The Species 2000 Protocols for a Distributed System

by Yuri Roskov, Species 2000 Secretariat
Species 2000

• Species 2000 is a federation of taxonomic databases around the world

• We are working in partnership with ITIS (Integrated Taxonomic Information System, N America) on the Catalogue of Life

• Catalogue of Life is a taxonomic checklist of all known species of the Earth
Species 2000

- The **Catalogue of Life** is available as
- **Dynamic Checklist** is an array of on-line taxonomic databases which linked to the common access system operated by SPICE software
- **Annual Checklist** is a fixed assembly of taxonomic databases as an annual edition of single database on CD and in the web
• Dynamic Checklist (2006)
✓ 26 databases (including European Hub)
✓ covers 450,000 species

• Annual Checklist (2006)
✓ 37 global species databases
✓ covers 880,000 species (over 1,050,000 in 2007)
The standard dataset has described 10 field groups related to each species:

1. **Accepted scientific name** linked to References,
2. **Synonym(s)** linked to Reference(s),
3. **Common name(s)** linked to Reference(s)
4. **Latest taxonomic scrutiny**
5. **Database title**
6. **Additional data/Comments**
7. **Family name**
8. **Classification** above family up to highest taxon
9. **Distribution data**
10. **Reference(s)**
Species 2000

Roadmap to database connection

1. Collecting metadata on each database via Sp2000 Questionnaire

2. Open on-line access to the database

3. Peer review process: 3 independent taxonomic reviews plus technical report by the Secretariat

4. Joining Species 2000 (membership of the international project)

5. Access agreement (permission for Species 2000 to include data into the Catalogue of Life)
Species 2000 Roadmap to database connection

• for Dynamic Checklist

6. Connection to one of the Species 2000 hubs via SPICE wrapper (incl. mapping fields and wrapper programming)

7. Testing the connection to the hub (technical tests & content verification)

• for Annual Checklist

8. Download from individual databases for the Annual Checklist assembly
Dynamic Checklist connection,
Architecture #1

Species 2000

20th International CODATA Conference, Session K2, 25 October 2006, Beijing
Species 2000

Annual Checklist assembly
(present procedure)

Luvie Paglinawan, Philippines
Annual Checklist assembly
(present procedure)
Species 2000

Annual Checklist assembly
(present procedure)

- Scarabaeidae DB
- Parhost
- AlgaeBase
- ILDIS

Global Species Databases

ITIS: North American species
Species 2000

Annual Checklist assembly
(present procedure)

Global Species Databases

ITIS: North American species
The Annual Checklist 2006

Species 2000

Annual Checklist assembly
(present procedure)

Global Species Databases

ITIS: North American species

Scarabaeidae DB
Parhost
AlgaeBase
ILDIS
The Annual Checklist 2007

Global Species Databases

ITIS: North American species
Species
2000
Catalogue of Life classification

CoL Management classification

Points of connection

GSD internal classification
Species 2000: Architecture # 2

Regional hubs around the World
Thank you!

y.roskov@reading.ac.uk

School of Biological Sciences
Plant Sciences Building
The University of Reading
Reading RG6 6AS,
United Kingdom