## B-78: Infections in imported seeds

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Eighty nine seed samples of rice, maize, wheat, sorghum, sunflower, cabbage, carrot, cucurbits, parsley, *Bracharia*, *Centrosema* and *Stylosanthes*, received at the National Plant Quarantine Service, were tested for the presence of seed-borne pathogens. Seeds were examined visually and then subjected to incubation tests on agar media, usually potato dextrose agar (PDA) and sucrose peptone agar (SPA). Seeds were also sown in soil and observed in growing-on tests for disease symptoms in the seedlings produced.

Several microorganisms were detected in these samples including saprophytes and pathogenic organisms as well as impurities such as stones and weed seeds. The microorganisms of pathogenic significance were identified by their characteristics such as spore morphology and features in culture. They included *Xanthomonas oryzae*, *Cercospora oryzae*, *Drechslera oryzae* and *Sarocladium oryzae* in rice and *Alternaria* spp in carrot. *Chaetomium* spp and *Fusarium* spp were detected in almost all the samples. In growing-on tests, hybrid maize seeds produced plants of various types unrelated to pathogenic causes.

Seed-borne pathogens are present in many consignments of seeds imported into the country and the risks to local crop production, especially if virulent pathogens are introduced, must be recognised.

Certification of the health status of imported seed consignments by competent authorities from the exporting country is essential. Laws and procedures intended to ensure crop protection should be strictly observed by all seed importers.