

RESEARCH ARTICLE

Assessment of chilli genotypes for anthracnose resistance under field conditions

■ K. Arjun, T. Arumugam, M. Karthikeyan, H. Usha Nandhini Devi and S. Mohankumar

SUMMARY

Anthracnose caused by complex of *Colletotrichum* species is an economically important disease of chilli. The study involved 132 genotypes grown under field conditions. Among the genotypes evaluated, fifteen genotypes were moderately resistant to anthracnose with fairly high yield. In the order of merit, the genotypes were CA 177 (10.74%), Paramakudi 1 (16.64%), F 507 (17.17%), Bird's eye chilli (17.85%), Kadaladi 1 (19.70%), Ramnad local (20.64%), CO 1 (20.82%), TA/CA/10 (21.56%), CA 166 (21.94%), CA 188 (22.29%), Paramakudi 2 (22.45%), CA 13/6 (23.42%), Chilli CO hybrid 1 (24.36%), IC 342465 (24.68%) and CA 165 (25.70%). whereas, 40 genotypes were susceptible with PDI ranging from 26.30 to 50.69 per cent and majority of the genotypes (77nos) were found to be highly susceptible to anthracnose with per cent disease index ranging from 51.81 to 96.42 per cent. The moderately resistant genotypes identified in the present investigation will serve as donors or source of resistance for anthracnose.

Key Words : Chilli, Anthracnose, *Colletotrichum* species

How to cite this article : Arjun, K., Arumugam, T., Karthikeyan, M., Usha Nandhini Devi, H. and Mohankumar, S. (2020). Assessment of chilli genotypes for anthracnose resistance under field conditions. *Internat. J. Plant Sci.*, **15** (2): 67-72, DOI: 10.15740/HAS/IJPS/15.2/67-72, Copyright@ 2020: Hind Agri-Horticultural Society.

Article chronicle : Received : 15.02.2020; Revised : 01.05.2020; Accepted : 11.05.2020

MEMBERS OF THE RESEARCH FORUM

Author to be contacted :

T. Arumugam, Horticultural College and Research Institute (T.N.A.U.),
Periyakulam (T.N.) India
Email : tarumugam64@gmail.com

Address of the Co-authors:

K. Arjun, M. Karthikeyan and H. Usha Nandhini Devi, Department
of Vegetable Science, Horticultural College and Research Institute, Tamil
Nadu Agricultural University, Coimbatore (T.N.) India

S. Mohankumar, Centre for Plant Molecular Biology and
Biotechnology, Tamil Nadu Agricultural University, Coimbatore,
Coimbatore (T.N.) India