INTRODUCTION
Studies on the seed mycoflora have greatly increased in recent times in view of their importance as toxin producers, seed deteriorating agents and as disease carriers. Some of the seed infections are such that if the infected seeds are consumed, they cause serious damage/disease to man and domestic animals (Ergot of bajra, scab of wheat, etc.). In view of the serious nature of such infections, international comparative seed health testing schemes have regularly been organized since 1958 and 16 international workshops on seed Pathology have been held for laboratory studies of the seed samples. It has been well established that seeds carry several destructive pathogens that often take a heavy toll by causing severe diseases in crops raised from such seed. The diseased seedlings besides suffering from damage, also produce in certain cases abundant secondary inoculum (spores and similar infective material) which further spread the disease to the healthy plants in and around such fields (Brown spot of Paddy, Anthracnose of chilli etc). Seeds may also introduce Plant Pathogens into new areas (Karnal bunt of wheat, grain smut of bajra, powdery mildew of wheat, etc). Some pathogens such as Fusarium and Verticillium, which are soil inhabitants, attack crop
like cotton causing wilt making such soil almost permanently sick. Similarly, the pathogen which causes downy mildew of sorghum found only in the southern India has been introduced into the northern parts in the form of oospores held in leaf bits mixed with seed material. Seed material was found introducing new and serious pathogens into our country from abroad (Race T of Helminthosporium maydis on maize seeds). Similarly, Alternaria brassicae a serious pathogen of rape crop was probably introduced into Canada along with seed material imported from Holland, U.K. or U.S.A. Besides in some cases seed infection changes colour of the grain or quality of the grain reducing the market value of the produce.

The damage caused by the seed-borne fungi and crops arising from diseased seeds is expressed in the failure of seed germination is a common symptom in several cases. Several fungi like Aspergillus flavus, Curvularia spp., Fusarium sp., were found to invade the outer seed coat, endosperm and embryo of rice seeds resulting in germination failure. Alternaria spp. found to cause blight of radish seedlings. There are diseases like loose smut of wheat and barley which are exclusively seed-borne. The
pathogen remains dormant inside the seed becoming active when such seeds are sown. In some instances pathogens are carried on the seed surface as spores and spore bearing structures like sclerotia.

Seed transmission of plant pathogens was recognised as early as 1698 when Hellwig in Germany reported that *Claviceps Purpurea*, a pathogen of ergot of rye was transmitted as sclerotia intermingled with the seeds. Tillet (1755) working in France proved that *Tilletia tritici* (wheat bunt) was spread through its spores carried on the seed. Similar instances were also reported with bacterial pathogens. Seed transmission of pathogens is accomplished in the following ways:

(a) Pathogens mixed with seeds (*Sclerotia of Claviceps purpurea* etc.) (b) Pathogens carried externally on seeds (*Sphaegelithes sorghi, G. Cruenta, Curvularia oryzae* etc.) (c) Pathogens carried internally in seeds (*Ustilago tritici, Alternaria tritigina, Helminthosporium gramineum* etc.).

Baker and Smith (1966) and Neergaard (1977) who have critically analysed the transmission of pathogens
through seeds stated the components that operate in
seed transmission can be grouped as (a) growth stage
of the crop (b) weather conditions (c) flowering period
of the host (d) path of infection in the seed. In most
of the cases it has been observed that physical factors
such as light, temperature and humidity play a significant
role in the physiology of spore germination. Hence it
is needless to elaborate the importance of the subject -
seed mycoflora. Accordingly, it is thought worthwhile
to undertake a study on the seed mycoflora of certain
commonly grown vegetable crops.