

Disease progress of angular leaf spot caused by *isariopsis griseola* sacc. and its implications on resistance of some bean (*phaseolus vulgaris* l.) cultivars

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Abstract:

Disease progress of angular leaf spot caused by *Isariopsis griseola* Sacc. was determined in the field on 14 bean cultivars after artificially induced infection. Isolate IG1-77 of the fungus was used to cause the infection, and evaluation was made using the CIAT disease severity scale of 1–5. The latter was subjected to logit transformation for analysis. The apparent rate of disease increase (r) was estimated for 8 cultivars selected for their varying susceptibility. Evaluation of disease incidence and severity showed four general patterns, ranging from immune reactions, low disease incidence and severity, high disease incidence but low severity, and high disease incidence and severity. The incubation period varied among cultivars. Computation of apparent rate of disease increase (r) showed that disease progress in cultivars 'BAT 67 - (20) P' and 'BAT 966 - IP - (20) P' was about one third of that in 'G2858' and 'Alabama No. 1'. This is interpreted by van der Plank's model to mean that the former cultivars exhibited partial resistance against the IG1-77 isolate expressed as the r -reducing resistance.