

The Syrphidae (Diptera) from Baltic Amber



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the Syrphids from Baltic Amber

contents


- an outline of the previous research
- an overview about the knowledge
- the target of my research



the previous research

Hermann Loew (1807-1879)

„Man kann diese Familie keineswegs artenarm nennen, aber zur Bestimmung brauchbare Stücke sind selten und auch diese wollen sich nicht recht gut in die üblichen Gattungen einreihen lassen“




the previous research

Fernand Anatole Meunier (1868-1926)

• described 1902-1904 six species

Tabelle der hypothetischen Entwicklung einer Syrphiden-Gruppe.





Mutmaßliche Urform: Kokave Gesicht mit Höcker in der Gesichtsmittle. Hinterleib eiförmig.

the previous research

Frank Montgomery Hull (1901-1982)

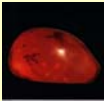

- described 1945 28 taxa
- Put all the species 1949 in a system of Syrphidae

the previous research

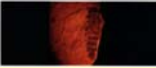
additional scientists

- Cockerell (1 new species 1910)
- Röder (1 new species 1980)
- Evenhuis (catalogue of the fossil Syrphids, 2 new names for genera)

Catalogue of the FOSSIL FLIES of the WORLD (Insecta: Diptera)

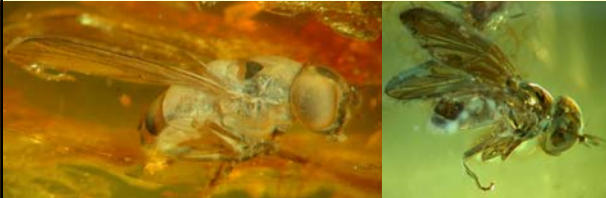
by Neal L. Evenhuis



The current knowledge

species and genera

- 36 described taxa (31 species)
- 16 genera (3 are recent)




the current knowledge

phylogenetical classification of the genera according to Hull (1949)

<i>Cheilosinae</i>	
† <i>Liomyodia</i>	- 1
† <i>Palaeopipiza</i>	- 1
† <i>Arctolepta</i>	- 1
<i>Cheilosia</i>	- 5
† <i>Eoxylota</i>	- 1
† <i>Cheilosialepta</i>	- 1
<i>Myolepta</i>	- 5
† <i>Palaeoascia</i>	- 3
† <i>Pseudopipiza</i>	- 2
† <i>Sericolepta</i>	- 1
† <i>Spheginascia</i>	- 1
† <i>Palaeosphegina</i>	- 4
† <i>Pseudosphegina</i>	- 2
<i>Xylotinae</i>	
† <i>Megaxylota</i>	- 1
<i>Volucellinae</i>	
† <i>Praeptilocephala</i>	- 1
<i>Syrphinae</i>	
<i>Syrphus</i>	- 1


the current knowledge

larvae



the current knowledge


determination



The current knowledge

problems

- poor definition of the genera (e. g. *Cheilosia* - *Myolepta*)
- the species diagnose is usually not useful (e. g. characters of the colouration)
- the type material of at least 20 species is lost
- the position of the genera within the Syrphids is not clear



preview

determination of the available specimens



