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New data on the predator Heteroptera from Mazandaran and Golestan provinces, northern Iran

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A b s t r a c t : Samplings in different regions of Golestan and Mazandaran provinces (northern Iran), allowed the caught of 19 species of Heteroptera from the families Anthocoridae, Geocoridae, Miridae, Nabidae, and Reduviidae which represent new data for these regions.

K e y w o r d s : Heteroptera, fauna, predator, Golestan, Mazandaran, Iran.

Introduction

Heteroptera is one of the most important orders of insect which includes agricultural pests, predators and blood-sucking. With more than 40,000 described species, Heteroptera (Hemiptera) are part of the most successful radiation of nonholometabolous insects (WEIRAUCH & SCHUH 2011). The predator species have efficient role in biological control of pests. The fauna of Iranian Heteroptera was studied well and all the data were catalogued by the authors (GHAHARI et al. 2009a, b, 2010a, b, 2012, 2013a, b; GHAHARI & MOULET 2012, 2013; GHAHARI & HEISS 2012; GHAHARI & CHEROT 2014; GHAHARI et al. 2014). The aim of this work is a faunistic survey on predator bugs in Golestan (36.8393°N 54.4444°E) and Mazandaran (36.5656°N 53.0588°E) provinces. These two provinces which are located in the south of Caspian Sea contain diverse flora and fauna. Therefore conducting of faunistic studies on different insect taxa such as Heteroptera in these regions will result to new findings.

Materials and Methods

The materials were collected by sweeping net and aspirator and were identified by the authors. The system, nomenclature, and distribution data follow HENRY (1988), KERZHNER (1996), PUTSHKOV & PUTSHKOV (1996), PERICART (1996).

Results

Totally 19 species of Heteroptera were collected from different regions of Golestan and Mazandaran provinces which are new data for these provinces. The list of species is given below together with distribution and biology data.

Family Anthocoridae FIEBER, 1836**Subfamily Anthocorinae FIEBER, 1836****Tribe Anthocorini FIEBER, 1836****Genus *Anthocoris* FALLÉN, 1814*****Anthocoris flavipes* REUTER, 1884**

Material examined: Golestan province, Gorgan, 1♀, 2♂♂, 15.ix.2012.

General distribution: Armenia, China (Western Plateau), Kazakhstan (Asian part), Kirgizia, Tadjikistan, Indian Tibet (PERICART 1996).

***Anthocoris nemoralis* (FABRICIUS, 1794)**

Material examined: Mazandaran province, Sari, 2♀♀, 4♂♂, 8.vii.2012.

General distribution: Widespread in Europe (from Great Britain to Russia), North Africa (Algeria, Egypt, Libya, Morocco, Tunisia), and Central Asia. Introduced to North America (PERICART 1996; HENRY 1988).

Biology: *A. nemoralis* attacks and feeds upon psyllids, Aphids (both living on herbs or deciduous trees), on eggs and caterpillars of Tineidae and Tortricidae (Lepidoptera); it has been mentioned also against Acari (PÉRICART 1972).

Tribe Oriini CARAYON, 1958**Genus *Orius* WOLFF, 1811****Subgenus *Dimorphella* REUTER, 1884*****Orius (Dimorphella) albidipennis* (REUTER, 1884)**

Material examined: Golestan province, Gorgan, 3♀♀, 5♂♂, 22.x.2012. Mazandaran province, Savadkooh, 5♀♀, 7♂♂, 5.iv.2013.

General distribution: Spain, Africa (southwards to Nigeria), Near East, Arabian Peninsula, Iraq, Iran, Central Asia, and Pakistan (PERICART 1996).

Biology: It is known to feed upon Aphids, Thysanoptera and some Lepidoptera pests of cotton (PÉRICART 1972).

Subgenus *Heterorius* WAGNER, 1952***Orius (Heterorius) horvathi* (REUTER, 1884)**

Material examined: Golestan province, Gorgan, 1♀, 4♂♂, 22.x.2012.

General distribution: Widespread in Europe (from France to Russia), Morocco, and Palaearctic Asia (from Turkey to China) (PERICART 1996).

Biology: *Aphis pomi* DE GEER (Aphididae) is the only prey mentioned for *O. horvathi* but this is not certain (PÉRICART 1972).

***Orius (Heterorius) minutus* (LINNAEUS, 1758)**

M a t e r i a l e x a m i n e d : Mazandaran province, Qaemshahr, 3♀♀, 3♂♂, 6.iv.2013.

G e n e r a l d i s t r i b u t i o n : Widespread in Europe and Palaearctic Asia, introduced to North America (PERICART 1996; HENRY 1988).

B i o l o g y : This species preys Aphids, Psyllids, Jassidae, eggs of bugs and of butterflies, it is not improbable that it partially be phytophagous (PÉRICART 1972).

Subgenus *Orius* WOLFF, 1811

***Orius (Orius) niger* (WOLFF, 1811)**

M a t e r i a l e x a m i n e d : Golestan province, Gorgan, 2♂♂, 15.ix.2012.

G e n e r a l d i s t r i b u t i o n : Widespread in Europe (from Great Britain to Russia), North Africa (Algeria, Egypt, Libya, Morocco, Tunisia), and Palaearctic Asia (from Turkey to India and China) (PERICART 1996).

B i o l o g y : *Orius niger* feeds on Aphididae, Thysanoptera, Acari, eggs of bugs and of butterflies (PÉRICART 1972).

Family *Geocoridae* BAERENSPRUNG, 1860

Subfamily *Geocorinae* BAERENSPRUNG, 1860

Genus *Geocoris* FALLÉN, 1814

Subgenus *Geocoris* FALLÉN, 1814

***Geocoris (Geocoris) megacephalus* (ROSSI, 1790)**

M a t e r i a l e x a m i n e d : Mazandaran province, Joibar, Qaemshahr, 5♀♀, 2♂♂, 6.x.2012.

G e n e r a l d i s t r i b u t i o n : Holomediterranean, extending into the Middle East and Middle Asia.

B i o l o g y : An active predator of various larvae of Heteroptera (particularly of *Ischnodemus*) (PÉRICART 1998).

Subgenus *Piocoris* STÅL, 1872

***Geocoris (Piocoris) luridus* (FIEBER, 1844)**

M a t e r i a l e x a m i n e d : Golestan province, Kordkoy, 3♀♀, 2♂♂, 15.ix.2012.

G e n e r a l d i s t r i b u t i o n : Eremian, extending from North Africa to Middle East, Middle Asia, Ethiopia, and Sudan.

B i o l o g y : *G. luridus* feeds upon Aphids and little Heteroptera (both eggs and larvae) living on several *Tamarix* (Tamaricaceae) (PÉRICART 1998).

Family M i r i d a e HAHN, 1833

Subfamily D e r a e o c o r i n a e DOUGLAS & SCOTT, 1865

Tribe Deraeocorini DOUGLAS & SCOTT, 1865

Genus *Deraeocoris* KIRSCHBAUM, 1856

***Deraeocoris (Camptobrochis) punctulatus* (FALLÉN, 1807)**

M a t e r i a l e x a m i n e d : Golestan province, Salikandeh, 1♀, 1♂, 14.vii.2012.

G e n e r a l d i s t r i b u t i o n : Holarctic species (GHAHARI & CHEROT 2014).

***Deraeocoris (Camptobrochis) serenus* (DOUGLAS & SCOTT, 1868)**

M a t e r i a l e x a m i n e d : Mazandaran province, Chalus, 2♀ ♀, 10.ix.2011.

G e n e r a l d i s t r i b u t i o n : West Palaearctic species (GHAHARI & CHEROT 2014).

***Deraeocoris (Knightocapsus) lutescens* (SCHILLING, 1837)**

M a t e r i a l e x a m i n e d : Golestan province, Golestan National Park, 2♀ ♀, 1♂, 8.vii.2013.

G e n e r a l d i s t r i b u t i o n : Widely distributed species, known from Europe, North-Africa and Middle- East (GHAHARI & CHEROT 2014).

Family N a b i d a e A. COSTA, 1853

Subfamily N a b i n a e A. COSTA, 1853

Tribe Nabini A. COSTA, 1853

Genus *Nabis* LATREILLE, 1802

Subgenus *Nabis* LATREILLE, 1802

***Nabis (Nabis) palifer* SEIDENSTÜCKER, 1954**

M a t e r i a l e x a m i n e d : Mazandaran province, Ramsar, 5♀ ♀, 2♂ ♂, 14.ix.2012.

G e n e r a l d i s t r i b u t i o n : Irano-Turanian, extending from the Balkan Peninsula to south-west China, north India and Nepal (KERZHNER 1996).

Subgenus *Tropiconabis* KERZHNER, 1968

***Nabis (Tropiconabis) capsiformis* GERMAR, 1838**

M a t e r i a l e x a m i n e d : Golestan province, National Park, 2♀ ♀, 1♂, 10.vii.2012.

G e n e r a l d i s t r i b u t i o n : Cosmotropical (KERZHNER 1996; KERZHNER & HENRY 2008).

Family Reduviidae LATREILLE, 1807

Subfamily Harpactorinae AMYOT & SERVILLE, 1843

Genus *Coranus* CURTIS, 1833

***Coranus (Coranus) aegyptius* (FABRICIUS, 1775)**

Material examined: Mazandaran province, Joibar, Sari, 3 ♀♀, 2.ix.2012.

General distribution: Eremian: from Madeira and The Canary Archipelago, North Africa, Near East, Arabic Peninsula, Central Asia; known in Tropical Africa (Senegal, The Sudan, Tchad) (KMENT & JINDRA 2005; PUTSHKOV & MOULET 2010).

Biology: In laboratory conditions the species consumes spiders but this is maybe not a rule (PUTSHKOV & MOULET 2010).

Genus *Rhynocoris* HAHN, 1833

***Rhynocoris ibericus* KOLENATI, 1857**

Material examined: Golestan province, Gorgan, 1 ♀, 2 ♂♂, 15.ix.2012.

General distribution: Ponto-Mediterranean and Central Asia from Greece to Turkmenistan.

Biology: Adults feed upon caterpillars and butterflies living on Apiaceae and other plants; in laboratory conditions they eat bees, wasps and Pentatomids (PUTSHKOV & MOULET 2010).

***Rhynocoris persicus* (JAKOVLEV, 1877)**

Material examined: Mazandaran province, Ramsar, 2 ♀♀, 1 ♂, 14.ix.2012.

General distribution: Ponto-Turanian (Caucasus, Central Asia, Near East) (PUTSHKOV & PUTSHKOV 1996).

Subfamily Reduviinae AMYOT & SERVILLE, 1843

Genus *Reduvius* FABRICIUS, 1775

***Reduvius jakovleffi* REUTER, 1892**

Material examined: Mazandaran province, Behshahr, Neka, 2 ♀♀, 2 ♂♂, 27.viii.2012.

General distribution: Eremian: Cyprus, Egypt, Near East, Central Asia, Arabic Peninsula; quoted in Afghanistan by PUTSHKOV & PUTSHKOV (1996).

***Reduvius pallipes* KLUG, 1830**

Material examined: Mazandaran province, Kiakola, 2 ♀♀, 3 ♂♂, 23.x.2012.

General distribution: North Africa, Italy (Sicily), Malta, Balkan Peninsula, Near east, Arabian Peninsula, Pakistan (PUTSHKOV & PUTSHKOV 1996; AUKEMA et al. 2013).

***Reduvius testaceus* (HERRICH-SCHAEFFER, 1845)**

Material examined: Golestan province, Salikandeh, 3♀, 14.vii.2012.

General distribution: Mainly an Asian species, westward to Croatia; North Africa (PUTSHKOV & PUTSHKOV 1996; AUKEMA et al. 2013).

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Zusammenfassung

Bei Aufsammlungen in den nordiranischen Provinzen Golestan und Mazandaran gelang der Nachweis von 10 Wanzenarten der Familien Anthocoridae, Geocoridae, Miridae, Nabidae und Reduviidae.

References

- AUKEMA B., RABITSCH W. & Ch. RIEGER (2013): Catalogue of the Heteroptera of the Palaearctic Region. VI. Supplement. — The Netherlands Entomological Society, Amsterdam, xxiii + 629 pp.
- GHAHARI H., CARPINTERO D.L. & H. OSTOVAN (2009a): An annotated catalogue of the Iranian Anthocoridae (Hemiptera: Heteroptera: Cimicomorpha). — *Acta Entomologica Musei Nationalis Pragae* **49**: 43-58.
- GHAHARI H., CHEROT F., LINNAVUORI R.E. & H. OSTOVAN (2009b): Annotated catalogue of Iranian burrower bugs (Heteroptera, Pentatomoidea, Cydnidae). — *ZooKeys* **26**: 1-31.
- GHAHARI H., CARPINTERO D.L., MOULET P., LINNAVUORI R.E. & H. OSTOVAN (2010a): Annotated catalogue of the Iranian broad-headed bugs (Hemiptera: Heteroptera: Alydidae). — *Acta Entomologica Musei Nationalis Pragae* **50**: 425-436.
- GHAHARI H., LINNAVUORI R.E., MOULET P. & H. OSTOVAN (2010b): An annotated catalogue of the Iranian Nabidae (Hemiptera: Heteroptera). — *Acta Entomologica Musei Nationalis Pragae* **50**: 33-44.
- GHAHARI H., MONTEMAYOR S.I., MOULET P. & R.E. LINNAVUORI (2012): An annotated catalogue of the Iranian Tingidae (Hemiptera: Heteroptera). — *Zootaxa* **3207**: 22-39.
- GHAHARI H. & P. MOULET (2012): An annotated catalog of the Iranian Lygaeoidea (excluding Berytidae and Piesmatidae) (Hemiptera: Heteroptera: Pentatomomorpha). — *Zootaxa* **3408**: 1-33.
- GHAHARI H. & E. HEISS (2012): Annotated catalog of Iranian Aradidae (Hemiptera: Heteroptera: Pentatomomorpha: Aradoidea). — *Zootaxa* **3571**: 81-86.
- GHAHARI H. & P. MOULET (2013): An annotated catalog of the Iranian Pyrrhocoridae (Hemiptera: Heteroptera: Pentatomomorpha: Pyrrhocoroidea). — *Zootaxa* **3609** (3): 335-342.
- GHAHARI H., MOULET P., OSTOVAN H. & R.E. LINNAVUORI (2013a): An annotated catalog of the Iranian Dipsochoromorpha, Enicocephalomorpha, Gerromorpha, Leptopodomorpha and Nepomorpha (Hemiptera: Heteroptera). — *Zootaxa* **3641** (4): 301-342.

- GHAHARI H., MOULET P., CAI W. & J. KARIMI (2013b): An annotated catalog of the Iranian Reduvidae (Hemiptera: Heteroptera: Cimicomorpha). — *Zootaxa* **3718** (3): 201-238.
- GHAHARI H. & F. CHEROT (2014): An annotated catalog of the Iranian Miridae (Hemiptera: Heteroptera: Cimicomorpha). — *Zootaxa* **3845** (1): 1-101.
- GHAHARI H., MOULET P. & D.A. RIDER (2014): An annotated catalog of the Iranian Pentatomoidea (Hemiptera: Heteroptera: Pentatomomorpha). — *Zootaxa* **3837** (1): 1-95.
- HENRY T.J. (1988): Family Anthocoridae, pp. 12-28. — In: HENRY T.J. & R.C. FROESCHNER (eds), *Catalog of the Heteroptera, or true bugs of Canada and the continental United States*. E. J. Brill, Leiden – New York – København – Köln, xix + 958 pp.
- KERZHNER I.M. (1996): Family Nabidae A. COSTA 1983 – damsel bugs, pp. 84-107. — In: AUKEMA B. & RIEGNER C. (eds). *Catalogue of the Heteroptera of the Palaearctic Region. Vol. 2. The Netherlands Entomological Society, Amsterdam*, xiv + 360 pp.
- KERZHNER I.M. & T.J. HENRY (2008): Three new species, notes and new records of poorly known species, and an updated checklist for the North American Nabidae (Hemiptera: Heteroptera). — *Proceedings of the Entomological Society of Washington* **110**: 988-1011.
- KMENT P. & Z. JINDRA (2005): New and interesting records of true bugs (Heteroptera) from Turkey, southeastern Europe, Near and Middle East. — *Acta Entomologica Musei Nationalis Pragae* **45**: 3-16.
- PÉRICART J. (1972): Hémiptères Anthocoridae, Cimicidae, Microphysidae de l'Ouest Paléarctique. In: *Faune de l'Europe et du bassin méditerranéen*, vol. 7. Masson éd., Paris, 402 pp.
- PÉRICART J. (1996): Family Anthocoridae FIEBER, 1836 – flower bugs, minute pirate bugs, pp. 108-140. — In: AUKEMA B. & C. RIEGER (eds). *Catalogue of the Heteroptera of the Palaearctic Region. Vol. 2. Cimicomorpha I. The Netherlands Entomological Society, Amsterdam*, xiv + 361 pp.
- PÉRICART J. (1998): Hémiptères Lygaeidae euro-méditerranéens, vol. 1. — *Faune de France*, t. 84A. FFSSN éd., Paris, xii + 468 pp.
- PUTSHKOV V.G. & P.V. PUTSHKOV (1996): Family Reduviidae LATREILLE, 1807, assassin bugs. — In: AUKEMA B. & C. RIEGER (eds), *Catalogue of the Heteroptera of the Palaearctic region, volume 2. Cimicomorpha I.* — *The Netherlands Entomological Society, Amsterdam*, pp. 148-265.
- PUTSHKOV V.G. & P. MOULET (2010): Hémiptères Reduviidae d'Europe occidentale. — *Faune de France*, vol. 92. Paris, 668 pp.
- WEIRAUCH C. & R.T. SCHUH (2011): Systematic and evolution of Heteroptera: 25 years of progress. — *Annual review of Entomology* **56**: 487-510.

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