In my thesis I have focused on the alpha-taxonomy of two poorly known beetle families Eulichadidae and Callirhipidae occurring predominantly in forests of tropical areas. Both families are classified as incertae sedis within the series Elateriformia.

The small elateriform family Eulichadidae comprises of two extant genera: the monotypic Californian genus *Stenocolus* LeConte, 1853, and the predominately Oriental genus *Eulichas* Jacobson, 1913, with 42 described species. The larvae of both genera are aquatic, while the adults live on vegetation near water, and especially the genus *Eulichas* is often attracted at light.

Altogether 182 taxa at the species level belonging to six genera are currently classified in the family Callirhipidae. Members of the family occur mainly in tropics of Oriental, Australian and Neotropical zoogeographical regions. Larvae feed on rotten wood, adults are collected on dead tree trunks, but most of all they are attracted at light.

REVISION OF THE GENUS EULICHAS JACOBSON, 1913 (COLEOPTERA: EULICHADIDAE) I. INTRODUCTION, MORPHOLOGY OF ADULTS, KEY TO SUBGENERA AND SPECIES GROUPS, AND TAXONOMY OF E. FUNEBRIS SPECIES GROUP [1 – see list of publications]

First part of the revision summarizes our knowledge about the genus *Eulichas*. It contains a detailed morphology of adults, and keys to identification of subgenera and species groups of the genus. The taxonomy of the *E. funebris* species group is revised in detail. The group is characterised by the long and slender phallobase, which is distinctly longer than the parameres, and by the long basal parameral apophysis. The group contains 16 species, including following nine newly described species: *E. birmanica* Hájek, sp. nov. (Myanmar: Tenasserim), *E. haucki* Hájek, sp. nov. (Thailand), *E. jaechi* Hájek, sp. nov. (Malaysia), *E. janbezdeki* Hájek, sp. nov. (Laos); *E. kubani* Hájek, sp. nov. (Laos, Vietnam), *E. meghalayensis* Hájek, sp. nov. (India: Meghālaya), *E. minuta* Hájek, sp. nov. (Sumatra, Nias, Siberut), *E. strbai* Hájek, sp. nov. (Malaysia), and *E. tanahrata* Hájek, sp. nov. (Malaysia). A lectotype is designated for *Lichas mediocris* Pic, 1921 (Sumatra). Diagnostic characters are illustrated for all mentioned species. For taxonomic purposes and for better orientation within the genus, the group is divided to five species complexes.

A NEW SPECIES OF EULICHAS (COLEOPTERA: EULICHADIDAE) FROM LAOS [2]

Eulichas pantherina sp. nov. is described from two localities in southern, and north-eastern Laos respectively. The new species belongs to the *E. pacholatkoi* species complex of the *E. funebris* species group, and can be distinguished by the different shape of male genitalia. *Eulichas pantherina* sp. nov. has a lanceolate median lobe and parameres with a very small subapical hook moved to the midlength of the paramere. The key to identification of species of the *E. pacholatkoi* species complex is updated to include the newly described species. New

distributional data are published for the following species: *Eulichas haucki* Hájek, 2007, and *E. pacholatkoi* Jäch, 1995, from Laos, and *E. kubani* Hájek, 2007, from Thailand.

REVISION OF THE GENUS EULICHAS JACOBSON, 1913 (COLEOPTERA: EULICHADIDAE) II. E. DUDGEONI SPECIES GROUP [3]

In the second part of the revision of the genus *Eulichas*, the *E. dudgeoni* species group is revised. The group is characterised by a relatively broad phallobase, which is about the same length, or slightly shorter than the parameres, and by the short basal parameral apophysis. The group contains 21 species, including following 11 newly described species: *E. alesbezdeki* Hájek, sp. nov. (Laos, Vietnam), *E. jakli* Hájek, sp. nov. (Indonesia: Kalimantan), *E. oborili* Hájek, sp. nov. (Thailand), *E. robusta* Hájek, sp. nov. (Malaysia), *E. sausai* Hájek, sp. nov. (Indonesia: Sumatra, Malaysia), *E. serricornis* Hájek, sp. nov. (Malaysia), *E. siamensis* Hájek, sp. nov. (Laos, Thailand, Vietnam), *E. similis* Hájek, sp. nov. (Laos, Thailand), *E. sundaensis* Hájek, sp. nov. (Indonesia: Sumatra, Java), *E. villosa* Hájek, sp. nov. (Malaysia: Sabah), and *E. wewalkai* Hájek, sp. nov. (Nepal). *E. baeri* (Fairmaire, 1898) is synonymised with *E. baeri* var. *innotatus* Pic, 1924 syn. nov. Lectotypes are designated for *Eulichas baeri innotatus* (Luzon), and *Lichas subocellata* Fairmaire, 1898 (Kinabalu) Diagnostic characters are illustrated for all mentioned species. For taxonomic purposes and for better orientation within the genus, the group is divided to three species complexes.

EULICHADIDAE & CALLIRHIPIDAE. IN: CATALOGUE OF PALAEARCTIC COLEOPTERA, VOLUME 3, SCARABAEOIDEA - SCIRTOIDEA - DASCILLOIDEA - BUPRESTOIDEA – BYRRHOIDEA [4, 5]

Within the third volume of Catalogue of Palaearctic Coleoptera, members of the elateriform families Eulichadidae and Callirhipidae are catalogued. Altogether 11 species of the family Eulichadidae are known from territories of northern India, Nepal, Bhutan and China; and 16 species of the family Callirhipidae are known from territories of northern India, Nepal, southern China, Taiwan and Japan. Following new nomenclatoric acts in the family Callirhipidae are established: The study of the type material revealed that *Callirhipis pinguis* Fairmaire, 1887 syn. nov. is based on female, while *C. maculosa* Fairmaire, 1887 syn. nov. on a male of *C. dissimilis* C. O. Waterhouse, 1877, and represent therefore its junior subjective synonyms. The single type specimen of *Horatocera niponica* var. *galloisi* Pic, 1932 syn. nov. represents only a colour variation of *Simianus niponicus* (Lewis, 1895). According to previously published synonymy of the genus *Horatocera* Lewis, 1895 with the genus *Simianus* Blanchard, 1853, following taxa are introduced in new generic combinations: *Simianus niponicus* (Lewis, 1895) comb. nov., *S. oshimanus* (Nakane, 1973) comb. nov., and *S. rubricollis* (Pic, 1916) comb. nov. *Homoeorhipis mesomelaena* Fairmaire, 1887 is designated as the type species of the genus *Homoeorhipis* Fairmaire, 1887.

A TAXONOMIC REVIEW OF THE CALLIRHIPIDAE (INSECTA: COLEOPTERA: ELATERIFORMIA) OF THE AFROTROPICAL REGION [6]

Only two species of the family Callirhipidae have been described from the Afrotropical zoogeographical region. *Callirhipis philiberti* Fairmaire, 1891 from the Seychelles is redescribed based on the type specimen and recently collected material. It is associated with the Oriental *C. dissimilis* species group. Oceanic dispersal is considered as the most probable explanation of its occurrence in Seychelles. A study of the type specimen of the enigmatic Madagascan species *C. hovana* Fairmaire, 1901 revealed, that it is in fact a member of the family Elateridae, subfamily Cebrioninae, and is conspecific with *Hemiopinus hildebrandti* Fairmaire, 1883. Therefore *C. hovana* syn. nov. is here regarded as a junior subjective synonym of *H. hildebrandti*.

WORLD CATALOGUE OF THE FAMILY CALLIRHIPIDAE (COLEOPTERA: ELATERIFORMIA) [unpublished manuscript]

The elateriform family Callirhipidae is catalogued. The family recently contains 14 taxa at genus level, of which ten taxa represent currently valid genera, and subgenera respectively, and four taxa are considered as synonyms. At the specific level, the family contains 210 available names, of which 182 names represent currently valid species, and subspecies respectively, and 28 names are considered as synonyms. For each taxon, all references known to the author are listed. For specific taxa, type locality, type material, current status and known distribution are introduced. Separately, the list of unavailable names, and list of taxa excluded from the family Callirhipidae are presented. One synonym on the genus level, five synonyms on the species level, and 35 new generic combinations are established. Type species for the genus *Celadonia* Laporte de Castelnau, 1840, and lectotypes for eight taxa are designated.