

Naturalis: a mity collection

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Naturalis

The National Museum of Natural History, Naturalis in Leiden, The Netherlands, was founded in 1820. Its first director and curator was Coenraad Jacob Temminck. Since then, the museum collection, holding many type specimens, has grown to about 12 million objects, of which more than half consists of insects and allied groups.

The majority of the museum collection is stored in a twenty stories tower, with separate compartments for wet and dry collections, where temperature and humidity are controlled.

The mite collection



The body of the mite collection is formed by the private collections of Oudemans and Lukoschus and of the collection of Van der Hammen. The collection consists of two main subsections:

- a dry collection, consisting of 75,000 slides;

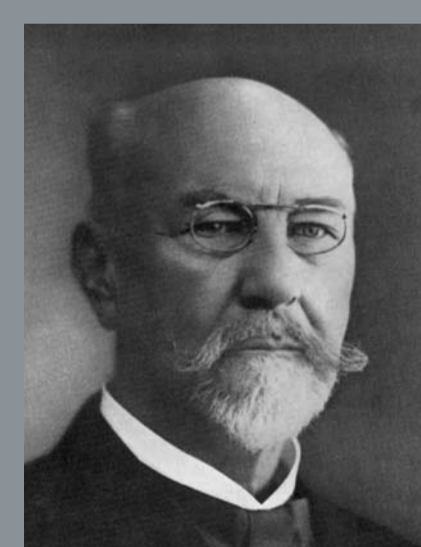
- a wet collection, consisting of 5000 samples.

Apart from this, there is associate material, like original plates made by Oudemans.

The main part consists of the dry collection, composed of 75,000 slides, which are stored in drawers in wooden cabinets. These mites originate from all parts of the world and were collected mainly between 1890-1990. The wet collection consists of about 5000 samples, containing mites from various parts of the world, mainly collected after 1950. All these samples are stored in glass vials in alcohol (and some in lactic acid).

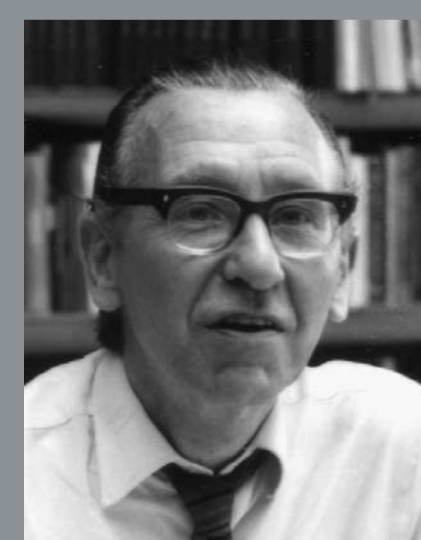
The slides from the Oudemans collection have all been scanned and are available in jpeg-format.

In October 2005 an inventory of types in the collection was initiated. The resulting list will be published on internet and, possibly, as a paper catalogue.



Oudemans

Dr Antonie Cornelis Oudemans (12 November 1858 - 14 January 1943) was born in Batavia (now Jakarta). He was a teacher by profession and lived in various parts of The Netherlands, where he actively collected mites. Oudemans donated his collection to the Leiden museum. It contained almost 6000 slides, belonging to 1316 different species. After his death the museum also received the original 2045 plates.



Van der Hammen

Dr Leendert van der Hammen was born in Schiedam, The Netherlands, on 14 April 1921. He worked as curator of Arachnoidea in the Leiden museum until his retirement in 1986. His main interest was oribatid mites, not only in The Netherlands but also, for instance, in New Guinea.

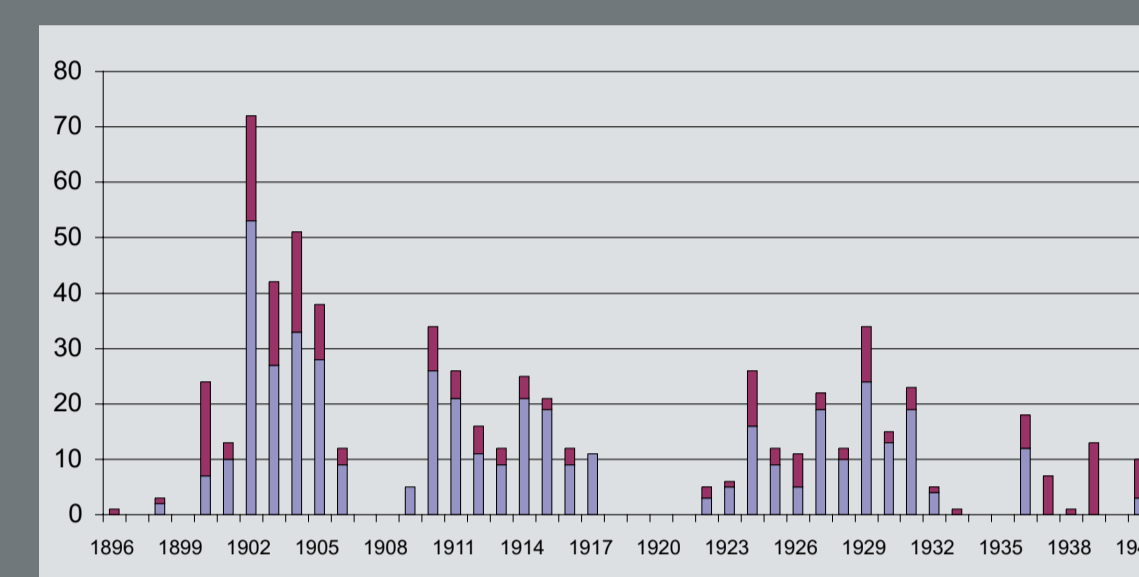


Lukoschus

Dr Fritz S. Lukoschus (27 April 1919 - 23 August 1987) was born in Grabstein, presently in Lithuania. He worked as a biologist at the Catholic University of Nijmegen, The Netherlands. He was especially interested in parasitic mites, which he not only collected during expeditions, but also brushed off mammal- and bird skins in museums. He described some 850 new species, many of which together with Alexander Fain. His mite collection was donated to the Leiden museum and contains approximately 64,000 slides.

Type registration

Many types are being loaned by mite specialists and, hence, the registration of types in the Leiden museum is especially important. The registration resulted, up till now, in a list of over 4300 certain or possible types, among which 460 holotypes or lectotypes and seven neotypes



Mites described by Oudemans. blue = present in RMNH-collection, red = not located (yet)

Challenges

A major problem we encounter is the lack of a list of all species names of mites, including synonyms. Because of this, many slides are now being stored under old, possibly even invalid, names and may be located only by coincidence.

Part of the Van der Hammen collection consists of samples containing a mixture of specimens. Although the species names per sample can be found on a card system, they can only be recognized by an expert. This collection holds many types.

Lukoschus stored part of his mites in tiny vials with liquid. These have not been surveyed yet and require an expert's eye.

A large part of the Lukoschus slides have no label at all! They have been stored together with the labelled slides they were found with, but this may be completely erroneous.

Many slides are in bad shape and are in need of restoration.

Mite specialists are invited to visit our collection. See www.naturalis.nl for details, or send an e-mail to collectie@naturalis.nl for loans.



The original drawing and slides of *Varroa jacobsoni* by Oudemans, who described this species new to science in 1904 from '*Apis indica*' (now *A. cerana indica*) from Java. *Varroa jacobsoni* only recently appeared not to be the major pest of honey bees *A. mellifera*: that species has been named *Varroa destructor* Anderson & Trueman, 2000.

