

consumption potatoes have been screened for the presence of this bacterium. Sampling and testing are performed according to the EU protocol, which is upgraded periodically. Each sample contains 200 tubers, representing 25 tons. Bacteria are extracted from a piece of tissue taken from the hilum of each tuber and cultured on a semi-selective medium. Morphologically appropriate colonies are tested by ELISA. Positive colonies are further identified by their fatty acids (FA) profile. In addition, 10% of the ELISA-negative samples are tested by PCR with specific primers, which were changed three times during the last few years, to increase the detection reliability. The present method uses two pairs of primers: one pair specific to *R. solanacearum*, the second used as an internal control for plant material. Colonies determined positive by both ELISA and FA tests are used to infect tomato and eggplant seedlings to complete Koch's postulates. Preparation of samples and ELISA tests are performed by external laboratories recognized by PPIS. FA, PCR and Koch's postulates are carried out in PPIS laboratories. A single imported lot of consumption potatoes was found infected since 1995. The infection was further confirmed by the plant protection services of the exporting country. [L]

Identification of Pathogenic Fungi during Purity Test of Seeds Imported to Israel

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A purity test is carried out on seed samples aimed for propagation, in order to determine a seed lot's components and predict field contamination by noxious and weed seeds. The aims of this work were to stimulate awareness of the possibility of detecting (a) sclerotia that are mixed with the seeds and/or (b) lesioned seeds during purity tests and thus prevent damages that might occur due to their entrance into Israel. Sclerotia of *Sclerotinia sclerotiorum* were found by our laboratory from 1999 until 2006 in 45 crops belonging to 12 plant families. Sclerotia were found during these years in 272 samples, and in 204 of them viable sclerotia were found. There has not been any uniform direction of increase or decrease of viable sclerotia percentage during the years. In our laboratory, sclerotia of *S. minor* were first revealed in 2006 in a watercress seed sample; sclerotia of *Claviceps purpurea* were first revealed in ryegrass seeds in 2005 and in fescue seeds, ryegrass and rye samples in 2006; *Tilletia tritici* was first revealed in 2006 in a wheat seed sample. Detection and identification of sclerotia and infected seeds during purity tests and reporting the findings to the Plant Quarantine Service and/or to the Health Ministry, prevented field infestation with sclerotia and the entrance into Israel of quarantine fungi (*C. purpurea*, *T. tritici*). In addition, distribution of fungi that exist in Israel was avoided (*S. sclerotiorum*, *S. minor*), as well as new races of these fungi. Today most of the purity tests are being carried out on seeds that are aimed for propagation. Most of the imported shipments of grain are not being tested in the laboratory at all for pathogen identification. Therefore, it is important to expand the purity and health tests to edible grains in order to avoid damage to health and to prevent contamination of fields with leftovers of grain and waste. [L]

Classification of *Rhizoctonia* spp. to Anastomosis Groups via ITS Sequence Analysis

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Rhizoctonia spp. isolates are divided according to the number of nuclei in their young hyphal cells, into uninucleate (UNR), binucleate (BNR) and multinucleate (MNR). The classical method divides them subsequently according to the ability of the isolates' hyphal tips to fuse with the hyphae of representative isolates of designated anastomosis groups (AGs). This method is time-