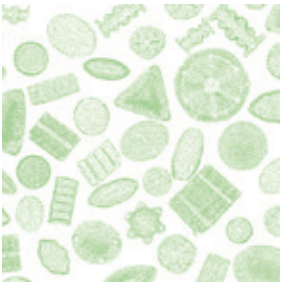
Making small data big :

What can Scratchpads do for you?



Eight case studies from the 550 communities using Scratchpads

Scratchpads
biodiversity online

http://scratchpads.eu

What are Scratchpads ?

Scratchpads is an **open source** and **free to use platform** that enables you to work in a collaborative online environment.

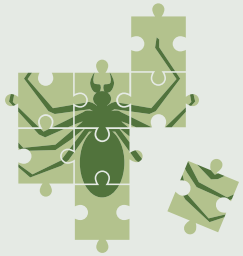
With a Scratchpad you can easily create your own website to structure, manage, link and publish your biodiversity data.

creative commons

open source

A place for your data

Create and manage different types of biodiversity data online. Scratchpads store all kinds of biodiversity data from taxonomies, media, literature and pages to species descriptions, observations, morphological and ecological traits, and more!



A link to big data

Scratchpads are built to easily share and link your data with all the major biodiversity repositories including: Encyclopedia of Life (EOL), IUCN Red List, the Global Biodiversity Information Facility (GBIF), Biodiversity Heritage Library (BHL) and the Bibliography of Life.

A collaborative environment

An extensive suite of communication tools, including forums, blogs, newsletters and content feedback allow you to nurture and sustain vital online discussions with your peers.

A publication platform

A work environment to bring together your community's data, easily compile manuscripts and directly send them to be published in a peer-reviewed and open-access journal. Take credit for all your work, no matter how big it is!

AGRICULTURE AND HORTICULTURE

Scratchpads Case Studies

Solanaceae Source

http://solanaceae.myspecies.info/

AUDIENCE

Plant taxonomists

Agricultural scientists

KEY SCRATCHPADS FEATURES USED

Botanical taxonomy

Field work pages

BRAHMS data import

Taxonomic media

Collaborator management

COLLABORATING INSTITUTIONS

The Natural History Museum London

The New York Botanical Gardens

University of Wisconsin-Madison

University of Utah Biology Department

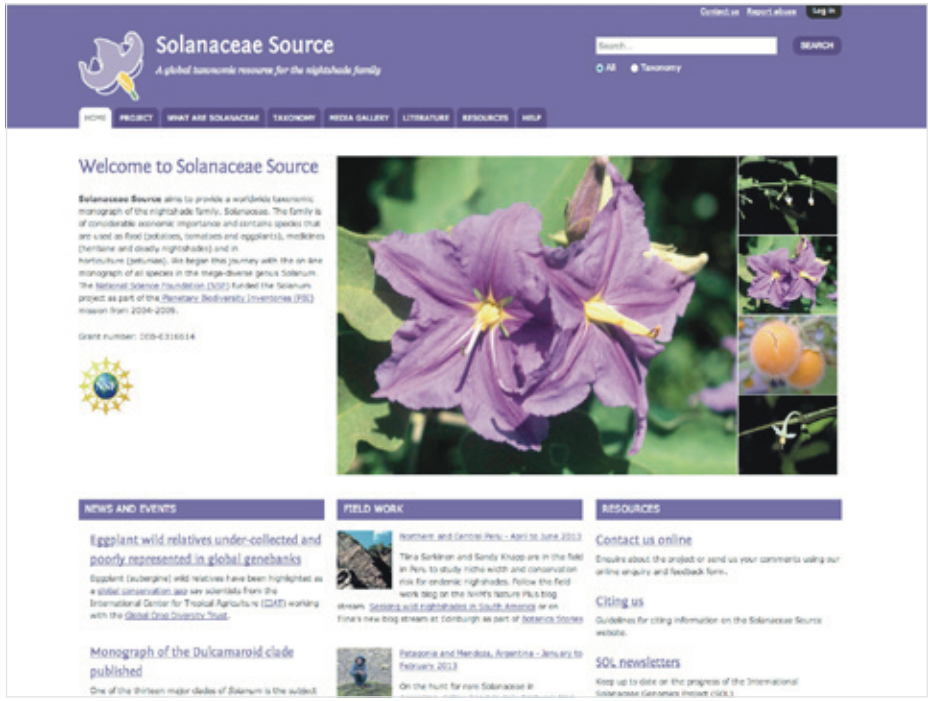
National Science Foundation

Solanaceae Source aims to provide a worldwide taxonomic monograph of the nightshade family, Solanaceae. The family is of considerable economic importance and contains species that are used as food (potatoes, tomatoes and eggplants), medicines (henbane and deadly nightshades) and in horticulture (petunias).

The incredible morphological and chemical diversity, fundamental economic importance and worldwide distribution make the Solanaceae one of the most fascinating groups of flowering plants.

The family is distributed worldwide on all continents except Antarctica. The majority of species diversity occurs in Central and South America. Members of the family are major agricultural plants such as the tomato, potato, aubergine/eggplant and chilli pepper, while others have horticultural or medicinal value.

Solanaceae Source is the result of a project aiming to produce a worldwide taxonomic monograph of the species occurring within the plant genus *Solanum*, organised by a robust phylogenetic framework.



SANDY KNAPP

Maintainer of Solanaceae Source

Sandy Knapp is a Merit Researcher and head of the Botany Division at the Natural History Museum, London. Sandy is one of the Principal Investigators of the Solanaceae project and maintainer of the Solanaceae Source Scratchpad community.

ANIMAL BIODIVERSITY

Scratchpads Case Studies

Africhthy - African Ichthyology Portal

http://africhthy.org/

AUDIENCE

Ichthyologists

Conservationists

Fishery management

Aquarists

KEY SCRATCHPADS FEATURES USED

Multi-lingual support (English/French)

Community forums

Zoological taxonomy

Scientific literature

Taxonomic media

SIMILAR OR RELATED ONLINE COMMUNITIES

Africhthy Facebook

FishBase

All Catfish Species Inventory

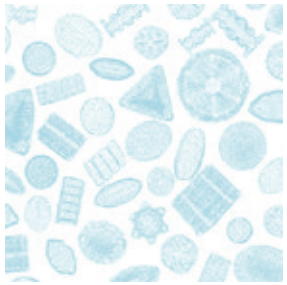
Africhthy is a web portal and information management system for African ichthyology created to allow efficient networking and collaboration.

Africhthy makes available an up-to-date taxonomy of African fishes, expert identification keys, species descriptions and images, an archive for the voluminous “gray literature” on African ichthyology, forums, newsletters for societies and projects, and a multi-authored blog highlighting new publications. The vision for Africhthy.org is to evolve into the premier African ichthyology web resource.

Africthy is one of the first sites that make use of the multi-lingual capabilities of Scratchpads. The site is making use of almost all available tools to facilitate communication between members of the community.

JOHN SULLIVAN
Maintainer of Africhthy

John Sullivan poses in front of the Doumé rapids on the Ogooué River of Gabon where some of the first freshwater fish specimens from the interior of West Central Africa were collected in the 1870s by French naturalist Alfred Marche. Sullivan revisited the site and made new collections of the fishes there in 2011.



CITIZEN SCIENCE

Scratchpads Case Studies

Diatoms Online

http://diatoms.myspecies.info/

AUDIENCE

General public

Researchers

Scientific historians

KEY SCRATCHPADS FEATURES USED

Darwin-core specimen records

Zoological taxonomy

Multi-user blogs

COLLABORATING INSTITUTIONS

The Natural History Museum London

PARTNER PROJECTS

V-Factor

SIMILAR OR RELATED ONLINE COMMUNITIES

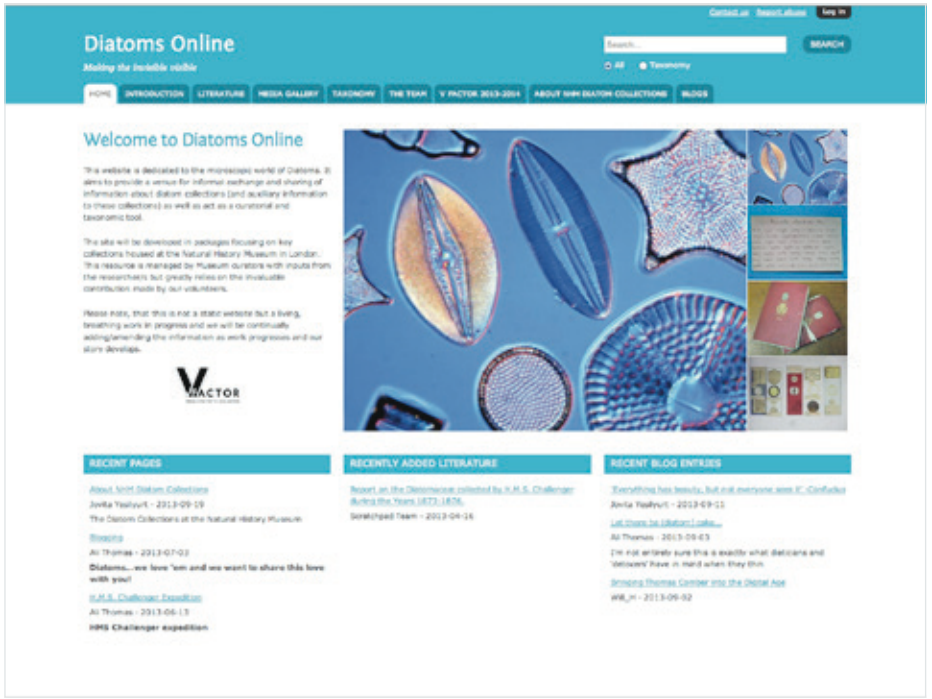
Catalogue of Diatom Names

World Register of Marine Species

Volunteers at the Natural History Museum are helping to collate Thomas Combers' diatom collection, from slides and bottles to notes and drawings as part of the V-Factor Project. This data will be used to create an all-in-one, online scientific resource for public study and research.

Diatoms Online is dedicated to the microscopic world of Diatoms. It aims to provide a venue for informal exchange and sharing of information about diatom collections (and auxiliary information to these collections) as well as act as a curatorial and taxonomic tool.

The site is being developed in packages that focus on key collections housed at the Natural History Museum, London. This resource is managed by Museum curators with inputs from the researchers but greatly relies on the invaluable contribution made by volunteers.



JOVITA YESILYURT
Co-maintainer of Diatoms Online

Jovita Yesilyurt undertaking botanical fieldwork in Brazil.

Jovita, along with Edgley Cesar and Ali Thomas manage Diatoms Online.

CONSERVATION

Scratchpads Case Studies

IUCN Sampled Red List Index for Plants

http://threatenedplants.myspecies.info/

AUDIENCE

Policy makers

Plant taxonomists

KEY SCRATCHPADS FEATURES USED

Conservation assessments

IUCN data integration

Multiple botanical classifications

Scientific literature

COLLABORATING INSTITUTIONS

The Royal Botanic Gardens, Kew, UK

The Natural History Museum London

The International Union for Conservation of Nature

SIMILAR OR RELATED ONLINE COMMUNITIES

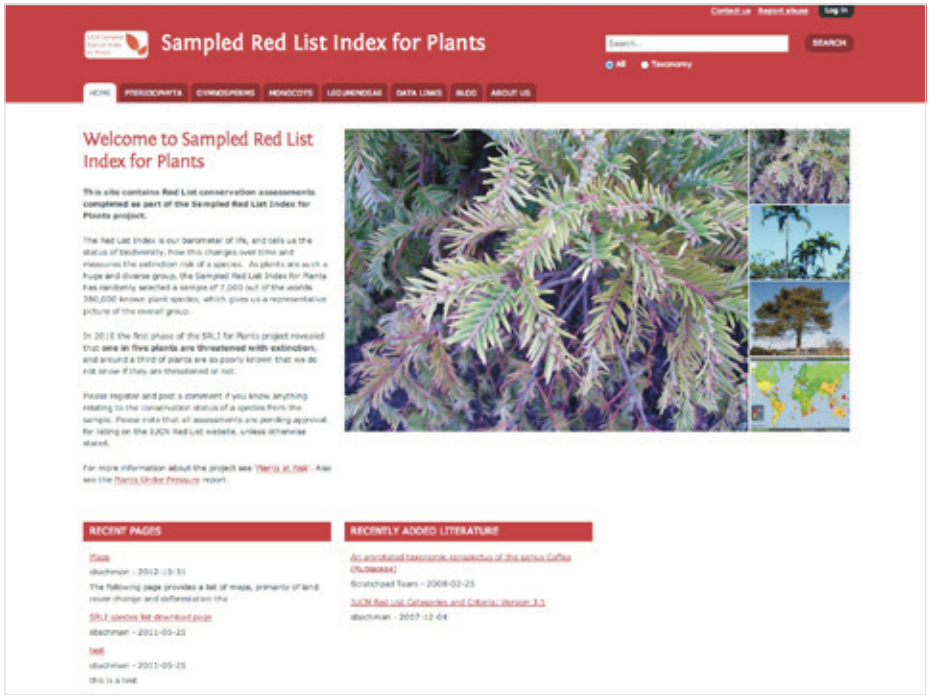
IUCN

SRLI for Plants collects vital information on plant species, including habitat, population and threats, which are used to determine risk of extinction. This is part of an ongoing monitoring effort to help understand the status and trends of plant species over time.

The Red List Index is our barometer of life, and tells us the status of biodiversity, how this changes over time and measures the extinction risk of a species. As plants are such a huge and diverse group, the IUCN Sampled Red List Index for Plants has randomly selected a sample of 7,000 out of the worlds 380,000 known plant species, which gives us a representative picture of the overall group.

In 2010 the first phase of the SRLI for Plants project revealed that one in five plants are threatened with extinction, and around a third of plants are so poorly known that we do not know if they are threatened or not.

For the Convention on Biological Diversity 'Aichi' Biodiversity Targets of 2020, the project aims to reassess these species as part of an ongoing global monitoring effort, so threats and trends in the status of plants can be understood.



SRLI TEAM
Maintainers of IUCN Sampled Red List Index for Plants

Members of the SRLI team on a recent field trip to Madagascar. The aim of the trip was to test the methods and protocols for Phase II of the project.

INVASIVE SPECIES

Scratchpads Case Studies

Antkey

http://antkey.org/

Antkey is a community resource for the identification of invasive, introduced and commonly intercepted ant species from across the globe.

Ants are conspicuous components of most terrestrial ecosystems. Ants are important predators, scavengers, granivores, and in the new world, herbivores. Ants also engage in an astonishing array of associations with plants and other insects, and can act as ecosystem engineers as agents of soil turnover, nutrient redistribution, and small-scale disturbance.

The antkey site is a comprehensive online resource for invasive and introduced ants. It includes taxa descriptions, images and links to other external resources for taxa belonging to 8 subfamilies. The site also has georeferenced data for more than 14,000 specimen records that, along with data coming from GBIF, generate well supported occurrence maps. The site also makes extensive use of the Glossary module providing illustrations and descriptions for more than 350 terms for ant anatomy and morphology. Antkey is also translated in Chinese, Indonesian and Thai.

AUDIENCE

Policy makers

Scientists

KEY SCRATCHPADS FEATURES USED

Multi-lingual support (English/Chinese/ Indonesian)

Anatomical glossary

Species occurence maps

COLLABORATING INSTITUTIONS

USDA Center for Plant Health Science and Technology (CPHST)

University of Illinois

School of Integrative Biology

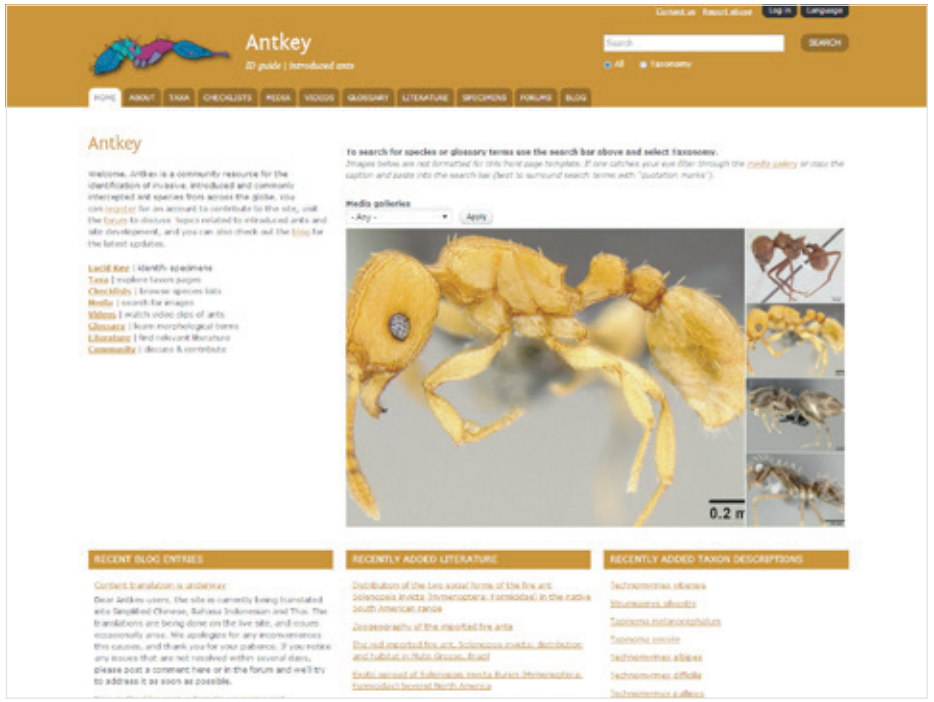
Encyclopedia of Life

SIMILAR OR RELATED ONLINE COMMUNITIES

Invasive Alien Species Information Services

AntCat

AntWeb



ELI SARNAT
Maintainer of Antkey

Eli Sarnat is the maintainer of the Antkey Scratchpads community. He is a Research associate in the California Academy of Sciences, San Francisco and Manager of Antwork Consulting, LLC

PLANT BIODIVERSITY

Scratchpads Case Studies

Arctic Flora of Canada and Alaska

http://arcticplants.myspecies.info/

AUDIENCE

Botanists

Citizen scientists

Conservation managers

KEY SCRATCHPADS FEATURES USED

Botanical taxonomy

Custom pages

Embedded custom Google maps

COLLABORATING INSTITUTIONS

Canadian Museum of Nature

SIMILAR OR RELATED ONLINE COMMUNITIES

Flora of Zwimbabwe

Australian Grasses

The Arctic Flora of Canada and Alaska project aims to produce a new flora for all vascular plants in the Arctic ecozone in Canada and northern Alaska.

The Arctic Flora research team includes scientists from Canada, Alaska and Norway who share common interests in plants, their taxonomy, and the Arctic. They work at museums, government departments and universities. The Scratchpad site is used to move the Flora beyond the printed page, and to produce treatments that are digital and interactive, taking full advantage of web and database technologies.

The Arctic Flora will eventually serve as the reference for anybody who requires accurate and up-to-date information on Arctic plant species, needs or wants to identify Arctic plants in the field or herbarium, or wants to know a little bit more about the amazing plant biodiversity in one of North America's most climate-threatened ecosystems. This site will be updated with Flora content on an ongoing basis.

JEFFERY SAARELA
Co-Maintainer of Arctic Flora of Canada and Alaska

Jeffery Saarela is a research scientist in the Canadian Museum of Nature. Jeffery is one of the maintainers of the Arctic Flora of Canada and Alaska site.

SOCIETY

Scratchpads Case Studies

The International Heteropterists' Society

http://ihs.myspecies.info/

AUDIENCE

Amateur entomologists

Professional entomologists

Educators

KEY SCRATCHPADS FEATURES USED

Private organisational groups

Group communication tools

Scientific literature

Zoological taxonomy

Taxonomic media

SIMILAR OR RELATED ONLINE COMMUNITIES

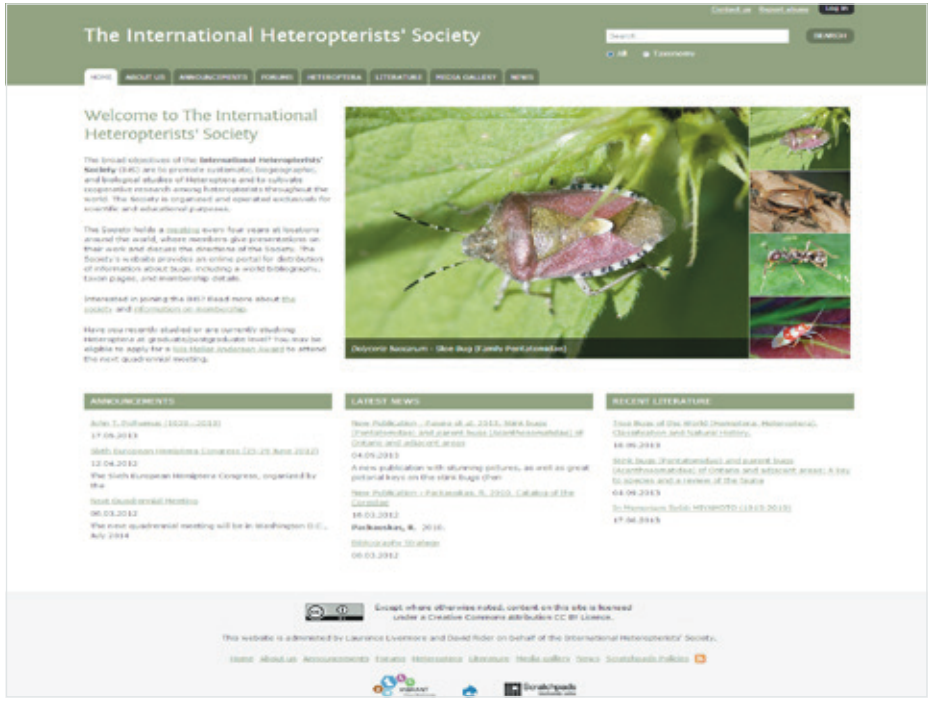
Phasmid Study Group

The site for the International Heteropterists' Society, where anyone can search for authoritative information on Heteroptera and take part in society activities.

The broad objectives of the International Heteropterists' Society (IHS) are to promote systematic, biogeographic, and biological studies of Heteroptera and to cultivate cooperative research among heteropterists throughout the world. The Society is organized and operated exclusively for scientific and educational purposes.

The Society's website provides an online portal for distribution of information about bugs, including a world bibliography, taxon pages, and membership details.

The Society holds a meeting every four years at locations around the world, where members give presentations on their work and discuss the directions of the Society.



IHS MEMBERS
Users of the International Heteropterists' Society Scratchpad

Members of the International Heteropterists' Society during fieldwork in China during the last quadrennial society meeting in July 2010.

SYSTEMATICS

Scratchpads Case Studies

Mosquito Taxonomic Inventory

AUDIENCE

Mosquito systematists

Infectious disease specialists

KEY SCRATCHPADS FEATURES USED

Anatomical glossary

Zoological taxonomy

Taxonomic media galleries

Scientific literature

COLLABORATING INSTITUTIONS

The Natural History Museum, London

SIMILAR OR RELATED ONLINE COMMUNITIES

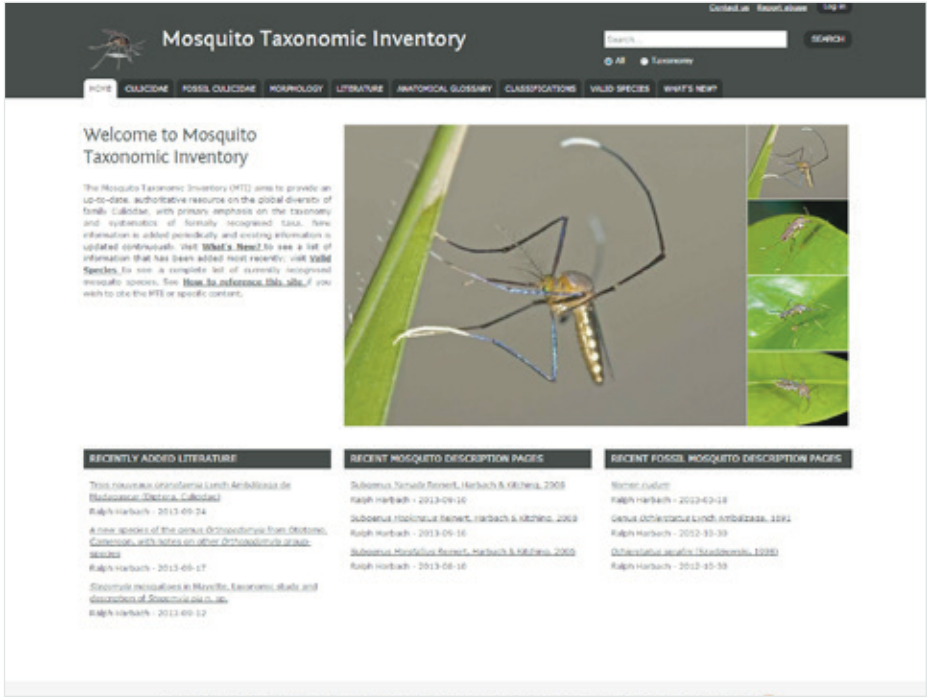
European Mosquito Bulletin

http://mosquito-taxonomic-inventory.info/

The Mosquito Taxonomic Inventory (MTI) aims to provide an up-to-date, authoritative resource on the global diversity of family Culicidae, with primary emphasis on the taxonomy and systematics of formally recognised taxa.

Mosquitoes, family Culicidae, belong to the order Diptera, the two-winged flies. The family is a large and abundant group which occurs throughout temperate and tropical regions of the world, and well beyond the Arctic Circle. The family includes 3,530 species classified in two subfamilies and 112 genera.

The mosquito taxonomic inventory is a comprehensive online resource providing taxonomic treatments and descriptions for around 200 different taxa. An extended anatomical glossary with around 1500 terms is also included.



RALPH HARBACH
Maintainer of Mosquito Taxonomic Inventory

Ralph Harbach is a Merit Researcher at the Natural History Museum, London and the maintainer of the mosquito taxonomic inventory Scratchpad site. Ralph is working on taxonomy, phylogeny and classification of mosquitoes as well as integrated systematics of disease vectors.

How to get a Scratchpad

http://scratchpads.eu

1. Go to http://scratchpads.eu

2. Click Create a Scratchpad

Acknowledgements

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  ViBRANT (http://vbrant.eu)

  A consortium of 17 partners in nine countries led by the Natural History Museum, London.

  Contract no. RI-261532

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  e-Monocot (http://emonocot.org)

  A consortium of:

  The Royal Botanic Gardens, Kew; Oxford University and the Natural History Museum, London.

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http://scratchpads.eu

Create ▪ Publish ▪ Contribute ▪ Collaborate