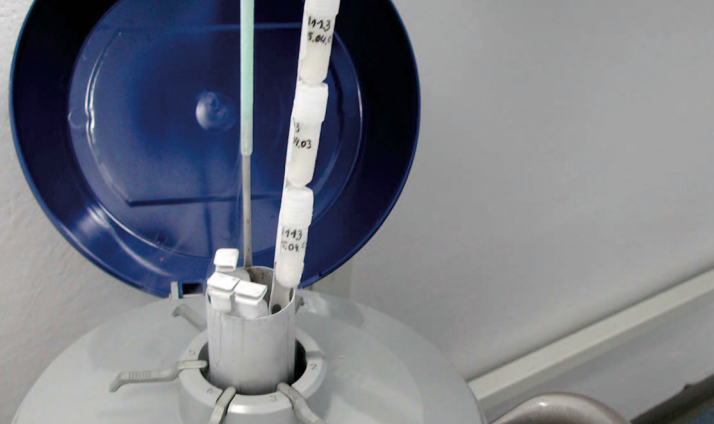


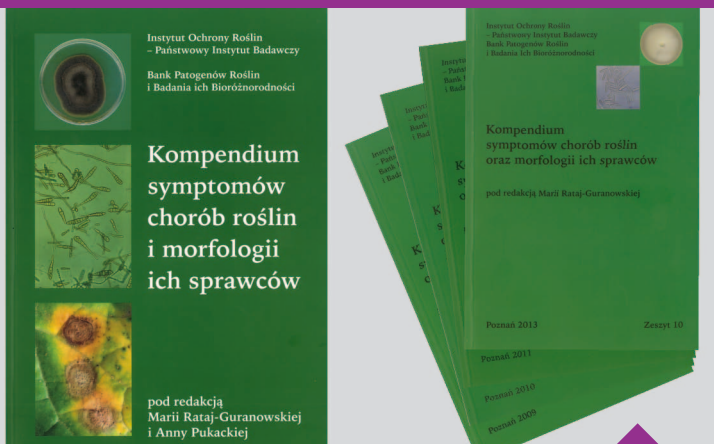
Chlamydospores of *Thielaviopsis basicola*



Pathogens frozen in the liquid nitrogen



Fungi maintained on agar slants under mineral oil



Issues of „Compendium of disease symptoms and morphology of pathogens”



Freeze-dried cultures of fungi

BANK OF PLANT PATHOGENS AND INVESTIGATION ON THEIR BIODIVERSITY

www.ior.poznan.pl



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“Management of the Bank of Plant Pathogens”



**INSTITUTE OF PLANT PROTECTION
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HISTORY

In the early 1990's, the Ministry of Agriculture and Food Economy decided to establish a Bank of Plant Pathogens in Poland in order to meet the needs of plant breeders who cultivate pathogen-resistant varieties, agricultural producers and scientific workers, practically involved in plant protection. That task was commissioned to the Institute of Plant Protection in Poznań where the Bacteriology, Mycology and Virology Departments had already been established. The project was developed within the frames of the "Genomic resources of cultivated plants" programme. The creation of a central collection of domestic phytopathogenic microorganisms, such as fungi, bacteria and viruses, practically from scratch, was a critical challenge. The arrangement for establishing of the Bank of Plant Pathogens started in 1994 and the official opening was in 1996. In 2004, the Bank's name was changed to the Bank of Plant Pathogens and Investigation on Their Biodiversity.



Laboratory room of Bank of Plant Pathogens

RESOURCES

The main objectives of the Bank of Plant Pathogens are: accumulation, preservation and maintenance of two phytopathogenic groups of microorganisms: fungi and bacteria.

The present collection contains around 1700 cultures of fungi and over 130 strains of bacteria sampled mainly from the territory of Poland (77%). The most numerous genera are represented by: *Fusarium* (22 spp.), *Phytophthora* (12 spp.), *Alternaria* (11 spp.), *Colletotrichum* (6 spp.), *Verticillium* (6 spp.) and *Sclerotinia*, *Rhizoctonia*, *Botrytis*, *Cladosporium*, *Phoma*. Among the bacteria strains the most numerous are the following genera: *Erwinia* (7 spp.), *Pseudomonas* (7 spp.), and *Clavibacter*, *Xanthomonas*, *Agrobacterium*, *Pantoea*. All these pathogens were isolated and collected by the professional staff of the Bank of Plant Pathogens or deposited by other scientific institutions. The collected pathogenic fungi and bacteria strains were isolated from vegetable, orchard and ornamental plants materials.

Each pathogen is preserved by using at least two complementary methods and has its individual computer database covering: morphological description, the size of spores and other characteristic structures illustrated by photographic documentations. The fungi are maintained on agar slants under mineral oil at 17°C, as freeze-dried samples and frozen at -80°C or -196°C in the liquid nitrogen. Bacteria are preserved on ceramic balls as kryosamples (Bacto-Protect System) at -80°C, at -196°C in liquid nitrogen or freeze-dried.

The sampled collection also includes deposited, quarantine-restricted organisms (bacteria and fungi). Because of the safety and law regulations they are maintained in The Research Center for Quarantine-Restricted, Invasive and Genetically Modified Organisms of the Institute of Plant Protection – NRI.

OFFER

All isolates of stored pathogens are available for sale or exchange without charge, on the basis of conducted negotiations. Only a written contract, signed by authorized representatives of scientific institutions or other interested units are taken into consideration and completed. Providing quarantine-restricted pathogens requires a formal permission issued by a local Inspectorate of Plant Health and Seed Inspection. The Bank of Plant Pathogens offers a payable storing service of pathogenic microorganisms for all interested parties.

The information on the pathogens maintained in the collection is available on the website:

<http://bankpat.expertus.com.pl/search/>

PUBLICATIONS

Since 2001 the volumes of „**Compendium on plant disease symptoms and morphology of casual agents**” have been published. They were mainly developed by the scientific staff of the Bank of Plant Pathogens. In 2013 a comprehensive volume was issued, covering the content of 10 earlier published volumes. A full description of 38 species of pathogenic fungi was shown, illustrated with numerous pictures.

CONTACT

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