

Ontology building with ROC+

How to make your computer applications as smart as you are

Mari Wigham, Nicole Koenderink, Dena Tahvildari, Jan Top

Too much data

Ontologies

ROC+

Smart software

The problem: Too much data

Making correct decisions is difficult:

- finding the right data
- understanding where it came from
- combining it with other data correctly

The answer: Ontologies

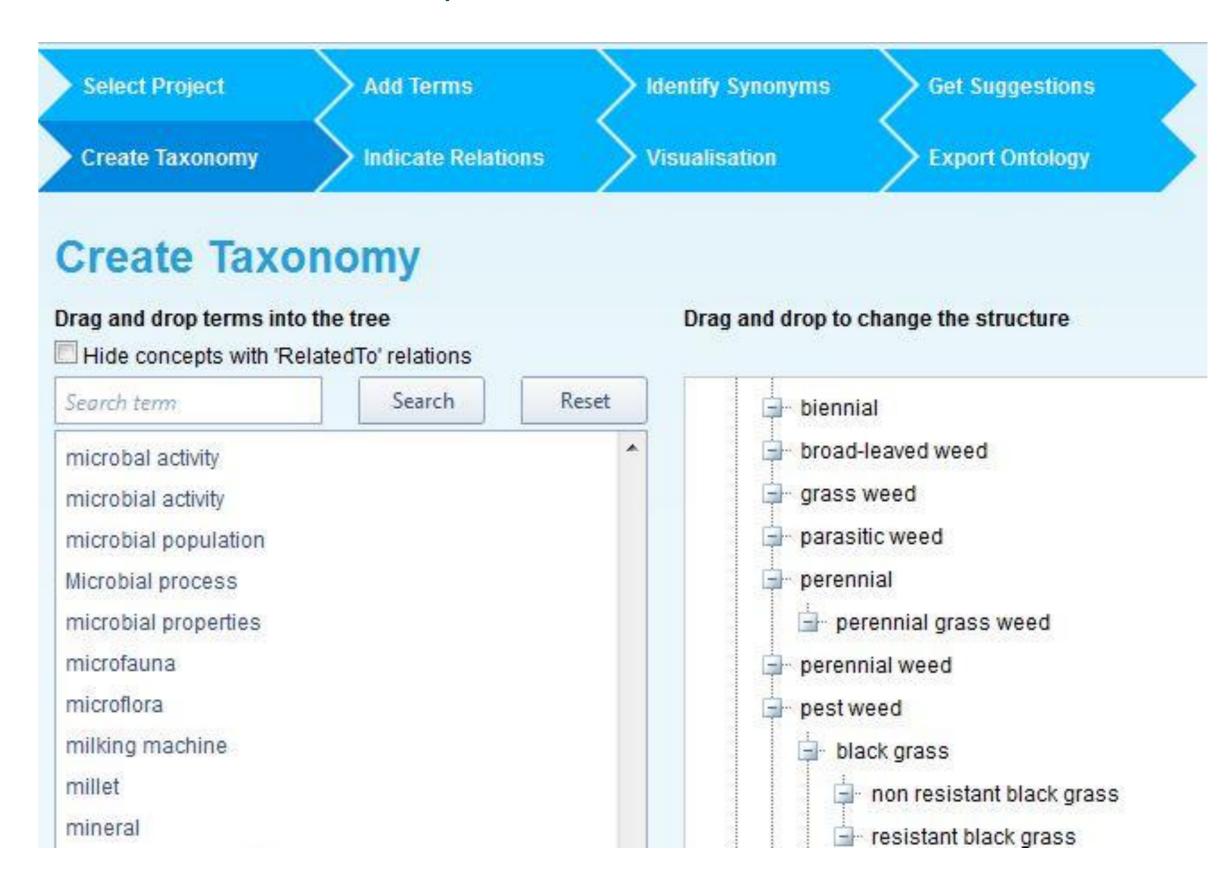
Ontologies make valuable background knowledge explicit. Software based on an ontology is smarter.

Search tools find more relevant results, and apps can combine knowledge from different sources to give a complete answer.

Unfortunately, ontology construction is difficult and time-consuming, leading to a shortage of good ontologies.



Domain experts at work in a ROC+ session



Structuring terms in ROC+

The method: ROC+

- Quick and easy ontology creation by domain experts
- Inspiration from existing ontologies and documents
- An easy-to-use web application for structuring terms
- Support for multiple languages

The result: smart software

We have applied the ROC+ method in many smart software tools. For example, <u>ask-Valerie.eu</u> allows agriculture practitioners to easily access scientific knowledge about innovations.

We believe that ROC+ will greatly improve the range and quality of ontologies, leading to far more smart software applications in the future.







