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Contribution to the knowledge of the Agrypninae (Coleoptera, Elateridae) fauna of Turkey

N. GULPERCIN & S. TEZCAN

A b s t r a c t : This study is based on the material of Agrypninae collected from different localities in Turkey between 1962 and 2005. In this study totally five species belonging to five genera of Agrypninae were recorded in Turkey. For each species new distributional localities were also reported.

K e y w o r d s : Coleoptera, Elateridae, Agrypninae, Fauna, Turkey.

Introduction

Elateridae fauna of Turkey is quite rich and the studies of SAHLBERG 1912-1913, GUGLIELMI & PLATIA 1985, LODOS 1998, GULPERCIN & TEZCAN 2006, KESDEK et al. 2006, LOBL & SMETANA 2007 and MERTLIK & PLATIA 2008 have great importance. Recently, the distributional catalogue of Turkish Elateridae (Coleoptera) fauna has been published (GULPERCIN & TEZCAN 2010). In this publication, a total of 27 species belonging to 11 genera of Agrypninae subfamily have been listed with their distributional data.

Data on some material of Agrypninae have been collected but have not been published up to now within the research projects by the researchers of Department of Plant Protection, Faculty of Agriculture, University of Ege, Izmir, Turkey, during 1962-2005 have been given in this paper. They were deposited in the collection of Lodos Entomological Museum, Turkey (LEMT) of the same department. The aim of the present study is to contribute to the knowledge of the Agrypninae fauna of the Turkey by evaluating the material deposited in this museum.

Provinces of the collected specimens are given in alphabetical order in the following list.

Results

In this study, five species belonging to five genera from Agrypninae are recorded. As a result a total 242 specimens from five species belonged to subfamily Agrypninae of the family of Elateridae were recorded in Turkey. Recent distribution of each species were also given with maps within the text.

Family L a t e r i d a e LEACH 1815

Subfamily A g r y p n i n a e CANDÉZE 1857

Genus *A d e l o c e r a* LATREILLE 1829

Adelocera pygmaea (BAUDI 1871)

M a t e r i a l e x a m i n e d : Antalya: Seki, 09.VI.1973, 1 ex.; Izmir: Kemalpaşa, Ören, 21.IX.1999, *Cerasus avium* (LINNAEUS) Moench, 1794, sticky yellow trap, 1 ex., Kemalpaşa, Örnekköy, 12.IX.1994, *C. avium*, sticky yellow trap, 2 ex. Totally 4 specimens.

D i s t r i b u t i o n i n T u r k e y : Turkey (LOBL & SMETANA 2007; MERTLIK & PLATIA 2008); Karaman (Bulgar Mountains) (SAHLBERG 1912-1913); Mersin (Derbent, Kızılen) (JANNSON & COSKUN 2008); Izmir (Kemalpaşa) (TEZCAN & GULPERCİN 2009). Distributional map of *A. pygmaea* in Turkey is given on Figure 1.

Genus *A e o l o d e r m a* FLEUTIAUX 1928

Aeoloderma crucifer (ROSSI 1790)

M a t e r i a l e x a m i n e d : Bursa: Central province, 16.VI.1977, *Nicotiana tabacum* LINNAEUS, 1753, 2 ex.; Izmir: Kemalpaşa, 09.IV.2004, sticky yellow trap, 1 ex., Ödemiş, 29.XII.1971, 1 ex., Ödemiş, Gereli, 25.I.1972, *Cydonia oblonga* MILLER, 1768, under bark, 10 exs., Ören, 14.VIII.1998, *C. avium*, pitfall trap, 1 ex.; Kütahya: Central province, 14.VI.1972, *Rubus* sp., 1 ex.; Mersin: Anamur, 22.V.1984, light trap, 1 ex., Erdemli, 05.VII.1988, light trap, 1 ex.; Sanlıurfa: Siverek, 15.VI.1972, weed, 1 ex. Totally 19 specimens.

D i s t r i b u t i o n i n T u r k e y : Turkey (LOBL & SMETANA 2007; MERTLIK & PLATIA 2008); Antalya (Elmalı-Avlan Lake), Burdur (Çeltikçibeli), Mersin (Susanoğlu) (GUGLIELMI & PLATIA 1985); Izmir [Ödemiş (Gereli), Seferihisar (Sığacık)] (GULPERCİN & TEZCAN 2009). Distributional map of *A. crucifer* in Turkey is given on Figure 2.

Genus *C a l a i s* LAPORTE de CASTELNAU 1836

Calais parreysii (STEVEN 1829)

M a t e r i a l e x a m i n e d : Antalya: Central province, 19.V.1986, aerial collector, 1 ex., VI.1994, *Pinus* sp., 1 ex.; Aydın: Karacasu, 25.IV.1993, *Pinus* sp., 1 ex.; İstanbul: Erenköy, 10.VIII.1983, weed, 1 ex.; Muğla: Central province, 21-26.V.1962, 1 ex. Totally 5 specimens.

D i s t r i b u t i o n i n T u r k e y : Turkey (LOBL & SMETANA 2007; MERTLIK & PLATIA 2008); This species is found everywhere in Turkey (LODOS 1998); Karaman (Bulgar Mountains) (SAHLBERG 1912-1913); Antalya, Bursa (Orhaneli) (ACATAY 1948); Antalya, Bursa (Orhaneli-Karıncalı) (CANAKCIOĞLU 1983); Antalya, Balıkesir (Havran), Mersin (Silifke, Namrun-Çamlıayyla) (GUGLIELMI & PLATIA 1985); Izmir (GULPERCİN & TEZCAN 2006); Isparta (Sütçüler), İçel (Tarsus) (KESDEK et al. 2006); Izmir [Balçova (Central province, Teleferik), Bornova (Çiçekli), Kemalpaşa (Çambel, Kurudere)] (GULPERCİN & TEZCAN 2009). Distributional map of *C. parreysii* in Turkey is given on Figure 3.

Genus D r a s t e r i u s ESCHSCHOLTZ 1829***Drasterius bimaculatus* (ROSSI 1790)**

M a t e r i a l e x a m i n e d : Adana: Yumurtalık, 08.V.1985, aerial collector, 1 ex.; Ankara: Keskin, 04.V.1979, sweeping net, 1 ex.; Antalya: Central province, 28.IV.1972, *Prunus armeniaca* LINNÆUS, 1753, 1 ex., 19.V.1986, aerial collector, 4 exs., Kaş, 05.IV.1984, aerial collector, 1 ex., Manavgat, 19.V.1972, light trap, 1 ex., 21.IV.1984, *Myrtus communis* LINNÆUS, 1758, 1 ex., 22.IV.1984, *Cistus* sp., 1 ex., 28.V.1986, aerial collector, 2 exs., Seki, 09.VI.1973, 8 exs., *Crataegus* sp., 2 exs., weed, 1 ex.; Aydın: Çine, VI.1991, light trap, 4 exs., Kuşadası, 15.VI.1977, weed, 1 ex.; Bahçesir: Bigadiç, 28.IV.1989, seedling, 1 ex., Manyas, Kızıksa, 10.V.1989, *Solanum lycopersicum* LINNÆUS, 1753, 1 ex.; Bartin: Central province, 31.V.1980, aerial collector, 1 ex., on the beach, 1 ex.; Burdur: Tefenni, Yesilova, 12.VI.1973, under stone, 1 ex.; Bursa: Central province, 01.VI.1972, *N. tabacum*, 1 ex., 08.VI.1977, *N. tabacum*, 1 ex., 11.VI.1977, *N. tabacum*, 1 ex., 14.VI.1977, *N. tabacum*, 2 exs., Inegöl, 15.VI.1977, *N. tabacum*, 1 ex., Mustafakemalpaşa, Ali Seydi, 14.VI.1977, *N. tabacum*, 1 ex., Yenişehir, 11.V.1989, *S. lycopersicum*, 1 ex.; Diyarbakır: Central province, 07.VII.1977, light trap, 3 exs., 14.VII.1977, light trap, 3 exs., 16.VII.1977, light trap, 2 exs., 18.VII.1977, light trap, 2 ex., 23.VII.1977, light trap, 1 ex., 03.VIII.1977, light trap, 1 ex., 10.IX.1977, light trap, 1 ex.; Düzce: Akçakoca, Konuralp, 08.VI.1977, *N. tabacum*, 2 exs., Gaziantep: Battal, 09.VI.1972, *Medicago sativa* LINNÆUS, 1753, 1 ex., Güreniz, 09.VI.1972, *Pistacia vera* LINNÆUS, 1753, 1 ex.; Hatay: Dörtyol, 29.V.1985, 1 ex., 28.V.1985, *Sideritis* sp., 1 ex., Hassa-İslahiye, 03.VI.1985, aerial collector, 5 exs.; Kilis: 04.VI.1985, aerial collector, 1 ex.; Izmir: Bergama, Kozak, 12.I.1982, *Pyrus elaeagnifolia* PALLAS, 1793, under bark, 2 exs., Bornova, 10.IV.1984, fabaceous plants, 1 ex., Bozdağ, 24.V.1978, *Alnus* sp., 1 ex., Çeşme, 09.XII.1971, under stone, 1 ex., Foça, 22.VII.1980, light trap, 1 ex., Karaburun, 20.VII.1977, light trap, 1 ex., Kemalpaşa, Central province, 17.V.2005, sticky yellow trap, 1 ex., Kemalpaşa, 07.II.1972, under stone, 1 ex., Kemalpaşa, Armutlu, 12.IX.2003, pitfall trap, 1 ex., Kemalpaşa, Kuyucak, 21.VIII.1994, sticky yellow trap, 1 ex., Kemalpaşa, Ören, 02.VIII.1993, *C. avium*, sticky yellow trap, 1 ex., 23.VIII.1993, *C. avium*, sticky yellow trap, 2 exs., 11.X.1993, *C. avium*, sticky yellow trap, 3 exs., 08.VII.1994, *C. avium*, sticky yellow trap, 1 ex., 06.V.1998, knock down, 1 ex., 21.IV.1998, *C. avium*, sticky yellow trap, 1 ex., 27.V.1998, knock down, 1 ex., 13.VI.1998, *C. avium*, pitfall trap, 16 exs., 31.VII.1998, *C. avium*, pitfall trap, 2 exs., 05.X.1998, *C. avium*, sticky yellow trap, 2 ex., 26.X.1998, *C. avium*, sticky yellow trap, 3 exs., 09.XI.1998, *C. avium*, sticky yellow trap, 1 ex., 04.V.1999, *C. avium*, sticky yellow trap, 1 ex., 20.VII.1999, *C. avium*, pitfall trap, 2 exs., 03.VIII.1999, *C. avium*, pitfall trap, 2 exs., 24.VIII.1999, *C. avium*, sticky yellow trap, 1 ex., 12.X.1999, *C. avium*, sticky yellow trap, 1 ex., 19.X.1999, *C. avium*, sticky yellow trap, 1 ex., 26.X.1999, *C. avium*, sticky yellow trap, 4 exs., 02.XI.1999, *C. avium*, sticky yellow trap, 1 ex., 03.XI.1999, knock down, 1 ex., Kemalpaşa, Örnekköy, 12.IX.1994, *C. avium*, sticky yellow trap, 1 ex., Kiraz, 25.I.1972, under stone, 1 ex.; Menderes, Gümüldür, Gümüşsu, 23.XII.1971, 2 exs., 20.I.1972, under stone, 4 exs., *Olea europaea* LINNÆUS, 1758, under bark, 1 ex., Menemen, Hatundere, 19.I.1972, under stone, 4 exs., *Vitis vinifera* LINNÆUS, 1758, under bark, 1 ex., *O. europaea*, under bark, 3 exs., Narlıdere, 02.VIII.1977, light trap, 1 ex., Ödemiş, 27.XII.1971, *Centaurea* sp., 1 ex., 27.I.1982, *Verbascum* sp., 1 ex., 16.VIII.1984, *Castanea sativa* MILLER, 1768, 1 ex., Ödemiş, Gereli, 25.I.1972, *C. oblonga*, under bark, 1 ex., Savandağ, 23.VIII.1993, sticky yellow trap, 1 ex.; Kahramanmaraş: Türkoglu, 19.VII.1984, light trap, 1 ex.; Karaman: Central province, 25.IV.1979, under stone, 1 ex., Ermenek, 27.IV.1979, sweeping net, 2 exs., aerial collector, 1 ex., 03.VII.1980, *Cirsium* sp., 1 ex., *Malus communis* LINNÆUS, 1753, 1 ex.; Kastamonu: Cide, 03.06.1980, *Sideritis* sp., 1 ex.; Kırklareli: Central province, 02.VI.1975, *Quercus* sp., 1 ex.; Kırşehir: Central province, 25.VI.1980, aerial collector, 1 ex.; Konya: Central province, 25.IV.1979, weed, 1 ex., Bozkır, 24.IV.1979, under stone, 2 exs., Seydişehir, 24.IV.1979, *Quercus* sp., 1 ex.; Malatya: Central province, 09.VII.1983, light trap, 1 ex.; Manisa: Central province, 31.VII.1997, pitfall trap, 1 ex., Muradiye, 31.V.1998, *C. avium*, sticky yellow trap, 1 ex., 13.VI.1998, *C. avium*, pitfall trap, 1 ex., 27.IV.1999, sweeping net, 1 ex., 04.V.1999, *C. avium*, sticky yellow trap, 1 ex., 14.VI.1999, *C. avium*, sticky yellow trap, 1 ex., 20.VII.1999, *C. avium*, pitfall trap, 3 exs., 03.VIII.1999, *C. avium*, pitfall trap, 3 exs., 10.VIII.1999, *C. avium*, sticky yellow

trap, 1 ex., 17.VIII.1999, *C. avium*, pitfall trap, 1 ex., 25.X.1999, *C. avium*, sticky yellow trap, 5 exs., 02.XI.1999, *C. avium*, sticky yellow trap, 2 exs., 15.XI.1999, *C. avium*, sticky yellow trap, 1 ex.; Mardin: Central province, 03.VI.1976, *A. vulgaris*, 1 ex.; Mersin: Anamur, 19.IV.1985, aerial collector, 1 ex., Gözne, 31.V.1984, on the ground, 1 ex., Gülnar, 24.V.1984, *Styrax* sp., 1 ex., Tarsus, 30.IV.1985, *Triticum* sp., 1 ex.; Muğla: Yatağan, 20.VIII.1975, *Verbascum* sp., 1 ex.; Niğde: Çiftehan, 29.IV.1979, *Tamarix* sp., 1 ex., Ulukışla, 29.IV.1979, *M. communis*, 1 ex.; Sakarya: Hendek, Kargalhanbaba, 17.V.1977, *N. tabacum*, 1 ex.; Sanlurfa: Siverek, 15.VI.1972, weed, 1 ex.; Tekirdağ: Şarköy, 01.VI.1977, *N. tabacum*, 1 ex.; Trabzon: Çukurçayır, 02.VI.1974, under stone, 1 ex.; Usak: Sivaslı, 11.VI.1972, 1 ex.; Yalova: Central province, 24.IV.1975, weed, 1 ex.; Zonguldak: Çaycuma, 31.05.1980, aerial collector, 1 ex., Ereğli, 25.V.1980, *Rubus* sp., 2 exs. Totally 203 specimens.

Distribution in Turkey: Turkey (LOBL & SMETANA 2007; MERTLIK & PLATIA 2008); West Anatolia, Karaman (SAHLBERG 1912-1913); Istanbul, Izmir (Bornova), Sakarya (GUL-ZUMREOGLU 1972); Adana (Pozanti), Amasya, Artvin (Borçka), Bursa (Inegöl), Düzce (Akçakoca-Konuralp, Gerede), Erzurum (Kopdağı Pass), Eskişehir (Sivrihisar), Gaziantep (İslahiye), Isparta (Central province), Izmir (Efes, Selçuk), Kastamonu (Central province), Mersin (Namrun-Çamlıayala), Muğla (Yatağan), Samsun (Bafra), Siirt (Baykan), Trabzon (Sümela-Maçka) (GUGLIELMI & PLATIA 1985); Izmir (GULPERCİN & TEZCAN 2006); Adana [Kozan (Bağtepe)], Ankara (Central province, Ayaş, Kocatepe), Erzurum (Horasan, Köprüköy, Oltu), Eskişehir, Hatay, İğdır [Central province, Suveren, Tuzluca (Çincevat)], Kırıkkale, Konya [Güneysinir (Gürağaç)], Muğla, Yozgat (KESDEK et al. 2006); Izmir [Bornova, Kemalpaşa (Central province, Armutlu), Kinik, Kiraz, Menderes (Gümüldür), Ödemiş, Seferihisar (Central province, Sığacık), Urla] (GULPERCİN & TEZCAN 2009); Izmir (Kemalpaşa) (TEZCAN & GULPERCİN 2009, UZUM et al. 2009). Distributional map of *D. bimaculatus* in Turkey is given on Figure 4.

Genus *Lacon* Lacoste LAPORTE de CASTELNAU 1836

Lacon punctatus (HERBST 1779)

Material examined: Antalya: Central province, 17.VIII.1991, on the ground, 1 ex., Kaş, 05.IV.1984, aerial collector, 1 ex.; Balıkesir: Dursunbey, 18.V.1971, *P. elaeagnifolia*, 1 ex.; Izmir: Bornova, Çiçekli, 22.VII.1999, 5 exs., Bornova, Kemalpaşa, 22.VII.1999, under bark, 1 ex.; Karaman: Ermenek, 03.VII.1980, *Celtis* sp., 2 ex.; Muğla: Dalaman, 04.VIII.1978, *Paliurus spinachristi* MILLER, 1768, 1 ex. Totally 12 specimens.

Distribution in Turkey: Turkey (LOBL & SMETANA 2007; MERTLIK & PLATIA 2008); Bilecik, Karaman (Bulgar Mountains), Sakarya (Sapanca) (BODEMEYER 1900); Karaman (Bulgar Mountains) (SAHLBERG 1912-1913); Istanbul (Bahçeköy-Belgrad Forests, Tarabya) (SCHMITSCHEK 1953); Istanbul (Alemdağ), Konya (Sertavul Pass), Mersin (Namrun-Çamlıayala) (GUGLIELMI & PLATIA 1985); Adana (Pozanti) (DUŠÁNEK & MERTLIK 2004); Izmir (GULPERCİN & TEZCAN 2006); Artvin (Hatila Valley, Madenler) (KESDEK et al. 2006); Izmir [Bergama (Kozak), Beydağ, Bornova (Central province, Çiçekli), Kemalpaşa (Central province, Armutlu, Kurudere, Nif Mountain), Ödemiş (Bozdağ), Seferihisar] (GULPERCİN & TEZCAN 2009). Distributional map of *L. punctatus* in Turkey is given on Figure 5.

Zusammenfassung

Vorliegende Arbeit behandelt Agrypninae-Material (Elateridae), das an verschiedenen Orten in der Türkei im Zeitraum 1962 bis 2005 aufgesammelt wurde. Fünf Arten aus fünf Gattungen konnten nachgewiesen werden, die Funddaten nebst Verbreitungsangaben für die Türkei wurden festgehalten.

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Addresses of the authors: Dr. Nilay GULPERCIN
Ege University,
Natural History Application and Research Center
TR-Bornova-Izmir, Turkey
E-mail: nilay.gulpercin@ege.edu.tr

Prof. Dr. Serdar TEZCAN
Ege University, Faculty of Agriculture,
Department of Plant Protection
TR-Bornova-Izmir, Turkey
E-mail: serdar.tezcan@ege.edu.tr

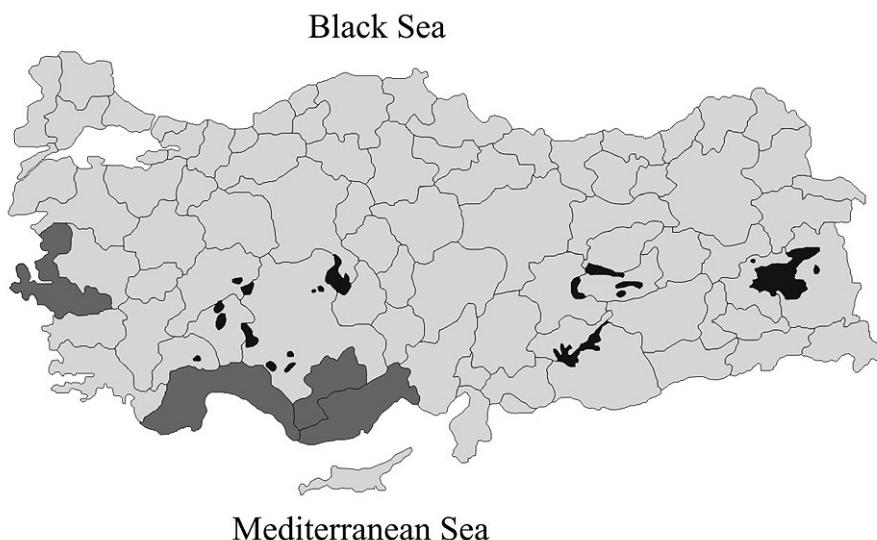
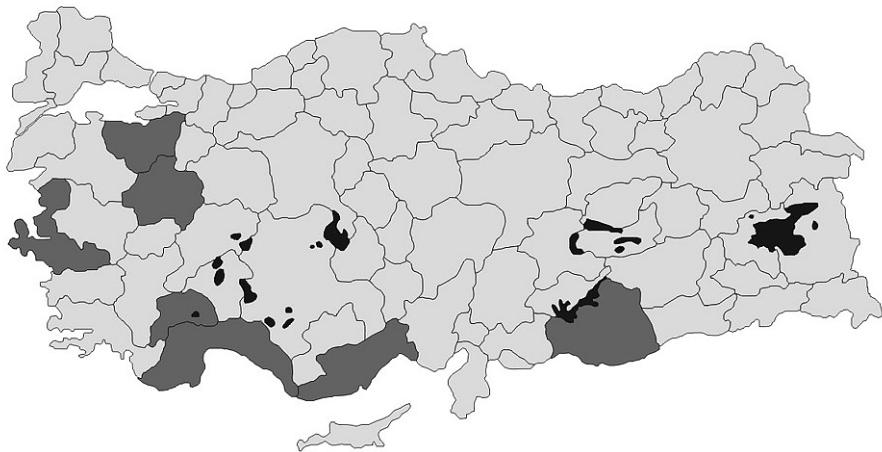


Fig. 1: Distribution of *Adelocera pygmaea* (BAUDI 1871) in Turkey.

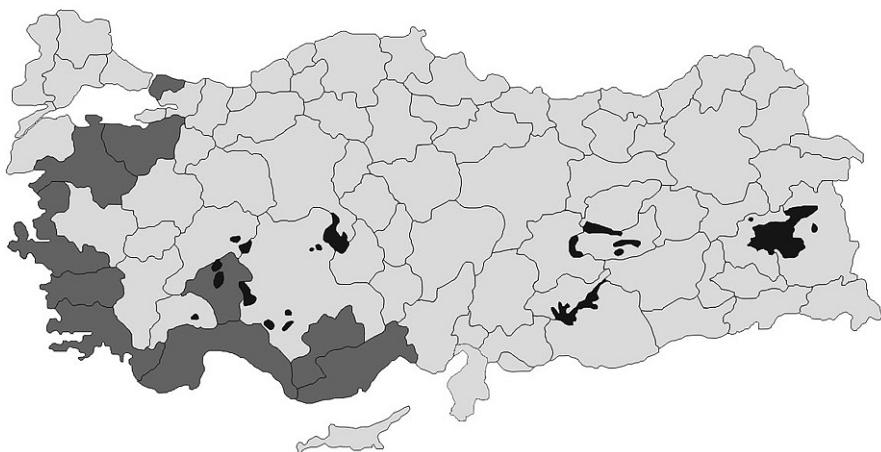
Black Sea



Mediterranean Sea

Fig. 2: Distribution of *Aeoloderma crucifer* (ROSSI 1790) in Turkey.

Black Sea



Mediterranean Sea

Fig. 3: Distribution of *Calais parreysii* (STEVEN 1829) in Turkey.

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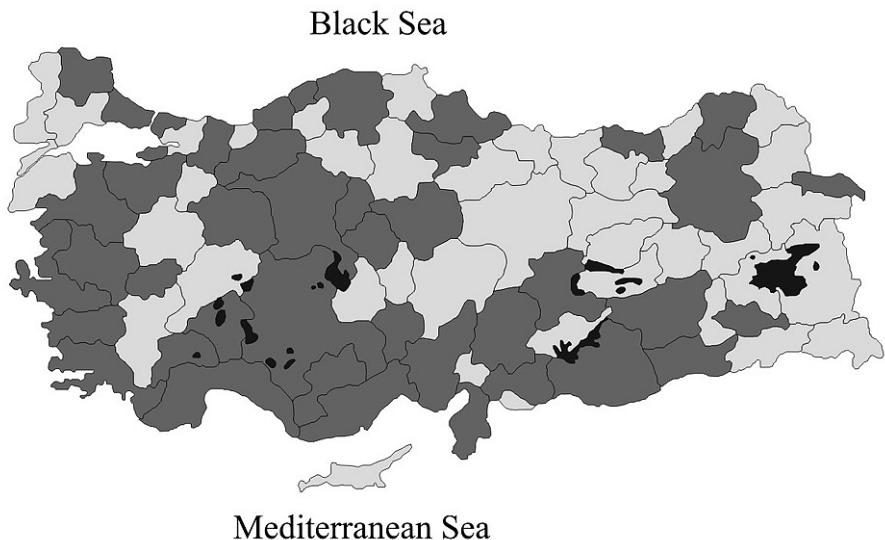


Fig. 4: Distribution of *Drasterius bimaculatus* (ROSSI 1790) in Turkey.

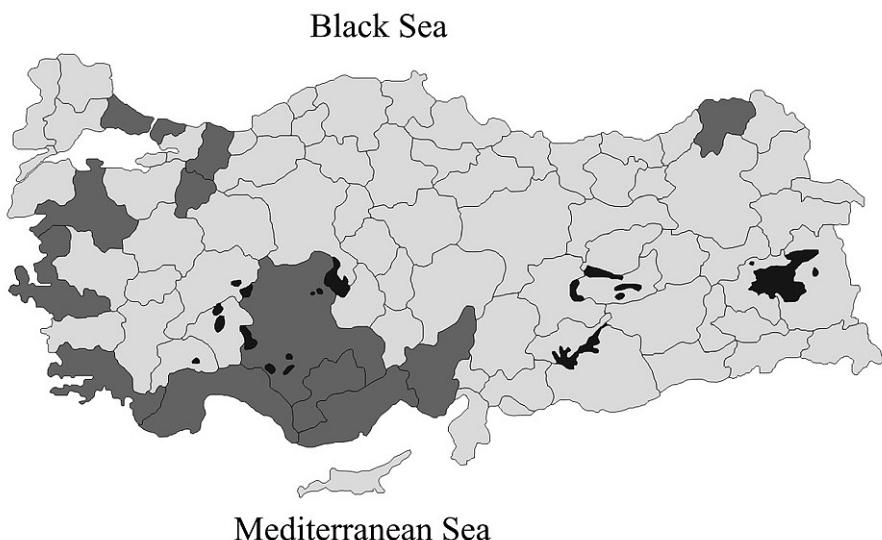


Fig. 5: Distribution of *Lacon punctatus* (HERBST 1779) in Turkey.

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Autor(en)/Author(s): GÜLPERCİN NILAY, TEZCAN SERDAR

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