

## **COLLECTION OF BARK BEETLES (CURCULIONIDAE: SCOLYTINAE) FORMED BY PROFESSOR DR. SVETISLAV ŽIVOJINOVIĆ**

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### **Abstract**

One of the major insect collections stored in the depots of the Chair of Forest Protection of the Faculty of Forestry University of Belgrade is the collection of bark beetles formed by Professor Dr. Svetislav Živojinović. It consists of 14 262 specimens collected in the area of the former Yugoslavia, mostly in the territory of Serbia. The collection includes 63 species from 15 tribes and 25 genera. The specimens of 61 species in the collection originate from Serbia, 28 species originate from Macedonia, 21 from Bosnia and Herzegovina, 15 from Montenegro, 12 from Slovenia, and four from Croatia.

This paper presents a list of species in the collection. Based on the label data, each species in the list is described by the data on the locality, date, and host plants on which it was identified, and a number of specimens.

**KEY WORDS:** bark beetles, Curculionidae, Scolytinae, collection, Svetislav Živojinović

### **Introduction**

The insect collections of the Faculty of Forestry, University of Belgrade are a treasure that can be boasted about. The sizes and wealth of species of the collections arouse the admiration of common people, students, experts and entomologists and make it our duty to respect the great effort, love and work of the people who created them. Unfortunately, a great part of the material within the collections has not yet been researched. Consequently, numerous unpublished data have still to be presented to the scientific public.

One of the major collections stored in the depots of the Faculty of Forestry University of Belgrade is the collection of bark beetles formed by Professor Dr. Svetislav ŽIVOJINOVIĆ. It is one of the largest collections of bark beetles in the Balkans.

Professor ŽIVOJINOVIĆ<sup>1</sup> started the research of bark beetles fauna in 1946. As they are a very significant insect group for forestry, but at that time still faunistically very poorly researched in Serbia and in many other parts of the former Yugoslavia, he wanted to perform detailed research. His intention was to divide the work on their study in two phases. The first phase was the study of the bark beetles fauna of Serbia. The second phase was the extension of the research to other uninvestigated parts of the former Yugoslavia (TOMIĆ & MIHAJLOVIĆ, 2001). The final goal of his research was to publish the fauna of bark beetles of the former Yugoslavia.

To be able to realise his plans, professor ŽIVOJINOVIĆ started the research on bark beetles fauna of the mountains in Serbia (Goč, Golija, Kopaonik, Kosmaj, Maljen, Prokletije, Zlatar, etc.). Simultaneously, he also started to collect material from other parts of the former Yugoslavia. Unfortunately, his unexpected death in 1966 prevented him from completing the planned research of the fauna of this insect group.

After Professor ŽIVOJINOVIĆ's death, the laboratory technician Branko UŽIČANIN B.Sc. organized the great quantity of material collected by the professor and his associates and created a major collection which was named after professor Svetislav ŽIVOJINOVIĆ. Unfortunately, the greatest number of specimens (about 80 %) in the collection was not taxonomically classified, so it was not known exactly what the contents of the collection included. To determine the exact contents, we decided to perform complete taxonomical research, compile a list of professor ŽIVOJINOVIĆ's collection of bark beetles and publish our results in this way.

## Material and Methods

The material in Professor ŽIVOJINOVIĆ's collection was collected by him and his associates: B. MAMONTOV, B. PEŠIĆ, D. GRUJIĆ, D. LAKIĆEVIĆ, D. TOMIĆ, D. ŽIVOJINOVIĆ, I. JODAL, J. PAVIĆ, K. VASIĆ, LJ. JANKOVIĆ, M. ILIĆ, M. MAKSIMOVIĆ, M. POPOV, M. ŠILETIĆ, R. MAROVIĆ, S. IDRIZOVIĆ, S. MAMONTOV, S. MILANOVIĆ, S. RADONJIĆ, T. BUNUŠEVAC, and Z. GRADOJEVIĆ.

The work on professor Svetislav ŽIVOJINOVIĆ's collection included:

1. identification of unidentified material;
2. checking of the identification of the already identified material; and
3. cataloguing of the entire collection.

<sup>1</sup> Professor Dr. Svetislav ŽIVOJINOVIĆ was born in the village Čenta (County Zrenjanin) on August 7<sup>th</sup>, 1907, died in a traffic accident on December 3<sup>rd</sup>, 1966 when he was 59 years old. He worked as a professor at the Faculty of Forestry University of Belgrade and was a corresponding member of the Serbian Academy of Arts and Sciences. His Doctoral Dissertation "Insect Fauna of the Forest Domain Majdanpek" was defended in 1940 and he became the first Doctor of Forestry Sciences at the University of Belgrade. During the period 1941-1945 he was in captivity in Germany. He was engaged in cultural and educational activities of the prisoners and organised courses in Applied Entomology. After his return, he was devoted to the renewal of the Chair of Forest Protection, especially entomological collections, because the Agricultural-Forestry Faculty of the University of Belgrade was burned during the war. His scientific research was focused on entomo-faunistics, apiculture, biology and ecology of insect pests and the study of parasitoids and predators of insect pests. He published the first textbooks: "Forest Entomology" and "Forest Protection" in Serbian language. He was the Director of the Forestry Department at the Agricultural-Forestry Faculty, University of Belgrade, the Dean and Vice-dean of the Faculty of Forestry University of Belgrade, Chief of the Chair of Forest Protection at the Faculty of Forestry University of Belgrade, Chief of the Department of Forest Protection at the Institute of Forestry and Wood Industry in Belgrade, Chief of the Entomological Department of the Institute of Biology in Belgrade, President of the Society for Plant Protection of Serbia, member of numerous associations and chief editor of several domestic scientific journals. He published more than 100 scientific and professional papers. For his scientific work and research in the field of faunistics, he was awarded by the Government of the National Republic of Serbia in 1949 and decorated with a Work Medal with Red Star for the successful work in science (GAJIĆ, 1985; TOMIĆ & MIHAJLOVIĆ, 2001; VUKŠA, 2009).

Identification of unidentified material and checking the identification of identified material were performed using the keys BALACHOWSKY (1949), STARK (1952), KARAMAN (1971), and PFEFFER (1995).

The catalogue of the collection was made using the database created in the programme Microsoft Office Access. The database is kept at the Chair of Forest Protection of the Faculty of Forestry, University of Belgrade. It contains the following data: species, locality, date, host, collector, identification, number of specimens, and number of the box containing the specimen.

A number of specimens in the collection have no data on the locality, date, host, or collector. As the entire collection was to be listed, such specimens were also included in the list.

## Results and Discussion

Professor ŽIVOJINović's collection of bark beetles is kept in 51 boxes (45 x 30 x 6 cm) with altogether 14 262 specimens (14 232 identified to the level of species and 30 to the level of genus). The highest number of specimens was collected in the territory of Serbia, and a considerably smaller number was collected in the area of other countries formed by the disintegration of the former Yugoslavia (Table I).

Table I. Numbers of specimens and species in the collection of bark beetles by Professor Dr. Svetislav ŽIVOJINović.

| State                  | Total number |       |         |
|------------------------|--------------|-------|---------|
|                        | specimens    |       | species |
|                        | number       | %     | number  |
| Bosnia and Herzegovina | 489          | 3.43  | 21      |
| Macedonia              | 2663         | 18.67 | 28      |
| Slovenia               | 401          | 2.81  | 12      |
| Serbia                 | 10293        | 72.17 | 61      |
| Croatia                | 11           | 0.08  | 4       |
| Montenegro             | 239          | 1.68  | 15      |
| Locality not listed    | 166          | 1.16  | 12      |
| Σ                      | 14262        | 100   | /       |

The collection of bark beetles by Professor ŽIVOJINović consists of 63 species from 15 tribus and 25 genera. Among them, from the trophic aspect, the majority are coniferous species. The percentage of broadleaf species of bark beetles in the collection is considerably lower, both in species number and in the total number of adults. The species that develop on herbaceous plants and climber plants are not found in the collection.

Professor ŽIVOJINović's collection of bark beetles is mainly composed of species widely distributed in central and southern Europe (PFEFFER, 1995). It should be noted that almost half its specimens are those belonging to only four very frequent and abundant species in coniferous forests of Serbia: *Ips typographus*, *Pityogenes chalcographus*, *P. bistridentatus*, and *Cryphalus piceae* (Fig. 1).

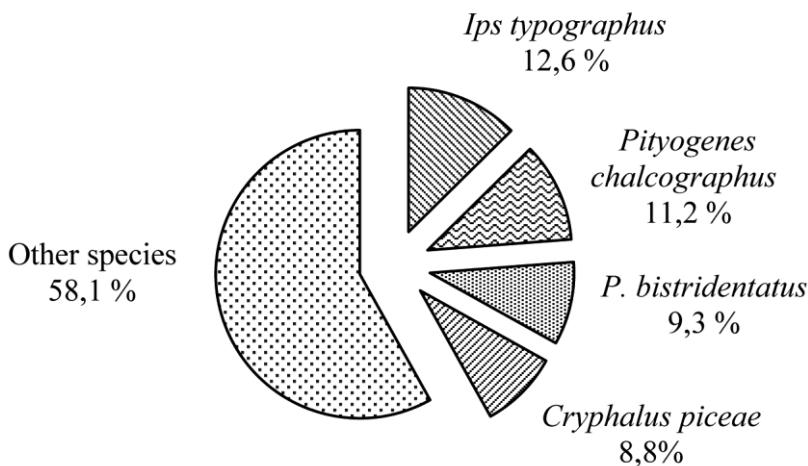


Figure 1. Percentage of specimens of *I. typographus*, *P. chalcographus*, *P. bistridentatus* and *C. piceae* in the collection of bark beetles by Professor Dr. Svetislav Živojinović.

The collection of bark beetles by Professor Živojinović consists of about 70% of species that have already been identified in Serbia (MARKOVIĆ & STOJANOVIĆ, 1997a, 1997b, 1997c, 1999, 2000a, 2000c). It is interesting that some species frequent in broadleaf forests in Serbia (*Scolytus ensifer* Eichhoff 1881, *Taphrorychus villifrons* (Dufour 1843), etc.) are not represented in this collection. This can probably be explained by the fact that the research on bark beetle fauna in Serbia and in other parts of the former Yugoslavia by Professor ŽIVOJINOVIC and his associates was focused mainly on coniferous forests because they host the highest percentage of bark beetles, both by the number of species and by the abundance of adults.

The entomologists studying the bark beetles fauna have suspected for a long time that the unresearched material in professor ŽIVOJINOVIC's collection contains some species which have still not been identified in the area of the former Yugoslavia. Our results show that these suspicions, at least in the case of Serbia, are justified. Namely, the collection includes two species (*Dryocoetes hectographus*, *Xylechinus pilosus*) which to date have not been identified in the area of Serbia (MARKOVIĆ & STOJANOVIĆ, 1997a, 1997b, 1997c, 1999, 2000a, 2000b, 2000c). In addition, this collection also contains the findings of the species *Ernporicus caucasicus* and *Orthotomicus longicollis*, which are considerably older than the findings which were reported in the papers by MARKOVIĆ & STOJANOVIĆ (2000a, 2000b) as the first findings from Serbia.

Some data in Professor Živojinović's collection have already been published (ŽIVOJINOVIC 1950, 1954, 1960, 1961; ŽIVOJINOVIC & ŽIVOJINOVIC, 1969; KARAMAN, 1971) and they are also included in the list of species in this paper. Based on the label data, each species in the list is described by the data on the locality, date, and host plants on which it was identified, and a number of specimens. For ease of reference, all tributes and species in the list are presented in alphabetical order and their names are compatible with the names found in the Fauna Europaea (VELAZQUEZ DE CASTRO, 2004).

List of species in Professor Dr. Svetislav ŽIVOJINović's collection of bark beetles

Tribe *Corthylini* LeConte 1876

Genus *Pityophthorus* Eichhoff 1864

*P. glabratus* Eichhoff 1878

Bosnia and Herzegovina: Han Pjesak 25.7.1947. (host not listed) 1 ex.

Macedonia: Kozjak: Lesnička reka 7.7.1965. *Abies alba* Mill. 1 ex.; Kožuh: Mrša 13.7.1963. *Pinus nigra* J.F.Arnold 5 ex.

Serbia: Bukulja 31.8.1964. *P. nigra* 1 ex.; Deliblatska peščara 23.6.1952. *Pinus* sp. 9 ex., 1.9.1953. *P. nigra* 11 ex., 3.9.1953. *P. nigra* 2 ex.; Deliblatska peščara: Devojački bunar 1-2.6.1960. *P. nigra* 5 ex.; Fruška gora 5.6.1963. *P. nigra* 13 ex.; Goč: Brezna 25.6.1963. *P. nigra* 44 ex., Brezna-Lisine 29.8.1962. (host not listed) 7 ex., Gvozdac 22.8.1961. *P. nigra* 13 ex.; Kopaonik 7.1949. *P. nigra* 3 ex., 7.1949. (host not listed) 1 ex., 8.1949. *Pinus* sp. 8 ex.; Kopaonik: Crni vrh 7.1949. *P. nigra* 26 ex.; Kosmaj 22.5.1960. *P. nigra* 25 ex., 22.-23.5.1960. *P. nigra* 6 ex., 23.5.1960. *P. nigra* 37 ex., 24.5.1960. *P. silvestris* L. 9 ex., (date not listed) *P. nigra* 5 ex.; Kosmaj: Blagojev kamen 24.4.1960. *P. nigra* 2 ex.; Vršački breg: Đakov vrh 15.7.1964. (host not listed) 2 ex.

Total number of specimens: 236

*P. lichtensteinii* (Ratzeburg 1837)

Serbia: Prokletije 12.7.1959. *P. peuce* Griseb. 27 ex.

Slovenia: Dutovlje 20.10.1957. *Pinus* sp. 1 ex., 24.10.1957. *Pinus* sp. 1 ex., 25.4.1958. *Pinus* sp. 2 ex., 29.4.1958. *Pinus* sp. 1 ex., 6.5.1958. *Pinus* sp. 1 ex., 14.5.1958. *Pinus* sp. 1 ex., 30.5.1958. *Pinus* sp. 1 ex.; Žerjavijn 20.7.1962. *P. strobus* L. 1 ex.

Total number of specimens: 36

*P. pityographus* (Ratzeburg 1837)

Bosnia and Herzegovina: Tribija 7.1947. *A. alba* 2 ex.

Macedonia: Kajmakčalan 7.1964. *P. silvestris* 1 ex.; Kozjak: Lesnička reka 7.7.1965. *A. alba* 3 ex.; Pelister 4.6.1962. *A. alba* 3 ex.

Montenegro: Durmitor: Žabljak 8.7.1958. *Picea abies* (L.) H.Karst. 8 ex.

Serbia: Đakovica 6.10.1947. *P. abies* 2 ex.; Goč 20.3.1947. *A. alba* 1 ex.; Goč: Bela reka 23.6.1963. (host not listed) 2 ex., Gvozdac 25.8.1960. *A. alba* 14 ex., 26.8.1960. *A. alba* 8 ex., 29.8.1962. (host not listed) 1 ex., 25.6.1963. *P. nigra* 11 ex.; Golija 9.7.1948. *A. alba* 3 ex., 29.7.1948. *A. alba* 3 ex.; Golija: Crni vrh 26.7.1948. *P. abies* 6 ex., Radulovac 21.7.1948. *P. abies* 1 ex.; Kopaonik 7.1949. *A. alba* 2 ex., 6.7.1949. *P. abies* 13 ex., 8.7.1949. *A. alba* 1 ex., 8.1949. *Pinus* sp. 2 ex., 18.8.1949. *A. alba* 7 ex., 12.9.1949. *A. alba* 6 ex., 10.6.1958. (host not listed) 1 ex.; Kopaonik: Hajdučica 10.6.1958. *A. alba* 2 ex., 8.8.1959. *P. abies* 2 ex.; Prokletije 12.7.1953. *Pinus heldreichii* H.Christ 2 ex., 20.5.1959. *A. alba* 5 ex., 12.7.1959. *P. peuce* 1 ex.; Prokletije: Ašti Škrele 21.8.1958. *P. abies* 13 ex., Babaloć 16.8.1958. *A. alba* 3 ex., Bješka Babait 16.8.1958. *P. abies* 1 ex., Raški do 16.8.1958. *P. abies* 1 ex., 10.7.1959. *P. silvestris* 1 ex., 11.7.1959. *A. alba* 8 ex., 11.7.1959. *P. peuce* 1 ex.; Studenica: Stolovak 13.8.1959. *Picea* sp. 1 ex.; Zlatar 29.3.1948. *P. nigra* 2 ex.

Slovenia: Mokronog 27.7.1962. *P. abies* 2 ex.; Žerjavin 20.7.1962. *P. strobus* 3 ex.

Total number of specimens: 147

Tribe Cryphalini Lindemann 1876

Genus *Cryphalus* Erichson 1836

*C. abietis* (Ratzeburg 1837)

Serbia: Golija 29.7.1948. *A. alba* 1 ex., 8.1948. *A. alba* 2 ex., 20.8.1948. *P. abies* 2 ex.; Kopaonik 7.1949. *A. alba* 3 ex., 18.8.1949. *A. alba* 1 ex.

Total number of specimens: 9

*C. piceae* (Ratzeburg 1837)

Bosnia and Herzegovina: Sarajevo: Ilijadža compartment 46 8.9.1962. *A. alba* 18 ex.; Tribija 8.1947. *A. alba* 3 ex.

Macedonia: Kajmakčalan 7.1964. *P. silvestris* 3 ex.; Kozjak: Lesnička reka 7.7.1965. *A. alba* 12 ex., Kozjačka reka 12.7.1965. *A. alba* 2 ex.; Kožuh 13.7.1963. *A. alba* 12 ex.; Pelister 4.6.1962. *A. alba* 3 ex.; Pelister: Begova česma 7.1964. *P. peuce* 1 ex., Palisnopje 7.1964. *P. peuce* 1 ex., (date not listed) *P. peuce* 92 ex.

Montenegro: Durmitor: Velika gora 1.7.1958. *A. alba* 6 ex., Žabljak 26.6.1958. *A. alba* 2 ex., Zminje jezero 28.6.1958. *A. alba* 8 ex.

Serbia: Goč: Bela reka 22.6.1963. *A. alba* 606 ex., 22.6.1963. (host not listed) 5 ex., 23.6.1963. (host not listed) 2 ex., Brezna 29.8.1962. *P. nigra* 1 ex., 29.8.1962. (host not listed) 18 ex., 20.4.1963. *A. alba* 1 ex., Brezna-Crni vrh 29.8.1962. *P. nigra* 7 ex., Gajnjača 27.8.1962. *P. nigra* 14 ex., Gvozdac 25.8.1960. *A. alba* 108 ex., 26.8.1960. *A. alba* 31 ex., 25.8.1962. (host not listed) 5 ex., 23.6.1963. *A. alba* 2 ex., 25.6.1963. *P. nigra* 63 ex., 25.6.1963. *Pinus* sp. 2 ex., Kavgalija 27.8.1962. *P. nigra* 1 ex., 28.8.1962. *P. nigra* 1 ex., Pasji potok 25.8.1966. (host not listed) 16 ex., Sokolja 15-17.4.1961. *A. alba* 9 ex., 15-17.4.1961. (host not listed) 145 ex.; Golija 20.8.1948. *P. abies* 7 ex.; Kopaonik 7.1949. (host not listed) 1 ex., 8.7.1949. *A. alba* 6 ex.; Kopaonik: Hajdučica 3.8.1959. *A. alba* 5 ex.; Prokletije 11.7.1959. *A. alba* 6 ex.; Prokletije: Prilepske planine 20.6.1957. *A. alba* 12 ex.; Zlatar 14.7.1947. (host not listed) 3 ex., 17.7.1947. (host not listed) 7 ex.

Locality, date and host not listed 1 ex.

Total number of specimens: 1248

Genus *Ernporicus* Berger 1916

*E. caucasicus* (Lindemann 1876)

Serbia: Deliblatska peščara: Kremenjak 6.6.1960. *P. silvestris* 3 ex., Dubovac 7.6.1960. *Tilia parvifolia* Ehrh. ex Hoffm. 23 ex.

Total number of specimens: 26

Genus *Ernoporus* Thomson 1859*E. tilliae* (Panzer 1793)

Serbia: Deliblatska peščara: Devojački bunar 1.6.1960. *Tilia* sp. 95 ex., Dumača compartment 461/b 8.6.1964. *Tilia* sp. 8 ex.

Total number of specimens: 103

## Tribe Crypturgini LeConte 1876

Genus *Crypturgus* Erichson 1836*C. cinereus* (Herbst 1793)

Bosnia and Herzegovina: Dubočica (date and host not listed) 3 ex.

Macedonia: Kozjak: Kostove livade 9.7.1965. *P. silvestris* 21 ex., Lesnička reka 4.7.1965. (host not listed) 1 ex., 8.7.1965. *P. silvestris* 2 ex., 9.7.1965. *P. nigra* 8 ex., Mala Kruša 9.7.1965. *P. nigra* 1 ex., 9.7.1965. *P. silvestris* 4 ex., Mešnik 16.7.1965. *P. nigra* 5 ex., reka Kruša 11.7.1965. *P. silvestris* 1 ex.

Serbia: Goč 2.7.1962. *P. nigra* 1 ex.; Golija: Oseđelica-Šipov 24.7.1948. *P. abies* 17 ex., 24.7.1948. (host not listed) 11 ex.; Radulovac 21.7.1948. *P. abies* 6 ex.; Kopaonik 11.7.1949. (host not listed) 1 ex.; Kopaonik: Suvi vrh 8.7.1949. *P. nigra* 3 ex.; Zlatar 2.4.1947. (host not listed) 2 ex.

Total number of specimens: 87

*C. cibrellus* Reitter 1894

Macedonia: Kozjak: Zdrave ornice 14.7.1965. (host not listed) 1 ex.

Serbia: Golija: Crna reka 28.7.1948. (host not listed) 4 ex.

Total number of specimens: 5

*C. pusillus* (Gyllenhal 1813)

Macedonia: Kozjak: reka Kruša 11.7.1965. *P. silvestris* 11 ex.

Serbia: Deliblatska peščara 3.9.1953. *P. nigra* 31 ex.; Deliblatska peščara: Kremenjak 6.6.1960. *P. banksiana* Lamb. 7 ex., 7.6.1960. *P. silvestris* 1 ex.; Goč: Gvozdac 25.8.1960. *A. alba* 3 ex.; Kopaonik 11.7.1949. (host not listed) 15 ex.; Kosmaj 23.5.1960. *P. nigra* 9 ex.; Studenica: Savovo 28.9.1960. *Picea* sp. 5 ex.; Zlatar 2.4.1947. (host not listed) 30 ex.

Total number of specimens: 112

## Tribe Dryocoetini Lindemann 1876

Genus *Dryocoetes* Eichhoff 1864*D. autographus* (Ratzeburg 1837)

Serbia: Kopaonik 7.1949. *Pinus* sp. 2 ex., 10.7.1949. (host not listed) 3 ex., 16.8.1949. *P. abies* 1 ex., 16.9.1949. *P. abies* 4 ex., 16.9. (host not listed) 37 ex.; Kopaonik: Hajdučica 6.8.1959. *P. abies* 1 ex., 8.8.1959. *P. abies* 6 ex., Suvi jelak 8.8.1959. *P. abies* 6 ex., Tresava 23.6.1954. (host not listed) 1 ex.;

Prokletije: Ašti Škrelje 21.8.1958. *Fagus* sp. 20 ex.; Studenica: Savovo 12.9.1959. *Picea* sp. 1 ex., Stolovak 13.8.1959. *Picea* sp. 16 ex.

Slovenia: Mokronog 27.7.1962. *P. abies* 3 ex.

Locality and host not listed 16.9. 2 ex.

Total number of specimens: 103

*D. hectographus* Reitter 1913

Bosnia and Herzegovina: Sarajevo: Iliča 5.9.1962. *P. abies* 1 ex., Iliča compartment 108 25.8.1962. *P. abies* 1 ex.

Serbia: Kopaonik 17.8.1949. *P. abies* 1 ex., 16.9.1949. *P. abies* 2 ex., 12.6.1959. on burlap 15 ex., 5.8.1959. *P. abies* 40 ex.; Kopaonik: Kadivac 17.10.1959. (host not listed) 12 ex., Hajdučica 5.8.1959. *P. abies* 15 ex., 6.8.1959. *P. abies* 51 ex., 8.8.1959. *P. abies* 7 ex., Suvi jelak 8.8.1959. *P. abies* 5 ex.; Studenica: Stolovak 13.8.1959. *Picea* sp. 1 ex.

Total number of specimens: 151

Tribe Hylastini LeConte 1876

Genus *Hylastes* Erichson 1836

*H. angustatus* (Herbst 1793)

Serbia: Deliblatska peščara: Kremenjak 4.6.1964. *P. banksiana* 1 ex., 4.6.1964. *P. jeffreyi* Grev. & Balf. 9 ex., 4.6.1964. *P. montana* Mill. 4 ex.; Kosmaj 22.5.1960. *P. nigra* 25 ex., 24.5.1960. *P. nigra* 5 ex., 24.5.1960. *P. silvestris* 1 ex.; Kosmaj: Beli kamen 5.1960. (host not listed) 3 ex., 23.5.1960. *P. nigra* 7 ex., 23.5.1960. *Pinus* sp. 187 ex., 24.5.1960. *P. silvestris* 22 ex.

Total number of specimens: 264

*H. ater* (Paykull 1800)

Serbia: Deliblatska peščara: Dumača 2.6.1960. *P. silvestris* 22 ex., Kremenjak 4.6.1964. *P. banksiana* 4 ex., 4.6.1964. *P. montana* 1 ex.; Kosmaj 22.5.1960. *P. nigra* 4 ex.; Kosmaj: Beli kamen 23.5.1960. *P. nigra* 3 ex., 23.5.1960. *Pinus* sp. 19 ex., (date and host not listed) 2 ex.; Prokletije 10.7.1959. *P. heldreichii* 1 ex.; Studenica: Rajkovača 13.6.1966. (host not listed) 1 ex., 28.9.1966. (host not listed) 1 ex.

Total number of specimens: 58

*H. cunicularius* Erichson 1836

Serbia: Kopaonik 10.6.1958. (host not listed) 3 ex., 5.8.1959. *P. abies* 6 ex., 3.6.1960. *P. abies* 1 ex.; Kopaonik: Hajdučica 5.8.1959. *P. abies* 3 ex., 5.8.1959. (host not listed) 4 ex., 6.8.1959. *P. abies* 3 ex.; Studenica: Stolovak 12.5.1959. *Picea* sp. 1 ex., 13.8.1959. *Picea* sp. 1 ex.

Total number of specimens: 22

*H. opacus* Erichson 1836

Montenegro: Durmitor: Crno jezero 28.6.1958. *Pinus* sp. 1 ex.

Total number of specimens: 1

Genus *Hylurgops* LeConte 1876*H. palliatus* (Gyllenhal 1813)

Macedonia: Kozjak: Baltova čuka 10.7.1965. *P. peuce* 4 ex., 10.7.1965. *P. silvestris* 4 ex., Kostova livada 9.7.1965. *P. nigra* 3 ex., Lesnička reka 7.7.1965. *P. silvestris* 4 ex., Mala Kruša 9.7.1965. *P. nigra* 1 ex., Železno vrata 15.7.1965. (host not listed) 1 ex.

Montenegro: Durmitor: Crno jezero 28.6.1958. *P. nigra* 18 ex., Topolov lom 1.6.1958. *P. abies* 5 ex.

Serbia: Goč: Brezna 23.8.1964. *P. nigra* 5 ex., Pasji potok 26.8.1964. *P. nigra* 8 ex.; Golija 21.7.1949. (host not listed) 2 ex.; Golija: Oseđelica-Šipov 24.7.1948. *P. abies* 2 ex., Radulovac 21.7.1948. *P. abies* 12 ex.; Kopaonik 6.7.1948. *P. abies* 2 ex., 7.1949. (host not listed) 12 ex., 6.7.1949. *P. abies* 12 ex., 7.7.1949. *Pinus* sp. 47 ex., 10.7.1949. (host not listed) 1 ex., 4.8.1949. *P. abies* 12 ex., 18.8.1949. (host not listed) 1 ex., 20.5.1959. *A. alba* 1 ex., 20.5.1959. *P. abies* 8 ex., 12.6.1959. on burlap 38 ex., 18.6.1959. *Pinus* sp. 3 ex., 18.6.1959. *P. abies* 5 ex.; Kopaonik: Crni vrh 10.7.1949. (host not listed) 17 ex., Hajdučica 6.8.1959. *P. abies* 10 ex., 8.8.1959. *P. abies* 2 ex., Hajdučke vode 22.7.1952. *P. silvestris* 5 ex., compartment 101 21.5.1959. (host not listed) 5 ex., Samokovska reka 21.5.1959. (host not listed) 9 ex., Tresava 21.7.1954. (host not listed) 1 ex.; Prokletije 9.7.1959. *P. heldreichii* 17 ex., 11.7.1959. *P. peuce* 1 ex.; Prokletije: Ašti Škreleje 21.8.1958. *P. abies* 2 ex., Babaloć 26.7.1960. *P. abies* 1 ex., Raški do 11.7.1959. *A. alba* 2 ex., Raški do compartment 64 24.7.1960. *P. heldreichii* 3 ex., 24.7.1960. (host not listed) 6 ex.; Studenica: Stolovak 12.5.1959. *Picea* sp. 3 ex.; Zlatar 21.7.1947. (host not listed) 1 ex.

Locality not listed 4-19.8.1949. *Pinus* sp. 88 ex.

Total number of specimens: 384

Tribe *Hylesinini* Erichson 1836Genus *Hylesinus* Fabricius 1801*H. crenatus* (Fabricius 1787)

Serbia: Prokletije 13.7.1959. *Fraxinus* sp. 14 ex.

Total number of specimens: 14

*H. fraxini* (Panzer 1779)

Croatia: Belje 20.5.1963. (host not listed) 4 ex.

Serbia: Belgrade: Ada Ciganlija 1950. *Salix* sp. 17 ex., Faculty of Forestry 1.4.1956. (host not listed) 2 ex.; Deliblatska peščara: Korn 13.6.1959. *F. americana* L. 2 ex., Korn compartment 303/a 6.7.1956. *Fraxinus americana* 7 ex.; Kragujevac: Šumarice 20.4.1956 (host not listed) 1 ex.; Vršački breg 5.9.1953. *Fraxinus excelsior* L. 1 ex.

Total number of specimens: 34

*H. toranio* (Danthonie 1788)

Serbia: Belgrade 3.9.1964. *Syringa vulgaris* L. 12 ex.; Deliblatska peščara 5.9.1953. *Syringa* sp. 3 ex.; Deliblatska peščara: Dumača compartment 460/b 8.6.1964. *Fraxinus* sp. 7 ex.; Pančevo: Omoljica 24.5.1966. *Fraxinus* sp. 1 ex., 25.5.1966. *Fraxinus* sp. 1 ex., 26.5.1966. *Fraxinus* sp. 2 ex., 28.5.1966.

*Fraxinus* sp. 1 ex., 29.5.1966. *Fraxinus* sp. 1 ex., 31.5.1966. *Fraxinus* sp. 2 ex., 2.6.1966. *Fraxinus* sp. 1 ex., 3.6.1966. *Fraxinus* sp. 1 ex.; Vršački breg 5.9.1953. *F. excelsior* 22 ex.

Total number of specimens: 54

Genus *Pteleobius* Bedel 1888

*P. kraatzii* (Eichhoff 1864)

Bosnia and Herzegovina: Brčko 30.6.1948. *Ulmus* sp. 1 ex.

Serbia: Deliblatska peščara: Ada Žilava 7.6.1960. *Ulmus* sp. 484 ex., Kremenjak 7.6.1960. *T. parvifolia* 1 ex., 7.6.1960. *P. silvestris* 11 ex.; Kupinovo 6.1951. *Ulmus* sp. 2 ex.

Total number of specimens: 499

*P. vittatus* (Fabricius 1787)

Serbia: Deliblatska peščara: Ada Žilava 7.6.1960. *Ulmus* sp. 77 ex., Dumača compartment 460/a 8.6.1964. *Quercus* sp. 9 ex., Kremenjak 7.6.1960 *P. silvestris* 5 ex.

Slovenia: Žerjavin 20.7.1962. (host not listed) 2 ex.

Total number of specimens: 93

Tribe Hypoborini Nüsslin 1911

Genus *Hypoborus* Erichson 1836

*H. ficus* Erichson 1836

Bosnia and Herzegovina: Stolac 26.4.1950. *Ficus carica* L. 2 ex.

Total number of specimens: 2

Tribe Ipini Bedel 1888

Genus *Ips* De Geer 1775

*I. acuminatus* (Gyllenhal 1827)

Bosnia and Herzegovina: Velika Maoča 20.7.1947. *P. nigra* 32 ex.

Macedonia: Kajmakčalan 7.1964. *P. silvestris* 84 ex., 14.7.1964. *P. silvestris* 29 ex.; Kozjak: Kozjačka reka 7.7.1965. *P. silvestris* 3 ex., 13.7.1965. *P. silvestris* 3 ex., Lesnička reka 7.7.1965. *P. nigra* 1 ex., 7.7.1965. *P. silvestris* 4 ex., 7.7.1965. (host not listed) 12 ex., 8.7.1965. *P. silvestris* 41 ex., 8.7.1965. (host not listed) 1 ex., 13.7.1965. *P. silvestris* 5 ex., 17.7.1965. *P. silvestris* 14 ex., 9.9.1965. *P. silvestris* 30 ex., Mala Kruša 9.7.1965. *P. nigra* 6 ex., Popova straga 8.7.1965. (host not listed) 1 ex.

Serbia: Maljen: Divčibare 1951. (host not listed) 3 ex.; Kopaonik 27.7.1947. *P. nigra* 28 ex.; Kopaonik: Hajdučke vode 22.7.1952. *P. silvestris* 4 ex.

Total number of specimens: 301

*I. mannsfeldi* (Wachtl 1879)

Bosnia and Herzegovina: Velika Maoča 19.7.1947. *P. nigra* 5 ex., 20.7.1947. *P. nigra*. 7 ex.

Macedonia: Kozjak: Krstovske livade 7.7.1965. *P. nigra*. 3 ex., Lesnička reka 8.7.1965. *P. silvestris* 1 ex., 9.7.1965. *P. nigra* 1 ex., Mala Kruša 9.7.1965. *P. nigra* 2 ex., Mešnik 16.7.1965. *P. nigra* 27 ex., reka Kruša 2.7.1965. *P. nigra* 1 ex., Zdrave ornice 14.7.1965. *P. nigra* 3 ex.

Serbia: Tara 2.6.1959. *P. nigra* 6 ex.

Total number of specimens: 56

*I. sexdentatus* (Borner 1776)

Bosnia and Herzegovina: Maoča: Krivaja 4.1950. (host not listed) 3 ex.; Velika Maoča 20.7.1947. *P. nigra* 17 ex.

Macedonia: Kozjak: Lesnička reka 9.9.1965. *P. silvestris* 27 ex., Mala Kruša 9.7.1965. *P. nigra* 50 ex., 9.7.1965. *P. silvestris* 5 ex., Popova straga 8.7.1965. (host not listed) 1 ex., Zdrave ornice 14.7.1965. *P. nigra* 71 ex., 11.9.1965. *P. silvestris* 24 ex., 14.9.1965. *P. silvestris* 5 ex.; Pelister 14.5.1948. *P. peuce* 5 ex.; Pelister: Begova česma 13.7.1964. *P. peuce* 11 ex., Palisnopje 7.1964. *P. peuce* 16 ex.

Montenegro: Crni vrh 7.5.1959. *Pinus* sp. 25 ex.

Serbia: Deliblatska peščara: Flamunda 13.7.1957. *P. nigra* 2 ex.; Goč 2.7.1962. *P. nigra* 44 ex.; Goč: Brezna 23.8.1964. *P. nigra* 36 ex., Gvozdac 30.8.1960. *P. nigra* 2 ex., 30.8.1960. (host not listed) 79 ex.; Kopaonik 11.7.1949. (host not listed) 3 ex.; Maljen: Divčibare-Saljanik 10.9.1945. (host not listed) 3 ex.; Prokletije 10.7.1956. *P. heldreichii* 1 ex., 16.8.1958. *P. peuce* 23 ex., 18.8.1958. *P. heldreichii* 1 ex., 9.7.1959. *P. heldreichii* 1 ex., 10.7.1959. *P. silvestris* 29 ex., 11.7.1959. *P. peuce* 4 ex., 18.8.1959. *P. peuce* 7 ex.; Prokletije: Miloševac 3.8.1960. *P. heldreichii* 3 ex., Prilepske planine 16.8.1958. *P. peuce* 38 ex., Raški do 17.8.1958. *P. peuce* 1 ex., 24.7.1960. *P. heldreichii* 6 ex.; Studenica: Đakovo 29.8.1958. (host not listed) 35 ex.; Užice 1.7.1948. *P. strobus* 5 ex.; Zlatar 11.7.1947. (host not listed) 5 ex., 24.7.1947. (host not listed) 1 ex.

Slovenia: Sežana 12.7.1957. (host not listed) 33 ex.

Locality, date and host not listed 28 ex.

Total number of specimens: 650

*I. typographus* (Linnaeus 1758)

Bosnia and Herzegovina: Sarajevo: Iliča 3.9.1962. *P. abies* 58 ex., 5.9.1962. *P. abies* 41 ex., Iliča compartment 108 25.8.1962. *P. abies* 50 ex.; Tribija 21.7.1947. (host not listed) 6 ex.; Velika Maoča 20.7.1947. (host not listed) 4 ex.

Macedonia: Kajmakčalan 7.1964. *P. silvestris* 19 ex., 14.7.1964. *P. silvestris* 1 ex.; Kozjak: Mala kruša 9.7.1965. *P. silvestris* 2 ex.; Pelister 6.1962. *P. peuce* 1 ex., 2.6.1962. *P. peuce* 108 ex., 4.6.1962. *P. peuce* 90 ex.; Pelister: Begova česma 7.1964. *P. peuce* 1 ex., 13.7.1964. *P. peuce* 26 ex., Palisnopje 7.1964. *P. peuce* 67 ex., (date not listed) *P. peuce* 1 ex.

Montenegro: Durmitor: Žabljak 27.6.1958. *P. abies* 1 ex., 27.6.1958. (host not listed) 3 ex., Crno jezero 26.6.1958. *P. abies* 11 ex., 28.6.1958. *P. abies* 4 ex., Topolov lom 1.6.1958. *P. abies* 8 ex., 1.7.1958. *P. abies* 10 ex.

Serbia: Golija 7.1948. *P. abies* 4 ex., 24.7.1948. (host not listed) 4 ex., 15.8.1948. (host not listed) 1 ex., Golija: Careva glavica 22.7.1948. *P. abies* 2 ex., Crni vrh 26.7.1948. *P. abies* 2 ex., Osedelica 24.7.1948. *P. abies* 2 ex., Osedelica-Šipov 24.7.1948. *P. abies* 3 ex., Radulovac 26.3.1947. *P. abies* 7 ex., 23.7.1948. *P. abies* 13 ex.; Kopaonik 7.1949. *P. abies* 1 ex., 7.1949. (host not listed) 27 ex., 6.7.1949. *P. abies* 3 ex., 6.7.1949. (host not listed) 8 ex., 16.7.1949. (host not listed) 3 ex., 6.8.1949. *P. abies* 14 ex., 16.8.1949. *P. abies* 3 ex., 21.7.1958. (host not listed) 1 ex., 13.8.1958. (host not listed) 1 ex., 18.6.1959. (host not listed) 2 ex., (date not listed) on burlap 1 ex.; Kopaonik: compartment 101 21.5.1959. (host not listed) 7 ex., Hajdučica 5.8.1959. (host not listed) 3 ex., 6.8.1959. *P. abies* 8 ex., Kadijevac 17.10.1959. (host not listed) 1 ex., Samokovska reka 21.5.1959. (host not listed) 8 ex.; Prokletije 7.1958. *P. peuce* 33 ex., 11.7.1958. *P. peuce* 14 ex., 16.8.1958. *P. abies* 2 ex., 16.8.1958. *P. heldreichii* 1 ex., 16.8.1958. *P. peuce* 39 ex., 18.8.1958. *P. peuce* 1 ex., 13.5.1959. (host not listed) 5 ex., 9.7.1959. *P. heldreichii* 6 ex., 10.7.1959. *P. heldreichii* 21 ex., 10.7.1959. (host not listed) 3 ex., 11.7.1959. *P. peuce* 60 ex., 11.7.1959. (host not listed) 5 ex., 12.7.1959. *P. abies* 18 ex., 12.7.1959. *P. mugo* Turra 29 ex., 12.7.1959. *P. peuce* 18 ex., 12.7.1959. (host not listed) 6 ex., 16.8.1959. *P. heldreichii* 5 ex., 16.8.1959. *P. peuce* 5 ex.; Prokletije: Ađovići 27.6.1960. *P. abies* 4 ex., Alagina reka 2.8.1960. *P. abies* 14 ex., Ašti Škrele 20.8.1958. *P. abies* 2 ex., 21.8.1958. *P. abies* 14 ex., 13.5.1959. (host not listed) 13 ex., 26.5.1959. (host not listed) 3 ex., 9.7.1959. *P. heldreichii* 3 ex., 21.8.1959. *P. abies* 3 ex., Babaloć compartment 46 26.7.1960. *P. abies* 3 ex., Bješka Babait 15.8.1958. *P. abies* 35 ex., Cerski potok 29.6.1960. *P. abies* 2 ex., Dečani 18.6.1957. (host not listed) 1 ex., Dečanske planine 29.6.1960. *P. abies* 4 ex., Drelje 7.1958. *P. abies* 12 ex., Kućiste 7.1958. *P. peuce* 2 ex., Laz Hus 20.8.1958. *P. abies* 8 ex., Marjaš 12.7.1959. (host not listed) 20 ex., Prilepske planine 20.6.1957. *P. abies* 2 ex., 16.8.1958. *P. peuce* 11 ex., 12.7.1959. *P. abies* 19 ex., 12.7.1959. *P. mugo* 19 ex., Raški do 10.7.1956. *P. heldreichii* 33 ex., 16.8.1958. *P. abies* 27 ex., 16.8.1958. *P. heldreichii* 78 ex., 16.8.1958. *P. peuce* 3 ex., 9.7.1959. *P. heldreichii* 39 ex., 10.7.1959. *P. heldreichii* 325 ex., 11.7.1959. *P. abies* 40 ex., 11.7.1959. *P. peuce* 7 ex., 12.7.1959. *P. peuce* 27 ex., 10.8.1959. *P. heldreichii* 1 ex., 24.7.1960. *P. peuce* 11 ex., 31.7. *P. peuce* 1 ex., (date not listed) *P. abies* 22 ex., Raški do compartment 64 24.7.1960. *P. heldreichii* 6 ex.; Žleb 2.8.1960. *P. peuce* 6 ex.; Studenica: Savovo 12.9.1959. *Picea* sp. 7 ex., 28.9.1960. *Picea* sp. 5 ex., Stolovak 12.8.1959. *Picea* sp. 8 ex., 13.8.1959. *Picea* sp. 2 ex.; Zlatar 2.4.1947. (host not listed) 1 ex., 3.4.1947. *P. abies* 4 ex., 11.7.1947. (host not listed) 1 ex., 14.7.1947. (host not listed) 2 ex., 17.7.1947. (host not listed) 7 ex., 24.7.1947. (host not listed) 2 ex., 29.8.1947. (host not listed) 3 ex.

Slovenia: Mokronog 27.7.1962. *P. abies* 14 ex.

Locality not listed: 7.7.1949. *Pinus* sp. 1 ex.

Locality and host not listed: 4-27.8.1959. 1 ex., 6.8.1959. 3 ex.

Locality, date and host not listed 3 ex.

Total number of specimens: 1795

#### Genus *Orthotomicus* Ferrari 1867

##### *O. erosus* (Wollaston 1857)

Macedonia: Kozjak: Mešnik 16.7.1965. (host not listed) 9 ex.; Kožuh: Mrša 13.7.1963. *P. nigra* 2 ex.; Devđelija 11.7.1963. *P. halepensis* Mill. 32 ex.

Serbia: Aranđelovac (date and host not listed) 9 ex.; Belgrade: Topčider 25.8.1953. *P. nigra* 4 ex.; Beočin 30.10. *Pinus* sp. 11 ex.; Deliblatska peščara 5.1950. *P. nigra* 11 ex., 20.7.1957. *P. silvestris* 7 ex., 2.6.1960. *P. nigra* 10 ex.; Deliblatska peščara: Banatski Karlovci compartment 223/g 4.1960. *P. nigra* 1 ex., Devojački bunar 16.7.1957. (host not listed) 3 ex., 1.6.1960. *P. nigra* 1 ex., Devojački bunar compartment 224/a 26.4.1960. *P. nigra* 1 ex., Devojački bunar compartment 225/a 14.5.1957. *P. nigra* 3 ex., Devojački bunar

compartment 225/g 29.5.1962. (host not listed) 2 ex., Đurin bor compartment 377/c 20.7.1957. *P. silvestris* 7 ex., Đurin bor compartment 378/e 18.4.1962. *P. nigra* 1 ex., Flamunda 26.6.1957. *P. nigra* 3 ex., 25.7.1957. *P. nigra* 6 ex., Grebenac compartment 378/e 12.6.1959. (host not listed) 5 ex., Grebenac compartment 379 12.6.1959. (host not listed) 3 ex., Korn compartment 314/g 13.6.1959. (host not listed) 16 ex., Kremenjak 6.6.1960. *P. nigra* 2 ex., 7.6.1960. *P. silvestris* 1 ex., 4.6.1964. *P. banksiana* 4 ex., 4.6.1964. *P. montana* 2 ex., Mariuš-Loparija 14.6.1959. (host not listed) 10 ex.; Goč: Gvozdac 30.8.1960. *P. nigra* 5 ex.; Kosmaj 22.5.1960. *P. nigra* 4 ex., 23.5.1960. *P. nigra* 3 ex.; Kosmaj: Beli kamen 24.4.1960. *P. nigra* 2 ex., 23.5.1960. *P. nigra* 44 ex.; Oplenac 28.3.1964. (host not listed) 12 ex.; Smederevo 9.4.1964. *P. nigra* 19 ex.; Sremska Mitrovica 11.6.1962. (host not listed) 11 ex.; Studenica: Rajkovača 13.6.1966. (host not listed) 1 ex.; Vršački breg 6.9.1953. *P. nigra* 27 ex.

Total number of specimens: 294

#### *O. laricis* (Fabricius 1792)

Montenegro: Crni vrh 7.5.1959. *Pinus* sp. 1 ex.; Durmitor: Crno jezero 28.6.1958. *Pinus* sp. 1 ex.

Serbia: Deliblatska peščara 9.7.1958. *P. nigra* 1 ex.; Deliblatska peščara: Bakatski Karlovac compartment 223/g 4.1960. *P. nigra* 6 ex., Čardak compartment 117 14.6.1959. *P. nigra* 7 ex., Devojački bunar 16.7.1957. (host not listed) 3 ex., Đurin bor compartment 377/a 18.3.1957. *P. nigra* 6 ex., Đurin bor compartment 380/a 9.7.1958. *P. nigra* 3 ex., Grebenac compartment 378/e 12.6.1959. (host not listed) 1 ex., Kremenjak 6.6.1960. *P. banksiana* 1 ex.; Golija: Crna reka 28.7.1948. (host not listed) 6 ex.; Studenica: Savovo 12.9.1959. (host not listed) 3 ex.

Locality, date and host not listed 4 ex.

Total number of specimens: 43

#### *O. longicollis* (Gyllenhal 1827)

Bosnia and Herzegovina: Dubočica (date and host not listed) 3 ex.

Macedonia: Kozjak: Lesnička reka 9.9.1965. *P. silvestris* 3 ex., Mala Kruša 9.7.1965. *P. nigra* 1 ex., 9.7.1965. *P. silvestris* 3 ex.

Montenegro: Crni vrh 7.5.1959. *Pinus* sp. 36 ex.

Serbia: Goč: Gvozdac 26.8.1960. (host not listed) 1 ex.

Total number of specimens: 47

#### *O. proximus* (Eichhoff 1867)

Bosnia and Herzegovina: Velika Maoča 19.7.1947. *P. nigra* 2 ex., 20.7.1947. *P. nigra* 15 ex.

Macedonia: Kozjak: Mešnik 16.7.1965. *P. nigra* 1 ex.

Montenegro: Crni vrh 7.5.1959. *Pinus* sp. 4 ex., 8.5.1959. *Pinus* sp. 1 ex.

Serbia: Goč 2.7.1962. *P. nigra* 4 ex; Goč: Brezna 23.8.1964. *P. nigra* 7 ex.; Kopaonik 6.7.1949. *P. abies* 1 ex., 11.7.1949. (host not listed) 5 ex.; Šargan 31.7.1946. (host not listed) 3 ex.

Total number of specimens: 43

#### *O. suturalis* (Gyllenhal 1827)

Macedonia: Kozjak: Lesnička reka 7.7.1965. *P. silvestris* 9 ex.

Serbia: Južni Kučaj 25.3.1947. *P. nigra* 1 ex.; Prokletije: Prilepske planine 20.6.1957. *Abies* sp. 1 ex.

Total number of specimens: 11

Genus *Pityogenes* Bedel 1888

*P. bidentatus* (Herbst 1784)

Macedonia: Kajmakčalan 7.1964 *P. silvestris* 324 ex., 14.7.1964. *P. silvestris* 79 ex.

Serbia: Deliblatska peščara: Devojački bunar 1-2.6.1960. *P. nigra* 78 ex.; Kosmaj: Beli kamen 23.5.1960. *P. nigra* 1 ex.; Maljen: Maljen 8.1953. *P. nigra* 12 ex.; Prokletije 10.7.1959. *P. silvestris* 3 ex., 10.7.1959. (host not listed) 1 ex.; Prokletije: Marjaš 12.7.1959. *P. mugo* 18 ex., Raški do 10.7.1959. *P. silvestris* 6 ex., 12.7.1959. (host not listed) 7 ex.

Slovenia: Mlake: Gradac 18.7.1962. *P. strobus* 54 ex.; Mokronog 27.7.1962. *P. abies* 18 ex.; Žerjavin 20.7.1962. *P. strobus* 38 ex.

Total number of specimens: 639

*P. bistridentatus* (Eichhoff 1878)

Bosnia and Herzegovina: Velika Maoča 19.7.1947. *P. nigra* 1 ex.

Macedonia: Đevđelija 11.7.1963. *P. halepensis* 1 ex.; Kozjak: Baltova čuka 10.7.1965. *P. silvestris* 8 ex., Gvozdina vrata 15.7.1965. (host not listed) 20 ex., Lesnice 11.7.1965. *Pinus* sp. 1 ex., Lesnička reka 7.7.1965. *A. alba* 8 ex., 7.7.1965. *P. silvestris* 33 ex., 7.7.1965. (host not listed) 11 ex., 8.7.1965. *P. silvestris* 14 ex., 8.7.1965. (host not listed) 16 ex., 9.7.1965. *P. nigra* 1 ex., 13.7.1965. *P. silvestris* 1 ex., 17.7.1965. *P. silvestris* 4 ex., Mala Kruša 9.7.1965. *P. nigra* 3 ex., Mešnik 16.7.1965. *P. nigra* 28 ex.; Kožuh: Mrša 13.7.1963. *P. nigra* 21 ex.; Pelister: Begova česma 13.7.1964. *P. peuce* 1 ex.

Serbia: Belgrade: Kalemeđdan 13.3.1952. *Fraxinus* sp. 3 ex.; Bukulja 31.8.1964. *P. nigra* 7 ex., 2.9.1964. *Pinus* sp. 12 ex.; Deliblatska peščara 26.6.1952. (host not listed) 2 ex., 1.9.1953. *P. nigra* 27 ex., 3.9.1953. *P. nigra* 12 ex., 9.7.1958. *P. nigra* 7 ex., 13.3.1959. (host not listed) 4 ex.; Deliblatska peščara: Banatski Karlovci compartment 223/g 4.1960. *P. nigra* 4 ex., Česta šuma 15.5.1957. (host not listed) 2 ex., Česta šuma compartment 99 15.5.1957. *P. nigra* 6 ex., Devojački bunar 16.7.1957. (host not listed) 3 ex., Devojački bunar compartment 225/a 30.5.1957. (host not listed) 8 ex., Đurin bor 10.7.1958. *P. silvestris* 8 ex., Kremenjak 31.5.1960. *P. nigra* 4 ex., 6.6.1960. *P. mugo* 2 ex., 6.6.1960. *P. nigra* 151 ex., 6.6.1960. *P. silvestris* 48 ex., 7.6.1960. *P. silvestris* 14 ex., 27.10.1969. *P. mugo* 6 ex.; Fruška Gora 1.11.1948. *Pinus* sp. 4 ex., 5.6.1963. *P. nigra* 119 ex.; Goč 2.7.1962. *Pinus* sp. 15 ex.; Goč: Bela reka 23.6.1963. (host not listed) 11 ex., Brezna 29.8.1962. *P. nigra* 25 ex., 29.8.1962. (host not listed) 16 ex., Brezna-Lisine 29.8.1962. (host not listed) 39 ex., Gvozdac 30.8.1960. *P. nigra* 34 ex., 21.8.1961. *P. nigra* 10 ex., 25.8.1962. *P. nigra* 18 ex., 23.6.1963. *A. alba* 12 ex., 25.6.1963. *P. nigra* 3 ex., Gvozdac compartment 82/a 5.1961. *Pinus* sp. 6 ex., Pasji potok 26.8.1964. *P. nigra* 2 ex.; Južni Kučaj 25.3.1947. *P. nigra* 5 ex.; Kopaonik 4.1949. (host not listed) 15 ex., 8.7.1949. *Pinus* sp. 15 ex., 11.7.1949. (host not listed) 7 ex., 22.7.1958. (host not listed) 6 ex.; Kopaonik: Suvi vrh 9.10.1958. *Pinus* sp. 39 ex.; Kosmaj 22.5.1960. *P. nigra* 21 ex., 23.5.1960. *P. nigra* 19 ex., 24.5.1960. *P. silvestris* 13 ex., 24.5.1960. (host not listed) 1 ex., 22-23.5.1960. *P. nigra* 28 ex.; Kosmaj: Beli kamen 24.4.1960. *P. nigra* 11 ex., 23.5.1960. *P. nigra* 94 ex., 24.5.1960. *P. silvestris* 16 ex.; Leskovac 9.1960. *P. nigra* 3 ex.; Magleš 28.7.1946. *Pinus* sp. 9 ex.; Maljen 14.4.1952. *Pinus* sp. 20 ex., 8.1953. *P. nigra* 2 ex.; Maljen: Dívčíbare 11.9.1952. (host not listed) 3 ex., (date and host not listed) 5 ex.; Prijepolje: Zabarje 17.4.1961. *P. nigra* 39 ex.; Prokletije 10.7.1959. *P. heldreichii* 3 ex., 10.7.1959. *P. silvestris* 27 ex.; Prokletije: Raški do 10.7.1959. *P. silvestris* 3 ex.; Prokuljje: Gornja Trnava 15.3.1948. *Pinus* sp. 2 ex.;

Šargan 31.7.1946. *Pinus* sp. 6 ex.; Sremska Mitrovica 11.6.1962. (host not listed) 2 ex.; Studenica: Rajkovača 12.8.1959. *P. silvestris* 12 ex.; Tara: Kremanske kose 22.7.1959. *P. nigra* 1 ex., Kremna 7.1959. *P. nigra* 8 ex.; Vršački breg 5.9.1953. *P. nigra* 28 ex.; Vršački breg: Crveni krst 13.5.1963. *P. nigra* 6 ex., Đakov vrh 29.6.1964. *P. nigra* 1 ex., 15.7.1964. *P. nigra* 8 ex., Turska glava compartment 52 18.4.1966. *P. nigra* 1 ex., 1.7.1966. *P. nigra* 3 ex., 3.7.1966. *P. nigra* 1 ex., 5.7.1966. *P. nigra* 2 ex., 6.7.1966. *P. nigra* 2 ex.; Zemun 27.1.1948. *P. nigra* 2 ex.; Zlatar 29.3.1948. *P. nigra* 11 ex., 1.4.1948. *P. nigra* 1 ex.

Locality not listed 26.10.1959. *P. nigra* 6 ex.

Locality, date and host not listed 5 ex.

Total number of specimens: 1328

#### *P. chalcographus* (Linnaeus 1761)

Bosnia and Herzegovina: Sarajevo: Iliča 3.9.1962. *P. abies* 5 ex., Iliča compartment 108 25.8.1962. *P. abies* 5 ex., Iliča compartment 46 8.9.1962. *A. alba* 1 ex., Velika Maoča 20.7.1947. (host not listed) 1 ex., 30.7.1960. *P. abies* 31 ex.

Macedonia: Pelister 14.5.1948. *P. peuce* 1 ex., 28.9.1961. *P. peuce* 28 ex., 6.1962. *P. peuce* 122 ex., 2.6.1962. *P. peuce* 217 ex., 4.6.1962. *P. peuce* 48 ex.; Pelister: Begova česma 7.1964. *P. peuce* 30 ex., 13.7.1964. *P. peuce* 5 ex., Kopanke (date not listed) *P. peuce* 14 ex., Palisnopje 7.1964. *P. peuce* 251 ex., 13.7.1964. *A. alba* 7 ex.

Montenegro: Durmitor: Topolov lom 1.6.1958. *P. abies* 8 ex., Žabljak 27.6.1958. *P. abies* 3 ex., 28.6.1958. *P. abies* 10 ex.

Serbia: Avala 8.4.1935. (host not listed) 1 ex.; Belgrade: Košutnjak 3.6.1948. *P. abies* 1 ex., Topčider 25.8.1953. *P. nigra* 4 ex.; Deliblatska peščara 26.6.1952. (host not listed) 1 ex.; Fruška Gora 1.11.1948. *Pinus* sp. 6 ex.; Fruška Gora: Erdevik 2.11.1948. *Pinus* sp. 9 ex.; Golija 9.7.1948. *A. alba* 1 ex., 26.7.1948. (host not listed) 2 ex., 21.7.1949. (host not listed) 4 ex.; Golija: Osredelica 23.7.1948. *P. abies* 3 ex., Osredelica-Šipov 24.7.1948. *P. abies* 5 ex., Radulovac 24.3.1947. (host not listed) 2 ex., 26.3.1947. *P. abies* 19 ex., 28.7.1948. *P. abies* 2 ex.; Južni Kučaj 25.3.1947. *P. abies* 1 ex.; Kopaonik 7.1949. *P. abies* 1 ex., 7.1949. (host not listed) 63 ex., 6.7.1949. *P. abies* 3 ex., 6.7.1949. (host not listed) 4 ex., 10.7.1949. (host not listed) 3 ex., 8.1949. *P. abies* 7 ex., 22.7.1958. (host not listed) 7 ex.; Kopaonik: Hajdučica 8.8.1959. *P. abies* 18 ex., Kadijevac 17.5.1959. (host not listed) 9 ex., Samokovska reka 10.6.1958. *A. alba* 7 ex., 10.6.1958. *P. abies* 11 ex., Suvi jelak 4.8.1959. *P. abies* 8 ex., 8.8.1959. *P. abies* 12 ex.; Prokletije 15.8.1958. *P. abies* 9 ex., 16.8.1958. *P. peuce* 3 ex., 21.8.1958. *P. abies* 10 ex., 13.11.1958. *P. heldreichii* 8 ex., 10.7.1959. *P. heldreichii* 14 ex., 11.7.1959. *P. abies* 3 ex., 11.7.1959. *P. heldreichii* 16 ex., 11.7.1959. *P. peuce* 15 ex., 11.7.1959. (host not listed) 69 ex., 12.7.1959. *P. abies* 26 ex., 12.7.1959. *P. mugo* 62 ex., 12.7.1959. *P. heldreichii* 1 ex., 12.7.1959. *P. peuce* 11 ex., 12.7.1959. (host not listed) 5 ex.; Prokletije: Adovići 27.8.1960. *P. abies* 3 ex., Ašti Škrele 21.8.1958. *P. abies* 10 ex., 25.8.1958. *P. abies* 1 ex., Drelje 7.1958. *P. abies* 1 ex., Laz Hus 20.8.1958. *P. abies* 24 ex., Laz Hus-Škrele 20.8.1958. *P. abies* 8 ex., Lovski potok 13.7.1959. *P. abies* 1 ex., Marjaš 12.7.1959. *P. mugo* 17 ex., Prilepske planine 16.8.1958. *P. peuce* 1 ex., 11.7.1959. (host not listed) 4 ex., Raški do 31.7.1950. *P. peuce* 1 ex., 10.7.1959. *P. heldreichii* 5 ex., 10.7.1959. *P. silvestris* 1 ex., 11.7.1959. *P. abies* 9 ex., 11.7.1959. *P. peuce* 3 ex., 16.8.1959. *P. abies* 12 ex.; Studenica: Rajkovača 12.8.1959. *P. nigra* 6 ex., Savovo 12.9.1959. *Picea* sp. 2 ex., 28.9.1960. *Picea* sp. 5 ex., Stolovak 13.8.1959. *Picea* sp. 8 ex.; Zlatar 15.7.1947. (host not listed) 22 ex., 23.8.1947. *Pinus* sp. 9 ex.

Slovenia: Mlake: Gradac 18.7.1962. *P. strobus* 62 ex.; Mokronog 27.7.1962. *P. abies* 120 ex.; Žerjavin 20.7.1962. *P. strobus* 6 ex.

Total number of specimens: 1594

*P. quadridens* (Hartig 1834)

Macedonia: Kozjak: Lesnička reka 9.7.1965. (host not listed) 1 ex.

Serbia: Prokletije 10.7.1959. *P. heldreichii* 1 ex., 10.7.1958. (host not listed) 1 ex., 11.7.1959. *P. heldreichii* 2 ex., 11.7.1959. *P. peuce* 1 ex., 12.7.1959. *P. heldreichii* 67 ex., 12.7.1959. (host not listed) 4 ex.; Prokletije: Raški do 10.7.1959. *P. silvestris* 13 ex., 12.7.1959. *P. heldreichii* 3 ex., 12.7.1959. *P. silvestris* 7 ex.

Total number of specimens: 100

*P. trepanatus* (Nordlinger 1848)

Macedonia: Kožuh: Mrša 13.7.1963. *P. nigra* 1 ex.

Serbia: Prokletije 13.11.1958. *P. heldreichii* 3 ex., 11.7.1959. *P. heldreichii* 21 ex., 12.7.1959. *P. heldreichii* 2 ex., 12.7.1959. *P. peuce* 1 ex.; Prokletije: Prilepske planine 12.7.1959. *P. mugo* 2 ex., Raški do 10.7.1959. *Pinus* sp. 2 ex.

Total number of specimens: 32

Genus *Pityokteines* Fuchs 1911*P. curvidens* (Germar 1824)

Bosnia and Herzegovina: Sarajevo: Ilijadža 8.9.1962. *P. abies* 8 ex., Ilijadža compartment 108 25.8.1962. *P. abies* 1 ex., Ilijadža compartment 46 8.9.1962. *A. alba* 124 ex.; Tribija (date not listed) *A. alba* 4 ex.

Macedonia: Pelister 2.6.1962. *P. peuce* 1 ex.; Kozjak: Kozjačka reka 12.7.1965. *A. alba* 67 ex., 13.7.1965. *A. alba* 16 ex., 13.7.1965. *P. silvestris* 1 ex., 14.7.1965. *A. alba* 38 ex.

Serbia: Belgrade: Topčider 2.3.1948. (host not listed) 3 ex.; Goč 1947. *A. alba* 1 ex.; Goč: Gvozdac 25.8.1960. *A. alba* 39 ex., 26.8.1960. *A. alba* 16 ex., 26.8.1960. (host not listed) 5 ex., 29.5.1961. (host not listed) 12 ex., 23.6.1963. *A. alba* 2 ex., Bela reka 22.6.1963. *A. alba* 201 ex., 23.6.1963. (host not listed) 2 ex.; Golija 24.7.1948. *A. alba* 4 ex.; Golija: Osredelica 24.7.1948. *A. alba* 9 ex.; Kopaonik 8.1949. *A. alba* 3 ex., 18.8.1949. *A. alba* 1 ex.; Kruševac 20.4.1947. (host not listed) 1 ex.; Prokletije 26.5.1959. *A. alba* 9 ex.; Prokletije: Adžovići 27.8.1960. *A. alba* 7 ex., Alagina reka 2.8.1960. *P. abies* 1 ex., Babaloč 12.5.1959. *A. alba* 19 ex., 29.6.1960. *A. alba* 12 ex., Cerski potok 8.1958. *A. alba* 8 ex., 29.6.1960. *A. alba* 13 ex., Prilepske planine 20.6.1957. *A. alba* 8 ex., 20.6.1957. (host not listed) 1 ex.; Zlatar 23.8.1947. *Pinus* sp. 1 ex.

Total number of specimens: 638

*P. spinidens* (Reitter 1894)

Bosnia and Herzegovina: Blatnica 25.7.1947. *A. alba* 9 ex.; Tribija (date not listed) *A. alba* 4 ex.; Velika Maoča 20.7.1947. *P. nigra* 1 ex.

Macedonia: Kozjak: Kozjačka reka 12.7.1965. *A. alba* 8 ex., 13.7.1965. (host not listed) 1 ex.

Montenegro: Durmitor: Crno jezero 27.6.1958. *A. alba* 2 ex., Žabljak 7.7.1958. *A. alba* 34 ex., 7.7.1958. *P. abies* 17 ex.

Serbia: Goč 28.3.1948. (host not listed) 12 ex.; Goč: Brezna 29.8.1962. *P. nigra* 8 ex., Gvozdac 25.8.1960. *A. alba* 107 ex., 26.8.1960. *A. alba* 160 ex., 26.8.1960. (host not listed) 8 ex., 27.8.1962. *P. nigra* 10 ex.; Golija: Radulovac 24.7.1948. *A. alba* 16 ex.; Kopaonik: Crni vrh 8.7.1949. (host not listed) 3 ex.; Prokletije 11.7.1959. *P. abies* 1 ex.; Prokletije: Raški do 11.7.1959. *A. alba* 4 ex.; Zlatar 16.7.1947. (host not listed) 1 ex.; Zlatibor: Murtenica 11.10.1947. (host not listed) 1 ex.

Locality not listed 22.8.1947. *A. alba* 1 ex.

Locality, date and host not listed 3 ex.

Total number of specimens: 411

*P. vorontzowi* (Jakobson 1895)

Serbia: Šargan 31.7.1946. (host not listed) 1 ex; Zlatar 2.7.1947. (host not listed) 25 ex., 8.9.1947. (host not listed) 5 ex.

Locality for which the country is not precisely identified: Vasiljev do 15.8.1952. *Abies* sp. 9 ex.

Total number of specimens: 40

Tribe Phloeosinini Nüsslin 1912

Genus *Phloeosinus* Chapuis 1869

*Ph. aubei* (Perris 1855)

Bosnia and Herzegovina: Tresnica 5.10.1952. *J. oxycedrus* L. 9 ex.

Serbia: Deliblatska peščara: Čardak 3.6.1960. *J. virginiana* L. 31 ex., Kremenjak 12.8.1956 *J. communis* 3 ex.; Goč: Gvozdac 26.8.1960. (host not listed) 15 ex.; Prokletije 8.4.1960. *Juniperus* sp. 1 ex.; Prokletije: Bok Miljošt 19.4.1960. *J. oxycedrus* 17 ex., Dečani 19.8.1958. *Juniperus* sp. 1 ex., Šišman Bok 8.4.1960. (host not listed) 1 ex.

Slovenia: Žerjavin 20.7.1962. *J. communis* L. 32 ex.

Total number of specimens: 110

*Ph. thujae* (Perris 1855)

Serbia: Deliblatska peščara: Kremenjak 12.8.1956. *J. communis* 1 ex.; Goč: Gvozdac 18.8.1961. *J. sabina* L. 26 ex., 20.8.1961. *Juniperus* sp. 3 ex.; Kopaonik 6.1962. *Juniperus* sp. 11 ex.

Total number of specimens: 41

Tribe Polygraphini Chapuis 1869

Genus *Carphoborus* Eichhoff 1864

*C. minimus* (Fabricius 1798)

Serbia: Maljen 8.1953. *Pinus* sp. 3 ex.; Maljen: Divčibare 11.9.1952. (host not listed) 8 ex.; Goč 20.5.1964. *P. nigra* 7 ex.; Goč: Brezna 25.6.1963. *P. nigra* 3 ex.

Total number of specimens: 21

Genus *Polygraphus* Erichson 1836

*P. polygraphus* (Linnaeus 1758)

Serbia: Golija: Radulovac 20.8.1949. *P. abies* 5 ex.; Kopaonik 7.1949. *P. abies* 14 ex., 18.8.1950. *P. abies* 3 ex.; Prokletije: Ašti Škrele 21.8.1958. *P. abies* 13 ex., Laz Hus 20.8.1958. *P. abies* 12 ex., Lovski potok 13.7.1959. *P. abies* 4 ex., Prilepske planine 16.8.1958. *Pinus peuce* 1 ex.

Total number of specimens: 52

## Tribe Scolytini Latreille 1807

Genus *Scolytus* Geoffroy 1762

*S. intricatus* (Ratzeburg 1837)

Serbia: Kupinovo: Kupinski kut 5.6.1958. *Quercus* sp. 1 ex.

Total number of specimens: 1

*S. kirschii* Skalitzky 1876

Serbia: Avala 13.7.1947. (host not listed) 9 ex.

Total number of specimens: 9

*S. mali* (Bechstein 1805)

Serbia: Belgrade: Kumodraž 9.5.1966. *Prunus avium* L. 10 ex.

Total number of specimens: 10

*S. multistriatus* (Marsham 1802)

Croatia: Gradište 9.5.1947. *Ulmus* sp. 1 ex.

Serbia: Aranđelovac 3.5.1964. *Ulmus* sp. 27 ex., 2.9.1964. *Ulmus* sp. 426 ex.; Belgrade 14.7.1945. *Ulmus* sp. 7 ex., 10.6.1946. (host not listed) 3 ex., 11.6.1946. (host not listed) 7 ex., 5.9.1962. *Ulmus* sp. 5 ex.; Belgrade: Banovo brdo 25.5.1962. (host not listed) 1 ex., 25.9.1962. *Ulmus* sp. 3 ex., Košutnjak 3.6.1948. *Ulmus* sp. 3 ex., Faculty of Forestry 15.10.1966. (host not listed) 1 ex., Topčider 5.1948. *Ulmus* sp. 2 ex.; Deliblatska peščara: Ada Žilava 7.6.1960. *Ulmus* sp. 29 ex., Dumača 11.4.1964. *Ulmus* sp. 35 ex., 19.5.1964. *Ulmus* sp. 2 ex., 20.5.1964. *Ulmus* sp. 7 ex., 22.5.1964. *Ulmus* sp. 3 ex.; Kupinovo 2.6.1951. *Ulmus* sp. 4 ex.; Sremska Mitrovica 19.7.1957. *Ulmus* sp. 2 ex.

Total number of specimens: 568

*S. pygmaeus* (Fabricius 1787)

Serbia: Deliblatska peščara: Ada Žilava 7.6.1960. *Ulmus* sp. 51 ex., Kremenjak 7.6.1960. *P. silvestris* 1 ex.; Oplenac 2.9.1964. *Ulmus* sp. 10 ex., 3.9.1964. *Ulmus* sp. 405 ex.

Total number of specimens: 467

*S. ratzeburgii* Janson 1856

Serbia: Deliblatska peščara 5.1950. (host not listed) 1 ex.

Total number of specimens: 1

*S. rugulosus* (Muller 1818)

Serbia: Belgrade 9.4.1962. *Prunus armenica* L. 152 ex.; Belgrade: New Belgrade 7.4.1964. *P. serulata* Lindl. 33 ex.; Deliblatska peščara 2.9.1953. *P. mahaleb* L. 2 ex., 3.9.1953. *P. mahaleb* 2 ex.; Oplenac 3.9.1964. *Ulmus* sp. 19 ex.; Svilajnac 25.3.1966. *Malus* sp. 9 ex.; Užička Požega 1.9.1947. (host not listed) 2 ex.; Zemun 27.5.1947. (host not listed) 1 ex., 15.6.1947. (host not listed) 3 ex., 3.5.1952. *P. avium* L. 5 ex.; Zlatar 2.8.1947. (host not listed) 1 ex.

Locality and host not listed 18.7.1946. 1 ex.

Total number of specimens: 230

*S. scolytus* (Fabricius 1775)

Bosnia and Herzegovina: Brčko 30.6.1948. *Ulmus* sp. 5 ex.

Serbia: Aranđelovac: Bukovički park 1.9.1964. *Ulmus* sp. 1 ex.; Belgrade: Topčider 5.1948. *Ulmus* sp. 4 ex., Košutnjak 3.6.1948. *Ulmus* sp. 2 ex.; Deliblatska peščara: Kremenjak 7.6.1960. *P. silvestris* 9 ex.; Kupinovo 2.6.1951. *Ulmus* sp. 6 ex.; Prokletije: Babaloć 13.7.1959. *Ulmus* sp. 13 ex.; Sremska Mitrovica 18.7.1957. *Ulmus* sp. 2 ex., 5.1963. (host not listed) 2 ex; Zemun 18.4.1946. (host not listed) 1 ex.; Zlatar 11.7.1947. (host not listed) 1 ex.

Total number of specimens: 50

Tribe Taphrorychini Reitter 1913

Genus *Taphrorychus* Eichhoff 1878

*T. bicolor* (Herbst 1793)

Macedonia: Kozjak: Kozjačka reka 12.7.1965. (host not listed) 2 ex., Zdrave ornice 14.7.1965. *Pinus* sp. 1 ex.

Serbia: Južni Kučaj 14.7.1966. (host not listed) 1 ex., 17.7.1966. (host not listed) 4 ex., 1.8.1966. (host not listed) 4 ex., 5.10.1966. (host not listed) 2 ex.; Ljig 17.5.1957. (host not listed) 1 ex.; Majdanpečka Domena 5.7.1948. *Fagus moesiaca* (K. Malý) Czecott. 14 ex.; Prokletije 13.7.1959. *F. moesiaca* 8 ex.; Prokletije: Prilepske planine 20.6.1957. *A. alba* 5 ex.; Studenica: Rajkovača 29.9.1966. (host not listed) 1 ex.

Total number of specimens: 43

Tribe Tomicini Thomson 1859

Genus *Hylurgus* Latreille 1807

*H. ligniperda* (Fabricius 1787)

Macedonia: Kozjak: Zdrave ornice 14.7.1965. *P. nigra* 2 ex., 11.9.1965. *P. silvestris* 1 ex.

Serbia: Deliblatska peščara: Dumača 8.6.1964. *P. silvestris* 1 ex., Đurin bor compartment 379/k 20.7.1957. *P. silvestris* 1 ex, Grebenac compartment 380/a 19.3.1959. *P. nigra* 1 ex., Kremenjak 4.6.1964. *P. banksiana* 6 ex.; Studenica: Rajkovača 23.5.1959. (host not listed) 5 ex.

Total number of specimens: 17

Genus *Tomicus* Latreille 1803*T. minor* (Hartig 1834)

Bosnia and Herzegovina: Dubočica (date and host not listed) 1 ex.; Velika Maoča 19.7.1947. *P. nigra* 1 ex.

Macedonia: Kozjak: Lesnička reka 9.6.1965. *P. nigra* 1 ex., Kozjačka reka 9.7.1965. (host not listed) 2 ex., Todorovska tumba 7.1965. (host not listed) 124 ex.; Kožuh: Mrša 13.7.1963. *P. nigra* 4 ex.

Montenegro: Crni vrh 7.5.1959. *Pinus* sp. 1 ex.

Serbia: Belgrade: Košutnjak 8.5.1953. (host not listed) 1 ex.; Maljen: Divčibare 1951. (host not listed) 2 ex.; Goč 5.1961. (host not listed) 50 ex.; Goč compartment 82/a 5.1961. *Pinus* sp. 110 ex.; Prokuplje: Gornja Trnava 15.3.1948. *Pinus* sp. 1 ex.; Studenica: Rajkovača 23.5.1959. (host not listed) 1 ex.; Tara: Kaluđerske bare 2.6.1959. *P. nigra* 1 ex.; Vrdnik 6.1962. (host not listed) 9 ex.

Total number of specimens: 309

*T. piniperda* (Linnaeus 1758)

Macedonia: Kajmakčalan 14.7.1964. *P. silvestris* 3 ex.; Kozjak: Baltova čuka 10.7.1965. *P. peuce* 3 ex.

Montenegro: Durmitor: Crno jezero 28.6.1958. *Pinus* sp. 1 ex.

Serbia: Aranđelovac 2.5.1964. *P. silvestris* 4 ex.; Avala 18.4.1947. *P. nigra* 1 ex., (date not listed) *P. silvestris* 1 ex.; Deliblatska peščara 18.3.1957. *P. nigra* 3 ex., 9.7.1958. *P. nigra* 1 ex., 2.6.1960. *P. nigra* 44 ex.; Deliblatska peščara: Banatski Karlovci compartment 223/g 4.1960. *P. nigra* 1 ex., Dumača 8.6.1964. *P. silvestris* 5 ex., Đurin bor compartment 377/a 26.4.1962. *P. nigra* 4 ex., Đurin bor compartment 377/c 18.4.1962. *P. nigra* 4 ex., Đurin bor compartment 378/e 8.7.1957. *P. nigra* 1 ex., 12.2.1962. *P. nigra* 2 ex., 12.3.1962. *P. nigra* 3 ex., 18.4.1962. *P. nigra* 4 ex., 26.4.1962. *P. nigra* 2 ex., Đurin bor compartment 378/2 12.3.1962. *P. silvestris* 7 ex., Đurin bor compartment 380/a 9.7.1958. *P. nigra* 3 ex., Grebenac compartment 380/a 19.3.1959. *P. nigra* 1 ex., 12.6.1959. (host not listed) 2 ex., Kremnjak 29.5.1960. *P. mugo* 1 ex., 6.6.1960. *P. banksiana* 32 ex., 6.6.1960. *P. nigra* 1 ex., 6.6.1960. *P. mugo* 3 ex., 4.6.1964. *P. banksiana* 5 ex., 4.6.1964. *P. jeffreyi* 2 ex., 4.6.1964. *P. strobus* 7 ex., Kremnjak compartment 397/a 21.3.1957. *P. nigra* 4 ex., Topila compartment 38/c 5.4.1957. *P. nigra* 1 ex., Česta šuma 15.5.1957. *P. silvestris* 6 ex.; Kopaonik 6.7.1949. (host not listed) 3 ex., 7.7.1949. *Pinus* sp. 6 ex., 4.8.1949. (host not listed) 6 ex., 22.7.1958. (host not listed) 4 ex.; Kosmaj 22.5.1960. *P. nigra* 4 ex.; Kosmaj: Beli kamen 24.4.1960. *P. nigra* 39 ex., 24.5.1960. *P. silvestris* 20 ex.

Total number of specimens: 244

Genus *Xylechinus* Chapuis 1869*X. pilosus* (Ratzeburg 1837)

Serbia: Kopaonik 11.6.1958. (host not listed) 1 ex., 12.6.1959. on burlap 1 ex.

Total number of specimens: 2

Tribe Xyleborini LeConte 1876

Genus *Xyleborinus* Reitter 1913

*X. alni* Niijima 1909

Montenegro: Crni vrh 7.5.1959. *Pinus* sp. 2 ex.

Serbia: Belgrade 10.3.1946. (host not listed) 15 ex.; Fruška gora: Stražilovo 10.5.1958. (host not listed) 1 ex.; Kruševac 28.9.1957. *Juglans* sp. 5 ex.; Kupinovo: Kupinski kut 10.4.1959. (host not listed) 5 ex.; Majdanpečka Domena 7.6.1935. (host not listed) 3 ex., 30.4.1937. (host not listed) 1 ex., 12.5.1937. (host not listed) 3 ex., 10.3.1946. (host not listed) 23 ex.; Morović: Vranjevina 16.8.1958. (host not listed) 1 ex.; Sremska Mitrovica 6.7.1957. *Juglans* sp. 3 ex., 26.7.1957. *Juglans* sp. 2 ex., 29.8.1957. *Juglans* sp. 6 ex.

Slovenia: Dutovlje 20.9.1957. *Quercus* sp. 2 ex.

Total number of specimens: 72

Genus *Xyleborus* Eichhoff 1864

*X. dispar* (Fabricius 1792)

Bosnia and Herzegovina: Prozor 25.7.1936. (host not listed) 1 ex.

Croatia: Županja 20.4.1963. *F. moesiaca* 1 ex.

Serbia: Kupinovo: Kupinski kut 10.4.1959. (host not listed) 16 ex.; Majdanpečka Domena 14.11.1964. (host not listed) 2 ex.; Zemun 22.6.1948. *Juglans* sp. 2 ex.

Slovenia: Krško polje 9.6.1948. *Juglans* sp. 2 ex.

Total number of specimens: 24

*X. eurygraphus* (Ratzeburg 1837)

Macedonia: Kozjak: Zdrave ornice 14.7.1965. *P. nigra* 2 ex., 14.9.1965. *P. silvestris* 2 ex.

Serbia: Belgrade 7.1946. (host not listed) 15 ex.

Total number of specimens: 19

*X. monographus* (Fabricius 1792)

Croatia: Gradište 9.6.1948. *Quercus* sp. 5 ex.

Serbia: Belgrade: Stari grad (date and host not listed) 2 ex.; Klenak 8.8.1957. *Quercus* sp. 2 ex.; Kupinovo: Kupinski kut 18.7.1957. *Ulmus* sp. 3 ex., 7.6.1958. (host not listed) 1 ex., 10.4.1959. (host not listed) 5 ex.; Lazarevac 20.8.1957. *Quercus* sp. 2 ex.; Ljig 21.8.1957. *Quercus* sp. 7 ex.; Obrenovac: Zabrežje 16.10.1957. *Quercus* sp. 4 ex.; Plandište 29.10.1957. *Quercus* sp. 1 ex.; Sremska Mitrovica 31.10.1957. *Quercus* sp. 1 ex.

Slovenia: Črna 5.1947. (host not listed) 2 ex.; Dutovlje 20.9.1957. *Quercus* sp. 1 ex.

Locality not listed 16.12.1952. *Quercus* sp. 4 ex.

Locality for which the country is not precisely identified: Jerno 1947. *Quercus* sp. 6 ex.

Total number of specimens: 46

Tribe Xyloterini Lindemann 1876

Genus *Trypodendron* Stephens 1830

*T. domesticum* (Linnaeus 1758)

Serbia: Čemerno 15.9.1960. *F. moesiaca* 5 ex.; Goč: Brezna 23.8.1964. *P. nigra* 2 ex., 30.9.1966. *Betula pendula* Roth 4 ex., Prerovska reka 7.1966. *F. moesiaca* 10 ex.; Južni Kučaj 15.7.1966. (host not listed) 11 ex.; Majdanpečka Domena 10.3.1946. (host not listed) 1 ex.; Prokletije: Babaloć 12.5.1959. (in flight) 1 ex.

Locality for which the country is not precisely identified: Palčina 3.6.1968. (host not listed) 1 ex.

Total number of specimens: 35

*T. lineatum* (Olivier 1795)

Macedonia: Kozjak: Kozjačka reka 12.7.1965. *A. alba* 2 ex., 13.7.1965. (host not listed) 2 ex.

Montenegro: Crni vrh 7.5.1959. *Pinus* sp. 1 ex.; Durmitor: Crno jezero 28.6.1958. *Pinus* sp. 6 ex, Topolov lom 1.6.1958. *P. abies* 1 ex.

Serbia: Avala 21.4.1935. (host not listed) 1 ex.; Goč 5.7.1946. *A. alba* 1 ex.; Goč: Brezna 8.1966. (host not listed) 3 ex., Gvozdac 26.8.1960. (host not listed) 1 ex.; Golija: Osedelica 24.7.1948. (host not listed) 1 ex., Radulovac 21.7.1948. *P. abies* 9 ex.; Kopaonik 4-19.8.1950. *P. nigra* 23 ex., 20.5.1959. *A. alba* 11 ex., 12.6.1959. on burlap 42 ex.; Kopaonik: compartment 101 21.5.1959. (host not listed) 8 ex., Hajdučica 3.8.1959. *A. alba* 9 ex., Samokovska reka 21.5.1959. (host not listed) 2 ex.; Kupinovo: Kupinski kut 10.4.1959. (host not listed) 2 ex.; Maljen 8.1953. (host not listed) 1 ex.; Prokletije 12.5.1959. *A. alba* 16 ex.; Prokletije: Babaloć 8.7.1958. *A. alba* 1 ex., Brza 12.5.1959. *A. alba* 3 ex., Prilepske planine 20.6.1957. *A. alba* 2 ex., Raški do 11.7.1959. *A. alba* 1 ex.; Studenica: Savovo 28.9.1960. (host not listed) 1 ex.

Locality, date and host not listed 1 ex.

Total number of specimens: 151

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## ЗБИРКА СИПАЦА (CURCULIONIDAE: SCOLYTINAE) ПРОФЕСОРА ДР СВЕТИСЛАВА ЖИВОЈИНОВИЋА

ЧЕДОМИР МАРКОВИЋ

### Извод

Једна од највећих збирки инсеката која се налази у депоима Катедре заштите шума Шумарског факултета Универзитета у Београду је збирка сипаца професора др Светислава Живојиновића. На жалост највећи део материјала који се у њој налази до сада није био таксономски обрађен. Како су подаци из ње јако важни за боље познавање фауне сипаца Србије збирка је у потпуности таксономски обрађена и пописана а добијени резултати су у овом раду представљени.

Збирка сипаца професора др Светислава Живојиновића садржи 14 262 примерака који прикупљени на подручју некадашње Југославије, највећим делом на територији Србије. У њој се налазе 63 врсте из 15 трибуса и 25 рода. За 61 врсту у њој постоје примерци из Србије, за 28 из Македоније, 21 из Босне и Херцеговине, 15 из Црне Горе, 12 из Словеније и 4 из Хрватске. По први пут за фауну сипаца Србије у овој збирци су пронађени налази врста *Dryocoetes hecographus* и *Xylechinus pilosus*. Такође, у њој су нађени и налази врста *Ernporicus caucasicus* и *Orthotomicus longicollis* који су знатно старији од налаза које као прве за Србију у својим радовима наводе MARKOVIĆ & STOJANOVIĆ (2000a, 2000b).

У резултатима овог рада наведен је списак врста које се у збирци налазе. За сваку од њих су, на основу података из збирке, наведени локалитети, датуми и домаћини на којима су оне констатоване и број примерака.

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