comparable with existing varieties it may be released for general cultivation.

Key Words: Pigeonpea (*Cajanus cajan*), germplasms/genotypes, screening, SMD (sterility mosaic disease), *Aceria cajani*.