

Systematic entomology I

Year 4.,5.
9 credits

Winter semester

lecture 104 hours/semester

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Annotation

Review of higher classification, relationships and phylogeny of Hexapoda taxa and Insecta taxa, except Oligoneoptera (see Systematic entomology II). Introduction to palaeoentomology. Characterization of world entomofauna from all orders mentioned above, from morphological, biological, ecological and economical point of view. Advanced course from systematic entomology obligatory for specialization Entomology, precondition or parallelly – General entomology.

Syllabus

Relationships, phylogeny and higher classification of Hexapoda, Insecta, and all insects orders and groups except Oligoneoptera.

Different types of insect metamorphosis, general review of reproduction and biology. Introduction to palaeoentomology.

Morphological, biological, and ecological characterization, and higher classification of individual orders and groups:

Hexapoda, Parainsecta = Ellipura, Protura, Collembola, Campodeina, Japygina.

Insecta, Monocondylia, Archaeognatha, Dicondylia, Zygentoma.

Pterygota, Palaeoptera, Ephemeroptera, Odonata.

Perloidea, Plecoptera, Embioptera, Dermaptera.

Blattopteroid complex, Isoptera, Blattoptera, Mantodea.

Orthopteroid complex, Grylloblattodea, Phasmatodea, Ensifera, Caelifera.

Paraneoptera, Zoraptera, Acercaria, Psocodea, Psocoptera, Phthiraptera, Amblycera,

Ischnocera, Anoplura, Rhynchophthirina.

Condylognatha, Thysanoptera, Hemiptera, Coleorrhyncha, Heteroptera, Archaeorrhyncha, Clypeorrhyncha, Sternorrhyncha.

References

BORROR D. J. TRIPLEHORN C. A. & JOHNSON N. F. 1989: *An introduction to the study of Insects. Sixth edition.* Philadelphia, Ft. Worth, Chicago, San Francisco, Montreal, Toronto, London, Sydney, Tokyo: Saunders College Publishing, xiv+875 pp.

BUCHAR J., DUCHÁČ V., HŮRKA K. & LELLÁK J. 1995: *Klíč k určování bezobratlých [Key to identification of invertebrates]*. Praha: Scientia, 285 pp.

CSIRO (eds): *The Insects of Australia. A textbook for students and research workers. Second edition. Volume 1 +2.* Melbourne University Press, Carlton, 1137 pp.

GULAN P. J. & CRANSTON P. S. 1994: *The insects: an outline of entomology.* 4th edition. London, Weinheim, New York, Tokyo, Melbourne Madras: Chapman & Hall, xiv+491 pp.

HŮRKA K. & ČEPICKÁ A. 1978: *Rozmnožování a vývoj hmyzu.* Praha: Státní pedagogické nakladatelství, 223 pp.