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## **C5.48 Workshop report on strategy for descriptive data tools as cross-cutting instrument for revisionary taxonomy**

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<b>PP</b>	Restricted to other programme participants (including the Commission Services)	
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## Workshop “Strategy for descriptive data tools as cross-cutting instrument for revisionary taxonomy”, February 7, 2008 at the ETI Amsterdam

**Participants:** Xavier Aubriot, Marc Brugman, Marküs Döring, Marina Ferrer, Gijswijt Gideon, Mircea Giurgiu, Gregor Hagedorn, Matus Kudela, Elise Kuntzelmann, Óna Maiocco, Stefano Martellos, Aurélien Miralles, Pier Luigi Nimis, Jozef Plachy, Tina Randlane, Andres Saag, Peter Schalk, Andre Schuiteman, Tomi Trilar, Huub Veldhuijzen, Régine Vignes, Ed de Vogel, Gisela Weber.

### Minutes

The meeting was divided into two sessions:

- Presentation of several taxonomic software tools;
- General discussion about descriptive tools and future tasks and action

#### **Session 1: Overview of different taxonomic tools**

This session focused on functionalities, advantages, and drawbacks of 6 taxonomic tools:

##### 1. FRIDA – Pier Luigi Nimis:

The Frida tool was developed in the KeyToNature context. K2N is a European project started in October 2007. 14 partners from 11 EU states and 7 data providers are involved in this program.

Frida focuses on education and adapts to different types of users (from primary school to university). The main characteristics of the software are:

- A dichotomous and multi-access key interface with 2 levels of characters available (easy to observe and typical).
- Potential access on different media supports (Internet, CD or DVD-Rom, paper-printed, smart phones).
- Access to unlimited use of images, thousands of hypertextual documents, descriptions, information on taxonomy, ecology, protection status, common names.

##### 2. DiversityDescription – Gregor Hagedorn:

DiversityDescription is a fully multilingual analysis and management tool. It includes a multi-item editor. It supports movies, sounds and allows working collaboratively on the same database.

It is possible to include and to exclude characters dynamically in order to create dynamic views. The bases are exportable to Navikey (Java applet that runs on the web and doesn't support images). All Delta features are supported by DiversityDescription.

Some aspects may be improved like the identification interface that is useful for taxonomists but not appropriate for other users. The tool needs practice to make good use of all functionalities, thus more help documentation would be welcome. DiversityDescription can be used as a Delta-to-SDD converter but the SDD import is more complex.

##### 3. Delta-Intkey – Matus Kudela:

Matus Kudela built knowledge databases on black flies using the Delta-Intkey tool.

The DELTA System is an integrated set of programs based on the DELTA format: Delta Editor, IntKey, Intimate (to build interactive keys), Confor (translation between the formats), Delfor, Dist (application to produce outputs for phenetical and phylogenetical analysis), Key. Other softwares also rely on the DELTA format, amongst which: Delia, DiversityDescription, Diana, Pandora.

Delta-Intkey allows user to express uncertainty and manages numeric characters. However, keys need to be reviewed manually and the conversion from the editor to the identification mode (Intkey) is more intuitive.

#### 4. Xper2 – Ôna Maicco and Aurélien Miralles:

Ona Maiocco shared her experience on using Xper2 tool to build 6 knowledge bases on varans. It led her to the following conclusions:

Xper2 is easy to use tool, manages images and is more intuitive than Delta-Intkey. It is possible for the user to group descriptors or duplicate species with associated metadata. However, Xper2 can be improved in terms of taxonomy research: ability to integrate taxonomic changes, to represent synonymy of data (references), authors of the base (name, institution etc.), information and formation about Xper2.

#### 5. Lucid – Xavier Aubriot:

Xavier Aubriot's work consisted of building a key on the French euphorbia (15 species, 22 characters). The key should be part of the Euphorbia PBI project, a web based virtual monograph, still under development. ([www.euphorbiaceae.org](http://www.euphorbiaceae.org)). The key was built with the Lucid program. The Lucid player is free but requires a Java applet. It manages rare and misinterpreted scores. Numerical and html files can be linked. A drawback of Lucid is the fact that it is not possible to export the data to phylogenetic or phenetic matrix; the data scoring model is still under-used and it is not possible to build dichotomous keys with the Lucid Builder, but additional options are required.

#### 6. Linnaeus – Ed de Vogel:

Ed de Vogel coordinates the orchid's project in New-Guinea. He built orchids knowledge bases using the Linnaeus program. Linnaeus is composed of 3 modules:

- The Builder which manages data;
- The Runtime engine which publishes information systems;
- The Web Publisher which publishes the final project as a Web site.

The navigator window of Linnaeus gives access to a glossary, literature, an index, species, higher taxa, text key, picture key, identifyit and mapit.

### **Session 2: General discussion on descriptive tools and future tasks/actions**

The visibility on identification and taxonomy needs to be improved. The proposal creation of a network called SPIN « SPecies Identification Network » was proposed. A meeting will thus be organised in order to develop taxonomists networking, assess works and identify the international taxonomic community: taxonomists, ecologists, environmental protectors (IUCN etc.). This organisation could also answer collaboratively to requests for proposal. Suggestion was made that the meeting could be organised which takes place at the end of May. (Marc Brugman).

Communication/formation on taxonomic tools should be developed by organizing trainings on taxonomic tools and by participating to the EDIT summer course in the Mercantour/Alpes Maritimes (Régine Vignes, Elise Kuntzelmann etc).

The bdtracker website need to be developed in order to have feedbacks on taxonomic tools, a link between the bdtracker website and wikipedia has been discussed (Elise Kuntzelmann, Marküs Döring).

The building of the CDM editor which could help creating applications will be pursued (Wp5 informatics team).

Another important point would be to develop the link with TDWG standards/SDD and to assess the SDD import/export between taxonomic tools (Elise Kuntzelmann, Gregor Hagedorn?).

Elise Kuntzelmann  
Régine Vignes