

**EFFECT OF DIFFERENT AGES OF CULTURE FILTRATE OF
SCLEROTINIA SCLEROTIORUM ON SEED GERMINATION
AND SEEDLING VIGOUR OF INDIAN MUSTARD VARIETIES**

**JITENDRA SHARMA, SHAILESH GODIKA, SHASHIKANT GOYAL,
ARJUN LAL YADAV & MANJU KUMARI**

Department of Plant Pathology, Sri Karan Narendra Agriculture University, Jobner, Rajasthan, India

ABSTRACT

Indian mustard [*Brassica juncea* (L.) Czern & Coss] is a 2nd important oilseed crop of India. India is one of the leading oilseeds producing country in the world accounting for 11.2 per cent of the world's rapeseed mustard production, and ranks third in the world next to China and Canada. More than thirty diseases are known to occur on Brassica crops in India. Among these, diseases Sclerotinia rot is a major disease incited by *Sclerotinia sclerotiorum* (Lib.) de Bary. The culture filtrate of *S. sclerotiorum* prepared on Potato Dextrose Broth (PDB). The effect of different age culture filtrate of *S. sclerotiorum* were observed on five mustard varieties (Arawali, Laxmi, NRCDR-2, RRN-505 and Varuna) for seed germination, seedling vigour (radicle and plumule length). The toxicity of culture filtrate increases with increased age of culture filtrate. It was noticed that 60 days old culture filtrate was highly toxic to all varieties. Least germination and seedling vigour were found in 60 days old culture filtrate. Variety NRCDR-2 resulted maximum seed germination, plumule length, and radical length and vigour index at all ages of culture filtrate. Whereas Variety varuna resulted minimum seed germination, plumule length, and radical length and vigour index at all ages of culture filtrate.

KEYWORDS: Culture Filtrate Age, *Sclerotinia sclerotiorum*, Seed Germination, Seedling Vigour, Indian Mustard

Received: Apr 22, 2016; **Accepted:** May 04, 2016; **Published:** May 05, 2016; **Paper Id.:** IJASRJUN201614