The Complexity of the Terminographic Processing of Phytomedical Terminology

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Project in collaboration with researchers in phytomedicine (mainly lecturers at the Faculty of Agricultural Sciences, University of Zagreb and the members of Croatian Society of Plant Protection).

Rich tradition of publishing (especially textbooks, glossaries, lexicons, scientific journals etc.).

The first attempt at systemizing Croatian phytomedical terminology using a terminology database (work with terminologists).

The Institute of Croatian Language and Linguistics has organized several workshops for phytomedicine experts in order to explain to them what the purpose and importance of terminology is and to introduce them to the fundamentals of terminographic work.
They have become aware of the fact that terminology is a special-purpose tool for communication; terminology allows communication between subject specialists and lay people; terminology uses the grammar of the standard language; terms are created according to the word-formation principles of the standard language; terms are documented and systematized in order to compile technical dictionaries, lists of terminology, or electronic term banks.

The primary aim is to promote communication in scientific and technological environments.

Concerning terminological rules, the main problem was associated with the definition of terms, specifically with its brevity and consistency.
It was difficult for them to formulate concise definitions in one sentence that include all the essential characteristics of a concept, because plant diseases have so many phases and are extremely complex to describe.

The mitigating circumstance was that any additional information can be included as a note or an example.

However, to write a definition that is clear, intelligible, and useful for the intended reader in just one short sentence was still „mission impossible”.

I began to study academic and professional phytomedical literature, including university textbooks, lexicons, scientific papers etc. and came to the conclusion that almost every plant disease consists of four elements: the symptoms, the cause of disease (parasite), the life cycle and epidemiology of parasite or the way of protecting plants from the parasite.
Definitions from other terminological databases (e.g. IATE and TERMUM Plus) were of great help.

The definition should include only information needed to properly set up the concept in the conceptual system, and in practice happened that plant disease is best and most concisely described by its *symptoms and the cause of its occurrence*.

Additional information, such as the life cycle and epidemiology of pests and protecting plants from pests, can be placed in the notes, as the most important insignificant features.

However, we need to be careful when selecting additional information, primarily because of its informativeness and relevance.
Example: *powdery mildew of grapevine* or *grape powdery mildew* (from IATE)
**Example:** *powdery mildew of grapevine* (from *Struna*)

### Definicija

Bolest vinove loze koja zahvaća sve zelene dijelove vinove loze prouzročujući pepeljaaste prevlake i oštećujući bijno likvo

### Racionalna definicija

### Istosnačnice

Dopušteni naziv: *lug, oidiom*

### Istovrijednice

- **Engleski:** *powdery mildew of grapevine*
- **Njemački:** *Echter Rebenmörtel*
- **Latinski:** *Erysiphe necator*, *Uncinula necator*, *Oidium tuckeri*

### Napomena

Latinska se istovrijednica rabi prema Schwein., a sinonim *Uncinula necator* prema (Schwe. ) Burt. Anamorf *Oidium tuckeri* rabi se prema Berk. Za razliku od planinečkih, pepelnica vinove loze češće se pojavljuje u na suhim i sušanim položajima, odnosno lijekom sušnjih godina.

### Razredba

- **Polje:** poljoprivreda (agronomija)
- **Grana:** fitomedicina
- **Projekt:** Izgradnja, odabir i usuglašavanje hrvatskog nazivja u fitomedicini
IATE definition: plant disease in which the pathogen is a growth on the host surface; a powdery mildew is caused by one of the *Erysiphaceae*

Struna definition: grapevine fungal disease that affects all green parts of the vine, causing an ashy coating and damaging the plant tissue

Croatian experts’ opinion is that the IATE definition can be applied to many plant diseases – it is too broad.

According to them, the definition should contain specific differences such as: dry bark, defoliation, root rot, death of tissue, brown-reddish spots on leaves etc.

Graphical additions, mostly photographs that show changes on the plants, are more than welcome.
Another problem that occurs are Latin equivalents – there are several of them for each concept.

Reasons:

1. most parasites, especially parasitic fungus, have an **anamorphic** or asexual stage and a **telemorphic** or sexual stage of development – each of these stages has its own Latin equivalent

2. in phytomedical literature, all Latin equivalents are always listed, as they have changed throughout the history of the study of certain plant diseases – in addition to the listed Latin equivalents there are mandatory abbreviations of the surnames of its authors, who are on the list of botanists by author abbreviation, which was created in order to cite them (e.g. **Sacc.** = Pier Andrea Saccardo).

E.g. Latin names for **powdery mildew of grapevine**: *Erysiphe necator, Uncinula necator* and *Oidium tuckeri*. 
- *Erysiphe necator* and *Uncinula necator* are the names for the telemorphic (sexual) stage; *Oidium tuckeri* is the name for the anamorphic (asexual) stage.

- **In the literature:** *Erysiphe necator* (synonym *Uncinula necator* [Schwein.] Burr.; anamorph *Oidium tuckeri* Berk.)
  
  **Schwein.** = Lewis David von Schweinitz (1780–1834)
  **Berk.** = Miles Joseph Berkeley (1803–1889)

- Phytomedicine experts agree that the list of Latin synonyms should be shortened (one of the solutions is to use only the latest Latin names).

- In the meantime, this information can be placed in the notes in the terminology database.
**Conclusion** - how definitions of plant diseases should look (the elements of the definition):

1. plant species that is affected (e.g. grapevine)
2. the cause of the disease (parasite) and its Latin name* (e.g. fungi *Erysiphe necator* or genus)
3. symptoms (affects all green parts of the vine, causing an ashy coating and damaging the plant tissue).

* Latin names* (with their authors) and additional information on the plant disease can be placed in the notes because it is very important to experts.

*Struna provides a special field for Latin names and their synonyms.*
Thank you for your attention.

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