

## **Perpetuation of angular leaf spot pathogen [*Phaeoisariopsis griseola* (Sacc.) Ferraris] of french bean under temperate conditions of Kashmir**

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**ABSTRACT :** The studies conducted on mode of perpetuation of angular leaf spot pathogen [*Phaeoisariopsis griseola* (Sacc.) Ferraris] of French bean (*Phaseolus vulgaris* L.) in/on seed and plant debris for two consecutive years revealed that the pathogen survival declined over time and varied under different storage/placement conditions. The seed borne inoculum lost its viability completely after a storage period of 12-15 months. The viability of conidia, present on infected seeds, was also completely lost after 10 months of storage. However, on infected plant debris, the pathogen survived for longer duration. On infected pod husks, synnemata production was observed up to 18, 8-9 & 5-7 months, whereas the conidia lost viability after 19, 10 & 5-8 months, when placed under in-door conditions, on soil surface and buried 15cm deep in soil in bean fields, respectively. Similarly on infected leaf bits, the pathogen survived up to 15, 8 & 6 months and the conidia lost their viability after 16, 9 & 6 months when placed under in-door conditions, on soil surface and at 15cm soil depth in bean fields, respectively. It was concluded that under temperate conditions of Kashmir valley, use of 15 months old seeds and a two year crop rotation with non-host crop could eradicate the seed infection and soil borne inoculum of *P. griseola*.

**Key Words:** Angular leaf spot (*Phaeoisariopsis griseola* Sacc), french bean (*P. vulgaris* L.).