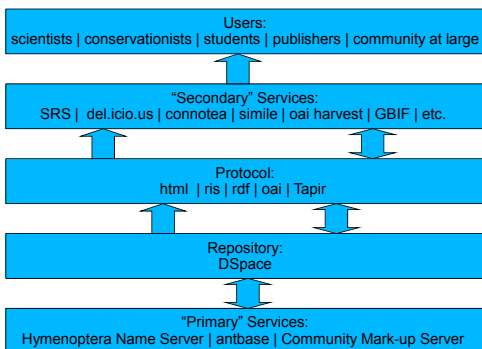
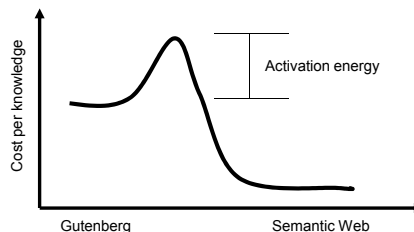


# Plazi.org: A service to provide open access to the content of the published taxonomic literature

## PLAZI

- Plazi develops tools to enhance digital scientific content, principally taxonomic literature. This can be seen as a "next wave" of open access initiatives, building on the work of current initiatives such as Internet Archive, etc...
- Plazi provides a stable repository for taxonomic literature and provides services to maximize interoperability and re-use.
- Plazi advocates for open access to scientific data, including promotion of enlightened legal and social frameworks necessary and appropriate for scholarly discourse and communication in current and emerging information environments.
- Plazi, a not-for profit association based in Switzerland, operates plazi.org



## Rationale

- Use DSpace to serve as "third party" repository/depository
- Provide stable, persistent locations for species descriptions through identifiers for publications, treatments, materials cited
- Enhance publications by refining the granularity to improve access to content: species names, specimens (geographic names and materials cited), bibliographic references, images, gene sequences, and identification keys.
- Expose data to external services via variety of channels, such as APIs or TAPIR
- Assure close integration of our work with related activities and organizations, such as GBIF, TDWG, BioGuid, BioGuid, Zoobank, Conservation Commons, ...
- Involve communities through publications, organization of training courses, and open source collaborative tools

## Taxonomic Literature

- Formal descriptions of species
- Quasi legal documents
- Species naming governed by international codes requiring both publication and citation of prior descriptions
- Rich source of data potentially beneficial to many domains (e.g., Conservation)
- Demands Open Access
- Scope: description of 1.8M species, >100M published pages, 22,000 new descriptions/year; current scope of plazi: >12,000 species, 3,400 publications, 150 enhanced xml versions, 5,600 treatments (descriptions)

**Proceratium avium** Brown, 1974  
Figs. 5-13.

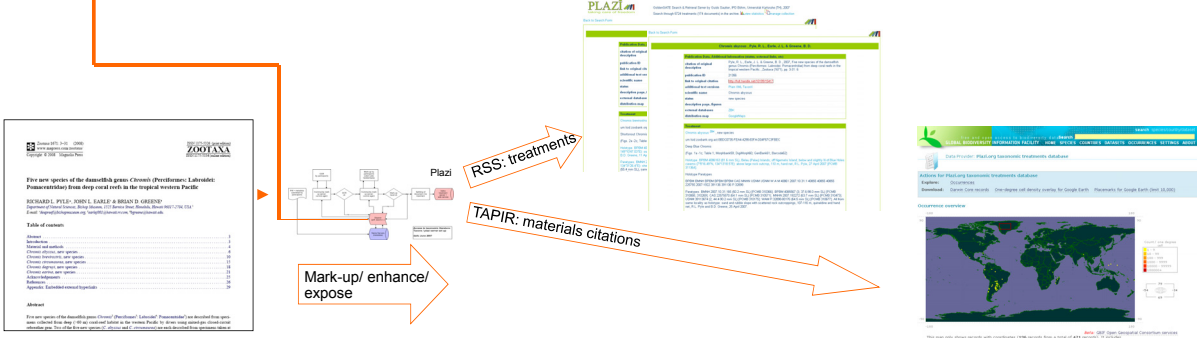
*Proceratium avium* Brown, 1974: 71, figs. 1 and 2 (worker, gyne and male). Mauritius: Le Pouce Mt, 700-800 m, Native forest, 1 Apr. 1969 (coll. W.L. Brown) [examined] AntWeb MCZTYPE32216 (MCZC) [de Andrade 2000:75]  
*Proceratium avioide* de Andrade 2003: 78, figs 37, 38 (worker, gyne and male). Mauritius: Le Pouce Mt, 700-800 m, Native forest, 30 March 1969 (coll. W.L. Brown) [examined] AntWeb MCZTYPE35017 (MCZC).  
New synonymy [see justification below]

During the trip to Le Pouce on May 25 and 30, seven new collections of *Proceratium* from Le Pouce were recorded (Table 2). Because of the small size of the forest patch, only two complete colonies were collected. For the other colonies we encountered, only a few foragers were removed. As Brown (1974) observed, foragers were returning to nests with what appeared to be spider eggs. In this case, they carried the eggs in the mandible, and did not support the eggs with the recurved gaster (Brown 1980). Baroni and de Andrade (2003) suggest the recurved gaster serves a phragmatic function, but I did not observe the recurved gaster being used to plug up the ant nest entrance.

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Mt, 700-800 m, Native forest, 30 March 1969 (coll. W.L. Brown) [examined] AntWeb MCZTYPE35017
(MCZC). New synonymy [see justification below]
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from Le Pouce were recorded (Table 2). Because of the small size of the forest patch, only two complete
```

## Workflow

A workflow has been established to mark up, enhance, and expose the content of documents to the public



- Digital documents submitted to DSpace at Plazi.org
- Community Mark-up Server creates XML TaxonX-XML document using GoldenGATE as advanced editor, and added to the respective DSpace items.
  - Identifiers are found for scientific names, bibliographic references
  - New names are entered into dedicated Name Servers (Hymenoptera Name Server and Zoobank)
  - Georeferencing of locations and issuing of LSID for materials citations

- Search and Retrieval Server imports the TaxonX-XML documents into PostgreSQL, builds indices and provides search capabilities
- Data is exposed via OAI and TAPIR protocols and pushed to services such as Antweb, Ispecies, connota, del.icio.us, etc.

**Donat Agosti (1), Terry Catapano (2), Christiana Klingenberg (3), Guido Sautter (4) & Willi Egloff (5)**

- 1 Naturmuseum der Burgergemeinde Bern, Switzerland / Plazi
- 2 Columbia University, USA / Plazi
- 3 Germany / Plazi
- 4 University of Karlsruhe, Germany
- 5 Advocomplex, Bern, Switzerland / Plazi

For further information, please contact [plazi@plazi.org](mailto:plazi@plazi.org)

Research funded by US NSF, DFG Grant BIB47 and GBIF