

Taxonomy of Microorganisms and Insects and Use of Common Names of Plant Diseases for GPG2 activity 3.1

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1. General

I want to bring to your attention the <http://www.species2000.org/> website that offers a 'Catalogue of Life' which appears to be a powerful tool integrating accepted names of living organisms (virus, bacteria, fungi, etc...). It is based on a range of recognized specialized database including 'Index Fungorum'. Please consult http://www.catalogueoflife.org/annual-checklist/2007/browse_taxa.php

2. Common Names of Plant Diseases

The International Society of Plant Pathology (ISPP) website should be the reference. However, as shown on its website at http://www.isppweb.org/names_common.asp, the list is only available for banana and sugarcane. Therefore it is suggested to refer to the American Phytopathological Society lists at <http://www.apsnet.org/online/common/> when available for crops under the CGIAR mandate. Lists can easily be extracted to earmark the diseases of quarantine relevance at the CGIAR level for the safe movement of germplasm and protection of germplasm banks.

3. Viruses

As suggest at the workshop in Mexico, the International Committee for Taxonomy of Viruses should be our reference. The universal virus database of the International Committee on Taxonomy of Viruses (ICTVdB) is found at <http://www.ncbi.nlm.nih.gov/ICTVdb/index.htm>. The search tool on http://www.catalogueoflife.org/annual-checklist/2007/browse_taxa.php links to it ICTVb.

4. Bacteria

Following the guidelines of The International Society of Plant Pathology (ISPP), access <http://www.isppweb.org/index.asp> to obtain the valid names for plant pathogenic bacteria. These can be found under "resources" at http://www.isppweb.org/names_bacterial_revised.asp. This is the international standard list of accepted names of plant pathogenic bacteria. New names (after 2004) can also be found on this site at http://www.isppweb.org/names_bacterial_new.asp.

In principle, the accepted names of the ISPP should be used by Bacteriology Insight Orienting System (BIOS) <http://www.sp2000ao.nies.go.jp/english/bios/index.html> which is linked to www.species2000.org

The German Collection of Microorganisms and Cell Cultures (DSMZ) website provides a 'Bacterial Nomenclature Up-to-Date' at http://www.dsmz.de/microorganisms/bacterial_nomenclature.php

Another useful site giving a List of 'Bacterial Names with Standing in Nomenclature' is found at <http://www.bacterio.cict.fr/>

5. Fungi

As suggested during the August 2007 workshop in Mexico. 'Index Fungorum' seems the best source to refer to for valid names of fungi. It can be accessed at <http://www.speciesfungorum.org/Names/Names.asp>

The international code of botanical nomenclature permits the different states of fungi with pleomorphic life cycles to be given separate names; if a teleomorph is present, the name automatically refers to that morph even if the anamorph is also present (Hawksworth, D.L., Kirk, P.M., Sutton, B.C. and Pegler, D.N., 1985. Ainsworth and Bisby's Dictionary of the Fungi., Wallingford, UK, CAB International)

6. Insects

If an insect name needs to be verified the website that offers a 'Catalogue of Life' which appears is useful. Please consult http://www.catalogueoflife.org/annual-checklist/2007/browse_taxa.php. Browse down to the Insecta class under Animalia.

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