

## THE BEETLES (INSECTA, COLEOPTERA) FROM THE TINCA AREA (BIHOR COUNTY, ROMANIA) DURING 2023

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### Abstract

In this work are presented taxonomical and ecological data about the beetles (Insecta, Coleoptera) from Tinca area, Bihor county during 2023. There were identified 79 species belonging to 19 families and 65 genera. Twenty one species: *Chrysolina olivieri* Bed, *Sitona hispidulus* Fabr, *Alophus kaufmanni* Str, *Coniocleonus nebulosus* L, *Mecaspis alternans* Hrbst, *Sphenophorus striatopunctatus* Goeze, *Phyllobius pyri* L, *Elytrodon bidentatus* St, *Liophloeus tessulatus* Mull, *Eusomus ovulum* Germ, *Lixus angustus* Hrbst, *Pyrrhidium sanguineum* L, *Leptura aurulenta* Fabr, *Calvia 14-guttata* L, *Tythaspis sedecimpunctata* L, *Harpalus atratus* Latr, *Cicindela hybrida* L, *Phymatodes testaceus* L, *Anthrenus pimpinellae* Fabr, *Hydrochara caraboides* L, *Anthaxia fulgurans* Schr are mentioned for the first time in the Tinca area.

**Keywords:** coleoptera, Tinca, Bihor county, Romania

### INTRODUCTION

The Tinca area is located in the south-western part of Bihor county, belonging to the historical province of Crişana, in the north-western part of Romania. The climate is temperate – continental, the average altitude is 110 m. The hydrographical network is various: the Crişul Negru river, some lakes. The vegetation belongs to the oak stage having a predominant central – European origin (BERINDEI et al., 1972). The disappearance of species or the diminution of their population, the emergence of new species, either accidental in territory, insufficient faunal data, observing some ecological aspects not published in the scientific literature are just a few reasons that make it absolutely necessary to publish the faunal data observed in nature. Data about the fauna of the beetles from Tinca area were published by different authors (ILIE, 2009, 2014a, 2014b, 2016a, 2016b, 2017, 2018, 2019; ILIE L.C. & ILIE A.L., 2018; ILIE A.L., MARINESCU M., ILIE L.C., 2019; ILIE & MARINESCU, 2020a, 2020b, 2021a, 2021b, 2022). The Tinca area includes Tinca, Râpa, Gurbediu, Belfir and Girişu Negru villages.

### MATERIAL AND METHODS

The researches were carried out in the period 2018 – 2022 in different ecosystems in the area and the surroundings of Tinca. The insects were collected with the entomological net or by hand. For the identification of the species were used different sources

(WARCHALOWSKI, 2003; GÎDEI, POPESCU, 2012; 2014; PANIN, 1951; en.m.wikipedia.org). The systematic classification of the species was done according to fauna-eu.org.

### RESULTS AND DISCUSSIONS

During 2023, the following species were recorded:

- Curculionidae Family *Hypera zoilus* (SCOPOLI, 1763) – one specimen, Tinca, March 7. Relatively common species in Romania, it is found in Europe and North America.
- *Sitona hispidulus* (FABRICIUS, 1777) – one specimen, Tinca, March 8. Common species in Romania, European species, invasive to Asia and North America. Species mentioned for the first time in the Tinca area.
- *Alophus kaufmanni* (STIERLIN, 1884) – one specimen, Tinca, May 4, 20. Species mentioned for the first time in the Tinca area, European species.
- *Coniocleonus nebulosus* (LINNAEUS, 1758) – one specimen, Tinca, March 21. European species, relatively common in Romania. Species mentioned for the first time in the Tinca area.
- *Mecaspis alternans* (HERBST, 1795) – one specimen, Tinca, March 21. Relatively common species in Romania, it is found in Europe, the Near East and North Africa. Species mentioned for the first time in the Tinca area.
- *Cyphocleonus dealbatus* (GMELIN, 1790) – one specimen, Tinca, March 22; April 21, 22. Common species in Romania, Eurasian species.
- *Lepyrus capucinus* (SCHALLER, 1783) – one specimen, Tinca, March 26; April 11, 21; May 9, 24, 25; July 25; two specimens, Tinca, April 23;

- one pair (the second annual generation), Tinca, July 24. Common species in Romania, European species.
- *Sphenophorus striatopunctatus* (GOEZE, 1777) – one specimen, Tinca, April 3; May 26; one specimen, the edge of the Tinca forest, April 28. Common species in Romania, Eurasian species. Species mentioned for the first time in the Tinca area.
  - *Pseudocleonus cinereus* (Schrank, 1781) – one specimen, Tinca, April 11, 19,22,29; May 3,5,6,10,11, 17,25; two specimens, Tinca, April 20,21. Common species in Romania, European species.
  - *Cleonis pigra* (SCOPOLI, 1763) – one specimen, Tinca, April 19,22, 30. Common species in Romania, Palearctic species.
  - *Phyllobius pyri* (LINNAEUS, 1758) – one specimen, Tinca, April 29. Common species in Romania, Palearctic species. Species mentioned for the first time in the Tinca area.
  - *Elytrodon bidentatus* (STEVEN 1829) – one specimen, Tinca, April 28; May 1. Relatively rare species in Romania, it is found in southern, central and eastern Europe. Species mentioned for the first time in the Tinca area.
  - *Liophloeus tessulatus* (MULLER, 1776) – one specimen, Tinca, May 17. Relatively common species in Romania, European species. Species mentioned for the first time in the Tinca area.
  - *Eusomus ovulum* (GERMAR, 1824) – one specimen, Tinca, June 17. Relatively common species in Romania, European species. Species mentioned for the first time in the Tinca area.
  - *Lixus angustus* (HERBST, 1795) – one specimen, Tinca, July 11. Common species in Romania, European species. Species mentioned for the first time in the Tinca area.
- Brentidae Family
- *Apion frumentarium* (LINNAEUS, 1758) – one specimen, Tinca, April 28. Common species in Romania, Palearctic species.
- Meloidae Family
- *Meloe proscarabaeus* (LINNAEUS, 1758) – one female specimen, Tinca, March 10, 22, 24, 28 (the edge of the Tinca forest). Common species in Romania, European species.
- Elateridae Family
- *Agriotes obscurus* (LINNAEUS, 1767) – one specimen, Tinca, March 15; May 11; June 12. Common species in Romania, European species.
- Chrysomelidae Family
- *Galeruca melanocephala* (PONZA, 1805) – one specimen, Tinca, March 14. Relatively common species in Romania, Eurasian species.
  - *Galeruca tanacetii* (LINNAEUS, 1758) – one male specimen, Tinca, June 20; July 3. Common species in Romania, Palearctic species.
  - *Gonioctena fornicata* (BRUGGEMANN, 1873) – one specimen, Tinca, March 23, 24.; t = 21<sup>0</sup> C. Common species in Romania, European species.
  - *Galeruca rufa* (GERMAR, 1824) – one specimen, Tinca, March 22. Common species in Romania, European species.
  - *Chrysolina sturmi* (WESTHOFF, 1882) – one female specimen, Tinca, March 24; April 11,21; May 4,5,27,31; June 13,15 – 17,19,20 – 22,24,25,30; July 2,3,13,16,18,25; one pair, Tinca, April 10,21; June 2,7,10; one male specimen and two female specimens, Tinca, April 22; two female specimens, three male specimens, Tinca, April 23; three female specimens, one male specimen, Tinca, April 28-29; May 6,19; June 19,28; two male specimens, Tinca, May 18, 22; six male and one female specimens, Tinca, June 1; one male specimen, Tinca, June 9,11; July 18; August 1,9; one male and three female specimens, Tinca, July 12. Common species in Romania, it is found in Europe and Western Asia.
  - *Chrysolina fastuosa* (SCOPOLI, 1763) – one male specimen, Tinca, June 6,13,19,20; two specimens, Tinca, June 8. Common species in Romania, it is found in Europe and North Turkey.
  - *Cassida nobilis* (LINNAEUS, 1758) – one specimen, Tinca, April 21. Common species in Romania, Palearctic species.
  - *Hispa atra* (LINNAEUS, 1767) – one pair, Tinca, April 23. Relatively common species in Romania, Eurasian species.
  - *Lema cyanella* (LINNAEUS, 1758) – one specimen, Tinca, April 22. Common species in Romania, Palearctic species.
  - *Oulema melanopus* (LINNAEUS, 1758) – one specimen, Tinca, April 27, 30. Common species in Romania, it is found in Europe, Asia, North America.
  - *Cryptocephalus octacosmus* (BEDEL, 1891) – one female specimen, Tinca, May 5. Relatively common species in Romania, European species.
  - *Smaragdina salicina* (SCOPOLI, 1763) – one specimen, Tinca, May 6. Common species in Romania, Eurosiberian species.

- *Galeruca tanacetii* (LINNAEUS, 1758) – one female specimen, Tinca, May 9. Common species in Romania, Palearctic species.
  - *Cryptocephalus hypochaeridis* (LINNAEUS, 1758) – one specimen, Râpa, My 20. Relatively common species in Romania, it is found in Europe, Siberia and Northwest Africa.
  - *Luperus xanthopoda* (SCHRANK, 1781) – one specimen, Tinca, May 24 - 26. Common species in Romania, it is found in Europe to Central Asia.
  - *Cryptocephalus moraei* (LINNAEUS, 1758) – one specimen belonging to the ab. *bivittatus* Gyll, Tinca, May 28,29. Common species in Romania, European species.
  - *Chrysolina herbacea* (DUFTSCHMID, 1825) – one male specimen, Tinca, June 11,14,15; July 29, 30. Relatively common species in Romania, Eurasian species.
  - *Clytra laeviuscula* (RATZEBURG, 1837) – one specimen, Tinca, June 13,22,23; two specimens, Tinca, June 14,29; two pairs in copula, Tinca, June 21; three specimens, Tinca, June 24. Common species in Romania, Palearctic species.
  - *Altica oleracea* (LINNAEUS, 1758) – one specimen, Tinca, June 29; July 10,22; August 9, 10. Common species in Romania, Palearctic species.
  - *Podagrica malvae* (ILLIGER, 1807) – two pairs in copula( the future second annual generation),Tinca, July 17. These specimens belongs to ab. *nigerrima* Heikertinger, 1930. Common species in Romania, Eurasian species.
  - *Crioceris duodecimpunctata* (LINNAEUS, 1758) – six specimens, Tinca, July 23; one pair in copula (the future annual generation), Tinca, July 24. Common species in Romania on *Asparagus* sp., Palearctic species.
  - *Chrysolina olivieri* (BEDEL, 1892) – one female specimen, the Tinca forest, July 28. Species mentioned for the first time in the Tinca area (ILIE A.L.et al., 2019). Species found in the mountainous and hilly areas, European specie  
Cerambycidae Family
  - *Dorcadion scopoli* (HERBST, 1784) – one specimen, Tinca, March 14, 24; April 20,21; May 2 -5,6; three specimens, Tinca, April 29. Common species in Romania, it is found in Central and southern Europe.
  - *Dorcadion aethiops* ( SCOPOLI, 1763) – one specimen, Tinca, April 20, t = 18<sup>o</sup> C; May 2,4,5; June 30; one specimen, Râpa, May 4. Common species in Romania, European species.
  - *Pyrrhidium sanguineum* (LINNAEUS, 1758) – many specimens, Tinca, March 19 – April 30. European species, common in Romania. Species mentioned for the first time in the Tinca area.
  - *Hylotrupes bajulus* (LINNAEUS, 1758) – one specimen, Tinca, June 14; July 18. Common species in Romania, Cosmopolitan species.
  - *Leptura aurulenta* (FABRICIUS, 1792) – one specimen, Tinca, June 21,22. Relatively common species in Romania, west – Palearctic species. Species mentioned for the first time in the Tinca area.
- Coccinellidae Family
- *Harmonia axyridis* (PALLAS, 1773) – one specimen, Tinca, March 17; April 11,30; August 9; many specimens, Tinca, April 23; May 25 - 31. Frequent species in Romania, it is found in Europe, Asia and North America.
  - *Coccinella septempunctata* (LINNAEUS, 1758) – one specimen, Gurbediu, March 18; one specimen, Tinca, March 22; April 10,18, 23; June 11,14; many specimens, the edge of the the Tinca forest, April 28. Frequent species in Romania, it is found in all over the world.
  - *Adalia bipunctata* ( LINNAEUS, 1758) – one specimen, Tinca, March 22; April 23; May 17; June 13; three specimens, Tinca, May 27. Holarctic species, common in Romania.
  - *Psyllobora vigintiduopunctata* (LINNAEUS, 1758) – one specimen, Tinca, March 24; May 17; June 9. Frequent species in Romania, European species.
  - *Exochomus quadripustulatus* (LINNAEUS, 1758) – one specimen, Tinca, April 10, 28. Common species in Romania, Palearctic species.
  - *Calvia quatordecimguttata* ( LINNAEUS, 1758) – one specimen, Tinca, May 21; June 21. Common species in Romania, Palearctic species. Species mentioned for the first time in the Tinca area.
  - *Tythaspis sedecimpunctata* (LINNAEUS, 1761) – one specimen, Tinca, July 26. Relatively common species in Romania, Palearctic species. Species mentioned for the first time in the Tinca area.
- Tenebrionidae Family
- *Opatrum sabulosum* (LINNAEUS, 1761) – two specimens, Tinca, March 22; one specimen, Tinca, April 10. Common species in Romania.
  - *Blaps mortisaga* (LINNAEUS, 1758) – one specimen, Tinca, May 9. Common species in Romania, European species.

- *Blaps lethifera* (MARSHAM, 1802) – one specimen, Tinca, June 22. Common species in Romania, Palearctic species.
- *Lagria hirta* (LINNAEUS, 1758) – one male specimen, Tinca, July 22. Common species in Romania, it is found in Europe, Asia, North Africa and South America (according to en.m.wikipedia.org).  
Carabidae Family
- *Carabus ullrichii* (GERMAR, 1824) – one specimen, Râpa, March 21. European species, common in Romania.
- *Harpalus atratus* (LATREILLE, 1804) – one specimen, Tinca, March 19. Relatively common species in Romania, European species. Species mentioned for the first time in the Tinca area.
- *Cicindela hybrida* (LINNAEUS, 1758) – many specimens, the Râpa forest, May 20. Common species in Romania, Palearctic species. Species mentioned for the first time in the Tinca area.
- *Carabus coriaceus* (LINNAEUS, 1758) – one specimen, Tinca, June 8,29. Common species in Romania, European species.  
Scarabaeidae Family
- *Cetonia aurata* (LINNAEUS, 1761) – one specimen, Tinca, April 18; May 8,25; June 7; two specimens, Tinca, June 1,14; one specimen, the Tinca forest, July 28. Common species in Romania, it is found in Europe, Asia Minor and Siberia.
- *Valgus hemipterus* (LINNAEUS, 1758) – one male specimen, Tinca, May 25. Common species in Romania, it is found in Europe, Turkey, North Africa and North America.
- *Trichius fasciatus* (LINNAEUS, 1758) – two specimens, Tinca, May 29; one specimen, Tinca, June 6. Common species in Romania, Palearctic species.
- *Amphimallon solstitiale* (LINNAEUS, 1758) – three specimens, Tinca, June 1; two specimens, Tinca, June 2; 12 specimens, Tinca, June 8; 30 specimens, Tinca, June 11; one specimen, Tinca, July 10,15. Common species in Romania, Palearctic species.
- *Oryctes nasicornis* (LINNAEUS, 1758) – one male specimen, Tinca, June 12, one female specimen, Tinca, June 13. Common species in Romania in the deciduous forests, Palearctic species.
- *Protaetia affinis* (ANDERSCH, 1797) – one specimen, Tinca, June 14; July 4,7,15. Common species in Romania, it is found in Southern and Central Europ  
Geotrupidae Family
- *Anoplotrupes stercorosus* (SCRIBA, 1791) – three specimens, Râpa, June 5. Common species in Romania, Eurasian species. Species mentioned for the first time in the Tinca area.  
Staphylinidae Family
- *Ablattaria laevigata* (FABRICIUS, 1775) – one specimen, Tinca, April 20, 28. Common species in Romania, it is found in Europe and the Near East.  
Cantharidae Family
- *Cantharis obscura* (LINNAEUS, 1758) – many specimens, Tinca, April 20 – June 15. Common species in Romania, Palearctic species.
- *Cantharis rustica* (FALLEN, 1807) – one specimen, April 28, 30; May 6,10,11,19; June 23. Eurasian species, common in Romania.
- *Phymatodes testaceus* (LINNAEUS, 1758) – many specimens, even in copula, Tinca, May 18-31. Common species in Romania, Palearctic species. Species mentioned for the first time in the Tinca area  
Dermestidae Family
- *Anthrenus pimpinellae* (FABRICIUS, 1775) – one specimen, Tinca, April 30. Relatively common species in Romania, it is found in Europe, Asia, North Africa and North America. Species mentioned for the first time in the Tinca area  
Cleridae Family
- *Clerus mutillarius* (FABRICIUS, 1775) – one male specimen, Tinca, May 1,10,26; June 23; one female specimen, Tinca, May 6; June 14. Common species in Romania, it is found in Europe and North Africa.
- *Trichodes apiarius* (LINNAEUS, 1758) – one specimen, Tinca, July 11,23. Common species in Romania, Palearctic species.  
Histeridae Family
- *Hister quadrimaculatus* (LINNAEUS, 1758) – one specimen, Tinca, May 5. Common species in Romania, European species.  
Lucanidae Family
- *Lucanus cervus* (LINNAEUS, 1758) – one female specimen, Tinca, May 17,22,26; June 12; one male specimen, Tinca, May 21; three female specimens, Tinca, June 3. Relatively common species in Romania in the deciduous forests, it is found in Europe and Asia Minor.  
Hydrophilidae Family
- *Hydrochara caraboides* (LINNAEUS, 1758) – one specimen, Tinca, May 20. Common species in Romania, aquatic species. Species mentioned for the first time in the Tinca area.

- *Hydrochara flavipes* (STEVEN, 1808) – one specimen, Tinca, June 8. Relatively common species in Romania, aquatic species, European species.

#### Buprestidae Family

- *Anthaxia fulgurans* (SCHRANK, 1789) – many male and female specimens, Tinca, May 23 -30. Common species in Romania, European species. Species mentioned for the first time in the Tinca area.

During 2023 in the Tinca area there were recorded 79 species belonging to 19 families and 65 genera. Twenty one species are mentioned for the first time in the Tinca area. The most represented families are Chrysomelidae – 22 species (27.84%), Curculionidae – 15 species (18.98%),Coccinellidae – 7 species (8.86%), Scarabeidae – 6 species (7.59%), Cerambycidae – 5 species (6.32%), Carabidae and Tenebrionidae – 4 species (5.06%), Cantharidae – 3 species (3.79%), Hydrophilidae, Cleridae – 2 species (2.53%) and Buprestidae, Lycaenidae, Histeridae, Dermestidae, Staphylinidae, Geotrupidae, Elateridae, Meloidae, Brentidae – 1 species (1.26%).

### CONCLUSIONS

During 2023 in the Tinca area were recorded 79 species, 21 being mentioned for the first time in this area. The most represented families are Chrysomelidae and Curculionidae.

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