**Activity2.1 Screening of genotypes and identification of promising lines for *Alternaria***





Spores of A.helianthi

**Whole plant assay screening for Alternaria Standardized**

Germplasm lines found promising are:- Acc No.7, 14, 35, 43, 147, 167, 180, 216, 251, 284, 348, 351, 353, 426, 430, 810, 832, 860, 873, 881, 886, 887, 889, 892, 901, 905, 912, 1015, 1020, 1029, 1052, 1054, 1136, 1139, 1229, 1386, 1391, 1424, 1430, 1431, 1442, 1445, 1447, 1464, 1473, 1474, 1484 and 1548.

Several CMS lines, R lines, and Inbred lines were screened ,the promising lines are as :- DCMS 6,DCMS 7,DCMS 14, DCMS 18, DCMS 19,DCMS 21 in CMS lines; DRS 12,60-1,DRS 19,RHA 271, DRS 20 in R lines; DSI 38,DSI 198,DSI 43,DSI 60,DSI 68,DSI 09 , DCMS 12,DRS 11,DSI 38,DSI 60,DSI 76,DSI 26,DSI 10,DSI 29 . DCMS 41, DCMS 42, M1008, HAM 161-P3, M 1029, N-DCMS 33,DCMS 36,DCMS45, DCMS 40 DCMS 1,DCMS4, DCMS 7,DCMS 8,DCMS 9,DCMS 10,DCMS 22,DCMS 23,DCMS 30,DCMS 31,DCMS 34,DCMS 44,DCMS 46,CMS 71 A, M 307-2,. Hybrids:- GAUSUF-12 (8.9%) and DRSF 114(11.1%) TAS-82 ,TNAUSUF 239, MLSFH 93, Sunbred 2077, KBSH 44 ,JKSFH-238, PAC 1091

Lines obtained from NBPGR: 6D-1R, 99RT, AK 345, EC 512673, EC 623072, EC 623201, EC 601932, **EC 601935,** EC 512676, EC 512681, EC 512682, EC 512687, EC 512786, EC 601746, EC 601755, EC 601760, **EC 601764,** EC-512681, **EC 601766,** EC 601769, EC 601807, EC 601820, **EC 601871,** EC 601875, EC 601878, EC 601900, EC 601916, **EC 601924, EC 601937 ,EC 601951,** EC 601958, EC 601967, EC 601970, EC 623011, EC 623015, EC 623016, **EC 623023, EC 623024,** EC 623026 , EC 623026 31, GMU 344, GMU 363, GMU 411, GMU 415, GMU 420, GMU 429, GMU 439, GMU 519, GMU 552, GMU 1000 ,GMU 1131, GP 127P, RHA 138-2, LR 6-03, LR-6-12, LSF 10, LSF 10-2, MRHA 2, NDLR 06, NDR-7-1B, NO.1131, P-141, P-144R, R 271, R 274, R-856,

**Most Promising are as:-** PS 2040, PS 2040-1 , PS 2040-2, PS 2037 , PS 4034, P 75 WP , ID-9 , ID-25, ID-30 , TX 16 R-(EC 537925) , SCG 28 , SCG 99, GMU -520, 440, GP- 679,564, White pollen line and Six accessions of wild are- *H. tuberosus, H. strumosus.*