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THE EUROPEAN ENDEMICIS OF *ALTICINAE* (*COLEOPTERA: CHRYSOMELIDAE*)

Blagoy A. Gruev

*Department of Zoology, University of Plovdiv, Tzar Assen Str. 24,
BG-4000 Plovdiv, Bulgaria*

Abstract. The European endemicis of *Alticinae* are arranged in 16 groups according to their geographic distribution.

Key words: *Alticinae*, European endemicis, distributional groups.

The whole number of the endemic taxa (species and subspecies) in Europe is 213. They belong to groups widely distributed in the continent (not rarely also in the adjoining islands), or to groups of various degree of localization. The groups are presented below, accompanied by some biogeographical notes.

Distributional groups of the European endemicis

I. Wide spread

1. Wide spread European (WdE)

Altica aenescens (WEISE, 1888)

Austria, Belgium, Byelorussia, Czechia, Estonia, Finland, France, Germany, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Russia (Karelia), Sweden (South), Switzerland, Ukraine

Altica brevicollis coryletorum KRAL, 1964

Belgium, Bosnia, Croatia, Czechia, England, Italy (North), Poland, Portugal, Rumania (Bihar), Slovakia, Slovenia, Spain, Switzerland

Altica cornivorax KRAL, 1969

Austria, Bulgaria, Czechia, Hungary, Poland, Slovakia, Switzerland (South), Turkey (Istanbul: Belgrat Orman), Ukraine (Poltava)

Altica fruticola (WEISE, 1888)

Austria, Bosnia-Herzegovina, Germany (Berlin Distr.), Rumania, Spain (North), Ukraine (Carpathians)

Altica longicollis (ALLARD, 1860)

Belgium, Byelorussia, Denmark, England, Estonia, Finland, France, Germany, Latvia, Luxembourg, Netherlands, Norway, Poland, Russia (North; Karelia), Spain (North), Sweden (South), Switzerland

Altica oleracea breddini (MOHR, 1958)

Austria, Croatia (Adriatic Islands: Is. Susak), Czechia, Germany, Italy, Slovakia, Slovenia

Aphthona cyparissiae (KOCH, 1803)

Albania, Andorra, Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Czechia, England, Liechtenstein, Luxembourg, Macedonia, Moldavia, Montenegro, Netherlands, Poland, Rumania, Serbia, Slovakia, Slovenia, Spain (Incl. Baleares), Switzerland, Tatarstan, Ukraine

Aphthona pallida (BACH, 1856)

Austria, Czechia, France (Alsace), Germany, Hungary, Italy (North), Latvia, Liechtenstein, Lithuania, Norway, Portugal, Rumania, Russia (eastwards to Voronezh), Serbia, Slovakia, , Sweden, Switzerland, Ukraine

Aphthona placida (KUTSCHERA, 1864)

Austria, Bulgaria, Greece, Hungary, Italy (North), Moldavia, Poland, Rumania, Russia (Tuapse), Serbia, Slovakia, Ukraine (Carpathians; Crimea)

Aphthona stussineri WEISE, 1888

Austria, Bosnia-Herzegovina, Croatia, France (Massif Central; Pyrenees), Italy (North), Poland, Rumania (Carpathians), Slovenia, Spain

Apteropeda globosa (ILLIGER, 1794)

Austria, Belgium, Czechia, Denmark, England, France, Germany, Ireland, Italy (North), Luxembourg, Netherlands, Poland, Portugal, Rumania, Slovakia, Slovenia, Spain (North), Switzerland, Ukraine (Carpathians)

Apteropeda orbiculata (MARSHAM, 1802)

Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czechia, Denmark, England, France, Germany, Hungary, Italy (incl. Sicily), Luxembourg, Macedonia, Netherlands, Poland, Portugal, Rumania, Slovakia, Slovenia, Spain, Ukraine (Carpathians)

Apteropeda splendida ALLARD, 1860

Andorra, Austria, Belgium, Denmark, France, Germany, Italy, Luxembourg, Poland, Slovakia, Spain, Switzerland, Ukraine

Argopus ahrensii (GERMAR, 1817)

Albania, Austria, Bosnia-Herzegovina, Byelorussia, Croatia (incl. Adriatic Islands), Germany (South and Mid), Greece (incl. Ionian Islands), Hungary, Italy, Latvia, Macedonia, Moldavia, Montenegro, Poland, Rumania, Russia (wood-steppe; North Caucasus), Serbia, Slovakia, Slovenia, Switzerland, Ukraine

Argopus bicolor FISCHER VON WALDHEIM, 1824

Bulgaria, Caucasus, Croatia, Hungary, Poland (South-East), Rumania, Serbia, Slovakia, Ukraine

Chaetocnema subcoerulea (KUTSCHERA, 1864)

Albania, Austria, Baltic States, Belgium, Bulgaria, Caucasus, Croatia, Czechia, Denmark, England, Finland, France, Germany, Greece (incl. Ionian Island), Hungary, Italy, Luxembourg, Macedonia, Netherlands, Poland, Rumania, Russia, Slovakia, Slovenia, Sweden (South), Switzerland, Ukraine

Longitarsus helvolus KUTSCHERA, 1863

Austria, Croatia (Rijeka), Czechia, France, Germany, Hungary, Italy, Slovakia, Slovenia (Mali Kras), Switzerland

Longitarsus languidus KUTSCHERA, 1863

Austria, Caucasus, Croatia (Istria), Czechia, Germany (Thuringia), Hungary, Italy (North-East), Moldavia, Rumania, Serbia (Maidanpek), Slovakia, Slovenia, Ukraine (South-West: Carpathian Rutenia)

Mniophila muscorum (KOCH, 1803) s. str.

Albania, Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Caucasus, Croatia, Czechia, Denmark,

England, France (incl. Corsica), Georgia, Germany, Hungary, Ireland, Italy (North and Mid), Luxembourg, Macedonia, Montenegro, Netherlands, Norway, Poland, Pyrenees, Rumania, Russia, Serbia, Slovakia, Slovenia, Sweden (South), Switzerland, Ukraine

Neocrepidodera nigritula (GYLLENHAL, 1813)

Austria, Bosnia-Herzegovina, Bulgaria, Byelorussia, Croatia (incl. Adriatic Isls.), Czechia, Estonia, Finland, Germany, Hungary, Italy (North), Latvia, Lithuania, Poland, Rumania, Russia (incl. Karelia), Serbia, Slovakia, Slovenia, Sweden (South and Mid), Switzerland, Turkei (European), Ukraine

Phyllotreta austriaca HEIKERTINGER, 1909 s. str.

Austria, Caucasus, Czechia, Germany (South-West), Hungary, Rumania, Slovakia, Ukraine

Phyllotreta ganglbaueri HEIKERTINGER, 1909

Austria, Bosnia-Herzegovina, Bulgaria, Croatia (incl. Istria), Czechia, France (Maritime Alps), Italy (Mid, East and North-East), Montenegro, Rumania, Serbia, Slovenia, Switzerland, Ukraine (Crimea)

Psylliodes picinus (MARSHAM, 1802)

Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Byelorussia, Croatia, Czechia, Denmark, England, Estonia, Finland (South), France (incl. Corsica), Germany, Hungary, Ireland, Italy (North), Luxembourg, Netherlands, Norway, Poland, Rumania, Russia (incl. Karelia), Slovakia, Slovenia, Spain (incl. Balears), Sweden, Switzerland, Ukraine

A part of the taxa of this group could be considered as conditional endemics. It is possible that some of them will be found out of Europe (at least in South-West Asia). On principle the spreading should be realized from European genesis centres, mainly from the North to the South, because of the Quaternary glatiations.

2. European steppe (E [st])

Dibolia russica WEISE, 1893

Byelorussia (Bobruisk; Minsk), Croatia (Vinkovce), Russia (Volgograd Distr.: Sarepta), Ukraine (Crimea)

Longitarsus tristis WEISE, 1888

Bulgaria (Danube shore: reserve "Srebarna"), Croatia (North), Czechia, Daghestan, Germany (North), Hungary, Rumania, Russia (Volgograd Distr.: Sarepta; Orenburg), Slovakia, Ukraine (Poltava)

Psylliodes reitteri WEISE, 1888 s. str.

Austria (Vienna), Bosnia-Herzegovina, Bulgaria (Black Sea side), Czechia, Germany (Mid and West), Hungary, Russia (South, eastwards to Volga) Slovakia, Ukraine (South)

These, undoubtedly of steppe origin and ecology species, were spreaded to the West from the eastern parts of Europe during the dry phazes of the Quaternary.

II. Northeuropean (NE)

Altica opacifrons (HAR. LINDBERG, 1938)

Finland, Russia (Karelia), Sweden

Probable a northern-refugium relict species.

III. Easteuropean (EE)

Longitarsus fuscoaeneus polonicus WARCHALOWSKI, 1967

Poland (Legnica)

Phyllotreta hochetlingeri FLEISCHER, 1917

Croatia (Samobor), Poland (South), Slovakia

Phyllotreta ogloblini SHAPIRO, 1960

Ukraine (South: Kherson Distr., reserve "Ascania-Nova")

The not long ago described *L. fuscoaeus polonicus* and *Ph. ogloblini* are probably conditional endemics correspondingly of Poland and Ukraine. It is possible they to be found out of those countries.

IV. Southeasterneuropean (SEE)

Aeschrocnemis laterufa Pic, 1909

Georgia (Vladikavkas; Kazbek), Turkey (European)

A conditional endemic; probable in Asiatic Turkey.

Crepidodera nigricoxis Allard, 1878

Albania, Bulgaria, Caucasus, Greece, Macedonia, Montenegro, Rumania, Serbia

Longitarsus bulgaricus Gruev, 1973

Bulgaria (Rhodope Mts.), Rumania (Baile Herculane)

Psylliodes wrasei Leonardi et Arnold, 1995

Bulgaria, Georgia, Greece (North), Macedonia, Ukraine (South)

It may be considered that the general distributions of these species are not yet completely established.

V. Atlantic (Atl)

1. *Northernatlantic (NAtl)*

Longitarsus plantagomaritimus Dollman, 1912

Coasts of North Sea and Baltic Sea (Belgium, Denmark, England, Germany, Netherlands, Sweden); Russia (Murmansk Distr., Karelia)

Mantura ambigua Kutschera, 1862

Belgium, Denmark, Estonia, Finland, France, Germany (North-West), Latvia, Luxembourg, Sweden

Psylliodes crambicola Lohse, 1953

Coastal parts of Denmark, Finland, Germany; Sweden around the Baltic Sea

2. *Britain (Br)*

Longitarsus bearei Kevan, 1967

England (Is. Wight)

Longitarsus fowleri Allen, 1967

England (Middlesex)

3. *Atlantic insular (Atl [is])*

Psylliodes luridipennis Kutschera, 1864

England (Is. Lundy in the Bristol Channel)

4. *Southern Atlantic (SAtl)*

Altica ericeti (Allard, 1859)

England, France, Germany (West and North), Netherlands, Portugal, Spain

Longitarsus agilis (Rye, 1868)

Belgium, England, France, Germany, Netherlands

5. *Southernatlantic-Westmediterranean (SAtlIWM)*

Aphthona occitana Doguet, 1988

Andorra, France, Spain, Portugal

Longitarsus nigrocillus (Motschulsky, 1849) s. str.

France (South), Italy (incl. Sardinia), Portugal, Spain

Oedionychus cinctus (Fabricius, 1781)

France (South-West), Portugal, Spain

Podagrica fuscipes (Fabricius, 1775)

Belgium, England, France (incl. Corsica), Germany (West), Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Switzerland

6. Subatlantic-Westsubmediterranean (SbAtlWSbM)

Psylliodes aereus Foudras, 1860 s. str.

Belgium, France (South), Germany (Mid), Italy (North), Luxembourg, Spain

The distribution of the Atlantic species has been determined by the Atlantic and Subatlantic climate influence. The general tendency of their spreading was from the North to the South during various times of the Late Tertiary and the Quaternary, depending on their ecological requirements (GRUEV, 2000 b). The most warm-loving (respectively older) species are distributed in the southern Atlantic lands. Some of them have penetrated into the Mediterranean (Atlanto-Mediterranean endemics). The most part of the Atlantic species of *Alticinae* however has a fundamental distribution in the Central (with preponderance either to the North, or to the South) Atlantic lands of Europe. One of the species is a Britain endemic, and two are insular endemics of origin from continental or Britain initial forms.

VI. Westeuropean (WE)

Dibolia veyreti Doguet, 1975

France (South)

Mantura horioni Heikertinger, 1940

France (East), Germany (West: Rheinland)

VII. Southwesterneuropean (SWE)

Aphthona albertinae Allard, 1866

France (Pyrenees), Portugal, Spain

Aphthona delicatula Foudras, 1860

France, Germany, Italy

Longitarsus bergeali Doguet et Gruev, 1988

France (Lozere), Spain

Longitarsus leonardii Doguet, 1973

France (Atlantic Pyrenees), Spain (Cantabrian Mts.)

Neocrepidodera hispanica (J. Daniel, 1904)

France (Camarague), Spain (North and Mid)

Phyllotreta gallica Brisout, 1891

France, Spain, Switzerland

Phyllotreta temperei Doguet, 1974

Pyrenees (Andorra; France), Spain (Sierra Nevada)

Psylliodes cucullatus heydeni Weise, 1888

France (Pyrenees), mountains of Portugal and Spain

Psylliodes hispanus Heikertinger, 1911

France, Spain, Portugal

Psylliodes pyrenaicus Heikertinger, 1921

France (Pyrenees; Alpes-de-Haute Provence=Bases Alpes), Spain (Avila)

Dominant representatives of this group are the mountain inhabitants.

VIII. Submediterranean (SbM)

Eastsubmediterranean (ESbM)

Longitarsus scrobipennis Heikertinger, 1913

Bulgaria, Croatia (Dalmatia: Is. Ugljan), Hungary, Montenegro

The Submediterranean species are distributed in the Submediterranean zone of Europe (and some of them also in the Mediterranean) (GRUEV, 2000 a). The single endemic occurs the eastern part of that zone.

IX. Mediterranean (M)

1. Northmediterranean (NM)

Aphthona carbonaria Rosenhauer, 1856

Greece (Ionian Is.: Kefalonia; Kerkira), France (South), Italy (South and Mid; Sardinia, Sicily), Portugal, Spain (South), Malta

Psylliodes laevifrons Kutschera, 1864

France (South incl. Corsica), Greece (Mid), Italy (Mid and South incl. Sardinia and Sicily)

2. Westernmediterranean (WM)

Longitarsus corynthius metallescens (Foudras, 1860)

Croatia (South), France, Italy (incl. Sardinia and Sicily), Malta, Spain

3. Westmediterranean insular (WM[is])

Aphthona alcina Leonardi, 1975

France (Corsica), Italy (Sardinia: Is. Maddalena)

Aphthona perrisi Allard, 1869

France (Corsica), Italy (Sardinia: Is. Giglio; Toscana: Is. Elba)

Aphthona sardea Allard, 1866

Italy (Sardinia)

Aphthona wagneri Heikertinger, 1909

France (Corsica), Italy (Is. of Toscana)

Longitarsus bonnairei (Allard, 1866)

France (Corsica), Italy (Sardinia)

Longitarsus nebulosus (Allard, 1866)

France (Corsica), Italy (Sardinia, Sicily)

Longitarsus nigrofasciatus rudipennis (Allard, 1866)

France (Corsica)

Orestia coiffaiti Doguet, 1990

France (Corsica)

4. Centralmediterranean (CM)

Longitarsus laureolae Biondi, 1988

Italy (Calabria; Sicily)

Orestia kraatzi Allard, 1861

Croatia (Dalmatia), Italy (South and West; Sicily)

Psylliodes ruffoi Leonardi, 1975

Italy (South incl. Sicily)

5. Centralmediterranean insular (CM[is])

Aphthona sicelidis Weise, 1888

Sicily

Psylliodes leonhardi Heikertinger, 1926

Italy (Sicily)

6. Central- and Easternmediterranean (CEM)

Dibolia tyrrhenica Mohr, 1981

Italy (Toscana; Sicily), Malta, Greece (Macedonia: Olympos, Spilios Agaptios, 2100 m)

7. Easternmediterranean insular (EM [is.])

Orestia calabra corcyrea Heikertinger, 1924

Greece (Ionian Isls.: Kerkira)

Psylliodes creticus Weise, 1888

Greece (Crete)

The diverse group of the Mediterranean endemics includes old relicts of probably preglacial origin from warm-loving initial forms, coming to the South during the Late Tertiary and the Quaternary because of the cooling-off the climate. Twelve taxa of totally 19 are insular endemics. That points about an intensive formation of new species in the Mediterranean islands of Europe, stimulated by a long insular isolation of Tertiary populations of continental origin.

X. European mountainous (E[m])

1. Wide spread

Chaetocnema angustula (Rosenhauer, 1847)

Andorra, Austria, France, Italy (North), Slovenia, Spain, Switzerland

Longitarsus celticus Leonardi, 1975

Austria, Czechia, France, Germany, Italy (North), Serbia, Slovakia, Spain, Switzerland, Ukraine

Longitarsus pallidicornis Kutschera, 1863

The Alps, Carpathians, Dinaric Mts., Hungary, Pyrenees (Austria, Bosnia-Herzegovina, Czechia, France, Italy, Poland, Rumania, Slovakia, Slovenia, Ukraine)

Longitarsus rubellus (Foudras, 1860)

Austria, Bosnia-Herzegovina, Croatia, Czechia, Germany (Bavaria), Italy (North), Poland, Rumania, Slovakia (Tatra Mts.), Slovenia (North), Ukraine (Carpathians)

Minota carpathica Heikertinger, 1911

Austria, Bulgaria (Mt. Rila), Croatia, Czechia, Germany (West), Hungary, Italy (North), Rumania, Slovakia, Slovenia, Switzerland, Ukraine (Carpathians)

Minota halmae (Apfelbeck, 1906)

Austria, Bosnia-Herzegovina, Bulgaria, Croatia, Czechia, Hungary, Italy (North), Rumania, Slovakia, Slovenia

Minota impuncticollis (Allard, 1860)

Albania, Austria (Styria), Bosnia-Herzegovina, France, Italy (North), Montenegro, Serbia, Spain (Madrid Distr.), Switzerland

Minota obesa (Waltl, 1839)

Austria, Belgium, Czechia, Germany (South and Mid), Italy (North), Luxembourg, Poland, Slovakia, Switzerland

Neocrepidodera brevicollis (J. Daniel, 1904)

Austria (South), Byelorussia, Czechia, Denmark, France (West), Germany (Bavaria), Italy, Poland, Slovakia, Slovenia, Sweden (South), Switzerland

Neocrepidodera corpulenta (Kutschera, 1860)

West Alps (France, Italy), Apennines (Italy), Carpathians (Hungary, Rumania, Slovakia, Ukraine), Balkan Peninsula (Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Macedonia, Montenegro, Serbia)

Neocrepidodera melanostoma (Redtenbacher, 1849)

Cantabrian Mts., The Alps, Vosges, Carpathians, Dinaric Mts., Pennines, North Apennines (Albania, Austria, Bosnia-Herzegovina, Croatia, France, Germany, Italy, Liechtenstein, Rumania, Slovakia, Slovenia, Spain, Switzerland, Ukraine)

Neocrepidodera norica (Weise, 1890)

Austria, Bosnia-Herzegovina, Croatia, Italy (North), Macedonia, Rumania (Transsylvania), Slovenia

Neocrepidodera peirolerii (Kutschera, 1860)

Austria, Bosnia-Herzegovina, Bulgaria, France, Germany (Bavaria), Italy (North), Liechtenstein, Macedonia, Slovenia, Switzerland

Orestia alpina (Germar, 1824)

Albania, Bosnia-Herzegovina, Croatia, Italy (North), Macedonia, Montenegro, Rumania (Banat), Serbia, Slovenia

Orestia aubei Allard, 1859

Bosnia-Herzegovina, Greece (Mt. Parnassos), Montenegro, Poland, Rumania, Serbia, Slovakia, Slovenia (North), Ukraine (Carpathians)

Orestia paveli Frivaldszkyi, 1877

Albania, Hungary, Macedonia, Rumania, Serbia, Ukraine (Carpathians)

Phyllotreta christinae Heikertinger, 1941

Austria, Bosnia-Herzegovina, Bulgaria, Croatia, Czechia, France, Germany, Hungary, Italy (North), Luxembourg, Poland, Rumania, Slovakia, Slovenia, Switzerland, Ukraine (Carpathians)

Psylliodes aereus austriacus Heikertinger, 1911

Austria, Bulgaria, Czechia, Hungary, Rumania, Slovakia, Ukraine (Carpathians)

Psylliodes glaber (Duftschmid, 1825)

Austria, Bosnia-Herzegovina, Croatia (North), Germany (Bavaria), Italy (North), Slovenia

Psylliodes napi flavicornis Weise, 1883

Austria, Croatia, Czechia, France, Germany (Bavaria), Italy, Poland, Rumania, Slovakia, Slovenia, Switzerland, Ukraine

Psylliodesa picipes Redtenbacher, 1849

Austria, Croatia, France (Maritime Alps), Italy (North), Slovenia

Psylliodes sturanyi Apfelbeck, 1906

Bosnia, Bulgaria (Stara planina ridge), Montenegro, Rumania (Carpathians), Serbia

Psylliodes toelgi Heikertinger, 1914

Austria, Croatia, Czechia, France, Germany, Hungary, Italy (North), Montenegro, Rumania, Slovakia, Spain, Switzerland, Ukraine (Carpathians)

2. Southwest European (SWE)

Orestia sierrana Heyden, 1882

France (Pyrenees), Spain (South and East)

3. Southeast European (SEE)

Batophila moesica Heikertinger, 1948

Bulgaria, Rumania

4. Alpine (Alp)

Aphthona juliana Springer, 1953

Italy (Julian Alps)

- Longitarsus gruevi** Leonardi et Mohr, 1974
Italy (Ligurian and Cottian Alps), France (Maritime and Cottian Alps), Austria (Alps)
- Longitarsus refugiensis** Leonardi et Mohr, 1974
Italy (Alps: Piemonte; Fore-Alps)
- Neocrepidodera adelinae** (Binaghi, 1947)
Italy (Alps: Piemonte)
- Minota alpina** Biondi, 1986
Italy (Pimonte), Switzerland (Alps)
- Neocrepidodera basalis** (K. Daniel, 1900)
Italy (Graian Alps), Switzerland
- Neocrepidodera nobilis** (J. Daniel, 1904)
Western Alps (France, Italy, Switzerland)
- Neocrepidodera obirensis** (Ganglbauer, 1897)
The Alps (Austria: Obir. Slovenia)
- Neocrepidodera rhaetica** (Kutschera, 1860)
Austria, France, Italy, Slovenia, Switzerland
- Neocrepidodera simplicipes** (Kutschera, 1860)
Austria (Styria and Carinthia)
- Neocrepidodera spectabilis** (J. Daniel, 1904)
Monte Rosa (Italy, Switzerland)
- Orestia carnica** Leonardi, 1974
Italy (Prealpi Venete)
- Orestia carniolica** Weise, 1886
Italy (North-East), Slovenia (Julian Alps)
- Orestia electra** Gredler, 1868 s. str.
Italy (Alps and Fore-Alps)
- Orestia electra brunnea** (Halbheer, 1898)
Italy (Veneto)
- Orestia heikertingeri** Leonardi, 1974
Italy (Lombardia), Switzerland
- Phyllotreta zieglerei** Lohse, 1980
Austria (Alps)
- Psylliodes danieli** Weise, 1900
Italy (Tridentinian Alps)
- Psylliodes rambouseki** Heikertinger, 1909 s. str.
Austria (Alps), Slovenia (Trnovski Gozd)
- Psylliodes schwarzi** Weise, 1900
France (Maritime and Savoy Alps), Italy (Pennine, Graian, Cottian and Maritime Alps), Switzerland (The Alps)
- Psylliodes subaeneus styriacus** Heikertinger, 1921
Austria (Styria), Slovenia
- 5. Carpathian (Cp)**
- Orestia carpathica** Reitter, 1880
Carpathians (Hungary, Rumania, Poland, Slovakia, Ukraine), Czechia (Mt. Czerna Hora)
- Neocrepidodera puncticollis** (Reitter, 1880)
Carpathians (Rumania, Slovakia, Ukraine)
- Neocrepidodera transsylvanica** (Fuss, 1864)
Carpathians (Poland, Rumania, Slovakia, Ukraine)
- Psylliodes frivaldszkyi** Weise, 1888
Carpathians (Poland, Rumania, Slovakia, Ukraine)

6. Alpine-Carpathian (AlpCp)

Neocrepidodera cyanescens (Duftschmid, 1825) s. str.

The Alps (Austria, Italy, Slovenia), Carpathians (Czechia, Poland, Rumania, Slovakia, Ukraine)

Neocrepidodera cyanipennis (Kutschera, 1860)

The Alps (Austria, France, Italy, Slovenia, Switzerland), Carpathians (Southern: Rumania)

7. Alpine-Dinaric (AlpD)

Psylliodes rambouseki forojulensis Heikertinger, 1926

Austria (Julian and Carnic Alps), Croatia (Mt. Rishnjak; Istria), Italy (Alps), Slovenia (Alps)

8. Alpine-Appenninian (AlpAp)

Derocrepis sodalis (Kutschera, 1860)

The Alps (France, Italy, Switzerland), Apennines (North and Mid Italy)

Dibolia alpestris Mohr, 1981

The Alps (Austria), Apennines (Mid Italy)

Neocrepidodera cyanescens concolor (K. Daniel, 1900)

The Alps (France, Italy, Switzerland), Ligurian Apennines (North Italy)

Neocrepidodera ligurica (J. Daniel, 1904)

The Alps (France, Italy), Ligurian Apennines (North Italy)

Psylliodes solarii Leonardi, 1975

France (Savoy Alps), Italy (North Apennines)

9. Carpathian-Dinaric (CpDin)

Psylliodes subaeneus Kutschera, 1867 s. str.

Carpathian-Dinaric species of Bosnia-Herzegovina, Croatia, Montenegro, Poland, Rumania, Slovakia, Ukraine

10. Pyrenean (Pyr)

Batophila pyrenaea (Allard, 1866)

France, Spain

Chaetocnema balanomorpha (Boieldieu, 1859)

France

Longitarsus ventricosus (Foudras, 1860)

France, Spain

Neocrepidodera melanopus (Kutschera, 1860)

France, Spain

Orestia pandellei Allard, 1863

France

Psylliodes petasatus Foudras, 1860

France, Spain

The group of the European mountain endemics is the richest one containing 65 taxa. Another 45 mountain taxa have to be added from the groups of the Iberian, the Apenninian and the Balkan endemics. The origin of the mountain endemics is connected with the isolation, caused by the climatic changes during the Tertiary and the Quaternary. Cardinal direction of their dispersion is from the North to the South. Many of them have settled the South-European mountains from the mountains of the Central Europe during the glacial and the interglacial periods of the Quaternary (GRUEV, 2000, 2002).

XI. Iberian (Ib)

Altica inconspicua Kral, 1966

Spain

Altica tamaricis franzi Kral, 1966

Spain (North)

Anthobiodes heydeni (Allard, 1870).

Spain (Ronda Mts.)

Aphthona constantini Doguet et Petitpierre, 1986

Spain (Prov. Cuenca)

Aphthona espagnoli Kral, 1965

Spain (Catalonia)

Aphthona maldesi Doguet et Petitpierre, 1986

Spain (Jaen)

Aphthona melancholica Weise, 1888

Spain (Asturia), Portugal

Chaetocnema rufofemorata Pic, 1915

Portugal (Mid)

Dibolia dogueti Mohr, 1981

Spain

Longitarsus andalusicus Gruev, 1973

Spain (South)

Longitarsus bedeli (Uhagon, 1887)

Spain (North-West and Mid)

Longitarsus ferruginipennis Fuente, 1910

Spain (Ciudad Real)

Longitarsus ibericus Leonardi et Mohr, 1974

Spain (Asturia)

Longitarsus petitpierrei Bastazo, 1997

Spain (Cadiz)

Longitarsus tarraconensis Leonardi, 1979

Spain (Central and South)

Longitarsus velai Bastazo, 1997

Spain (Cadiz; Malaga)

Phyllotreta asturica (Fabricius, 1775)

Spain (North-West)

Phyllotreta gloriae Biondi, 1994

Spain (Granada; Cadiz; Alicante)

Phyllotreta hispanica Pic, 1903

Spain (Jaen)

Phyllotreta iberica Heikertinger, 1911

Spain (Palencia)

Phyllotreta lacerta Heikertinger, 1941

Spain (Palencia)

Phyllotreta melichari Heikertinger, 1941

Spain (Algericas)

Psylliodes wunderlei Doeberl, 1998

Spain (North: Santander)

XII. Apenninian (Ap)

- Longitarsus springeri** Leonardi, 1975
Italy (Mid)
- Longitarsus zangherii** Warchalowski, 1968
Italy (Romagna)
- Neocrepidodera peirolerii melanothorax** (Biondi, 1982)
Italy (Abruzzo)
- Oreina apennina** Weise, 1886
Italy (Apennines)
- Orestia calabra** Heikertinger, 1909 s. str.
Italy (Calabria)
- Psylliofes feroniae** Leonardi, 1978
Italy (Lazio)
- Psylliodes fiorellae** Leonardi, 1978
Italy (Liguria)
- Psylliodes springeri** Leonardi, 1975
Italy (Marche; Abruzzo)

XIII. Balkan (Bn)

- Aeschrocnemis graeca** (Allard, 1884)
Greece (Peloponnes; Ionian Isls.)
- Aeschrocnemis hellenica** (Doguet et Bergeal, 2000)
Greece (Fthiotida)
- Aeschrocnemis merditensis** (Heikertinger, 1922)
Albania (Mt. Merdita)
- Aeschrocnemis peloponnesiaca** (Heikertinger, 1910)
Greece (Mid: Mt. Parnassos. Peloponnes)
- Aeschrocnemis rhilensis** (Gruev, 1974)
Bulgaria (Mt. Rhila: North - westward of Jakoruda)
- Aeschrocnemis slavicus** (Gruev, 1979)
Bulgaria (West: above Tran), Macedonia (Mt. Baba), Serbia (Mt. Shar, Brezovitsa)
- Altica graeca** Kral, 1966
Greece
- Aphthona biokovensis** Penecke, 1907
Albania (West: Shkoder Distr., 2200-2400 m), Croatia (Dalmatia), Herzegovina (South), Croatia (Dalmatia: Mt. Biokovo)
- Aphthona parnassicola** Heikertinger, 1944
Bulgaria (South), Greece (North-West and Mid), Macedonia (Ohrid)
- Chaetocnema imitatrix** Gruev, 1990
Bulgaria (Mt. Vitosha)
- Chaetocnema leonhardi** Heikertinger, 1951
Bosnia (Mt. Bjelashnitsa; Mt. Ilidzha)
- Longitarsus behnei** Gruev et Arnold, 1989
Bulgaria (Mt. Pirin)
- Longitarsus croaticus** Gruev, 1975
Croatia (Plitvice)
- Longitarsus solaris** Gruev, 1977
Bulgaria (Black Sea coast), Greece (Mid; North Sporades)
- Minota stussineri** (Weise, 1893)

Croatia (South-West), Montenegro
Mniophila bosnica Apfelbeck, 1914
Bosnia-Herzegovina (South), Montenegro
Neocrepidodera albanica (Mohr, 1965)
Albania, Macedonia
Neocrepidodera springeri (Heikertinger, 1923)
Albania, Bosnia-Herzegovina, Montenegro, Serbia
Orestia bulgarica Heikertinger, 1910
Stara planina ridge (Bulgaria and Serbia)
Phyllotreta zerchei Doeberl, 1998
Greece (Peloponnes)
Psylliodes magnificus Gruev, 1975
Bulgaria, Greece
Psylliodes wachsmanni Csiki, 1903
Slovenia, Croatia, Montenegro, Albania, Italy

A hypothesis about the origin of the Iberian, the Apenninian and the Balkan endemics of *Alticinae* was proposed by GRUEV (2000).

XIV. Pontic steppe (P [st])

Aphthona sarmatica Ogloblin, 1928
Daghestan, Russia (speppe), Ukraine (South and East; incl. Crimea)

XV. Crimean (Cr)

Aeschrocnemis jallensis (Heikertinger, 1922)
Ukraine (Crimea)
Aphthona lubishevi Konstantinov, 1998
Ukraine (Crimea)

XVI. Caucasian (Ca)

Aeschrocnemis caucasica (Weise, 1886)
Caucasus (Circassia, Daghestan, Georgia, Swanetia, Russia: Krasnodar distr.)
Aeschrocnemis ossetica Heikertinger, 1922
Caucasus (Russia: North Ossetia - Kobi and Terek)
Dibolia weisei Mohr, 1981
Georgia (Mt. Mesket)
Longitarsus dlabolai Kral, 1964
Georgia
Longitarsus georgianus (Allard, 1866)
Georgia
Longitarsus lederi Weise, 1889
Caucasus, Georgia (North; Swanetia), Russia (South: Circassia)
Longitarsus ratshensis Iablokoff-Khinzorian, 1962
Georgia
Orestia caucasica Reitter, 1879
Georgia, Russia (Krasnodar Distr.)
Phyllotreta pseudoexclamationis Konstantinov, 1992
Georgia
Psylliodes callinotus Faldermann, 1837

Caucasus

Psylliodes deplanatus L. Medvedev, 1962

Georgia, (Russia (South: Krasnodar Distr.)

Psylliodes nivalis Iablokoff-Khnzorian, 1962

Georgia

Psylliodes rubroaeneus Heikertinger, 1916

Georgia, Russia (South: North Caucasus)

The fundamental causes of the origin of the Caucasian endemics lie mainly in the insular (sea) isolation of the Caucasus area during the Tertiary, and in the isolation of its high mountain parts during the Quaternary.

Finally quantitatively the European endemic groups can be presented as follows: Wide spread European- 26, Northeuropean- 1, Easteuropean- 3, Southeasteuropean- 4, Atlantic- 13, Westeuropean- 2, Southwesteuropean- 10, Submediterranean- 1, Mediterranean- 19, European mountainous- 65, Iberian - 23, Apenninian- 8, Balkan- 22, Pontic steppe- 1, Crimean- 2, Caucasian- 13

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ЕВРОПЕЙСКИТЕ ЕНДЕМИТИ НА *ALTICINAE* (COLEOPTERA: *CHRYSOMELIDAE*)

Благой А. Груев

Катедра Зоология, Пловдивски Университет „Паисий Хилендарски“,
ул. Цар Асен 24, 4000 Пловдив

(Резюме)

Известните 213 ендемични за Европа таксони (видове и подвидове) са подредени в 16 групи според географската им локализация: Широко разпространена (WdE) - 26, Северноевропейска (NE) - 1, Източноевропейска (EE) - 3, Югоизточноевропейска (SEE) - 4, Атлантическа (Atl) - 13, Западноевропейска (WE) - 2, Югозападноевропейска (SWE) - 10, Субмедитеранска (SbM) - 1, Медитеранска (M) - 19, Европейска планинска (E [m]) - 65, Иберийска (Ib) - 23, Апенинска (Ap) - 8, Балканска (Bn) - 22, Понтийска (степна) (P [st]) - 1, Кримска (Cr) - 2, Кавказка (Ca) - 13. Към част от групите са дадени кратки биогеографски бележки.