

## Study of the genus *Ametastegia* Costa (Hymenoptera: Tenthredinidae: Allantinae) in northern Iran, with the description of a new species

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**ABSTRACT.** The genus *Ametastegia* Costa 1882 (Hymenoptera: Tenthredinidae: Allantinae) was studied in northern Iran. The specimens were collected using sweeping net and Malaise traps during March to November 2010 and 2011. Four species were collected and identified of which *Ametastegia persica* Khayrandish, Talebi & Blank **sp. n.** is described as new to science. An illustrated key for identification of *Ametastegia* species in Iran is provided.

**Key words:** Symphyta, new species, identification key, taxonomy

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### Introduction

The subfamily Allantinae (Hymenoptera: Tenthredinidae) comprising 804 species in 107 genera (Taeger *et al.* 2010). This subfamily has been divided into a number of tribes, but different authors used different classification (Smith 1979; Lacourt 1999; Wei and Nie 1998). Most authors believed that the Allantinae divided into six tribes: Acidiophorini, Allantini, Belesesini, Emprini, Eriocampini and Xenapateini. The Allantinae is the most diverse subfamily containing the highest number of genera in the family Tenthredinidae (Taeger *et al.* 2010). Genus *Ametastegia* Costa, 1882 belongs to the tribe Emprini which includes 55 species worldwide and

10 species in the West Palaearctic region (Taeger *et al.* 2010). *Ametastegia glabrata* (Fallén, 1808) is widely distributed throughout the Northern Hemisphere, including temperate Europe, the Mediterranean region, Siberia, North America, and it has also been recorded from Chile and eastern Australia (Naumann *et al.* 2002). Some species of *Ametastegia*, particularly *A. glabrata*, are important pests of apple, *Malus domestica* in Ukraine, Russia (Storozhenko and Kuznetsov 1995) and USA (CABI 2007). Damage attributed to the larvae of *A. tenera* (Fallén, 1808), *A. glabrata* and *A. equiseti* (Fallén, 1808), has also been reported on grapevine, *Vitis vinifera* in France (Chevin 1979). The first Australian record of *A.*

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*glabrata* attacking raspberries, *Rubus idaeus* and grapevines has been reported by Malipatil *et al.* (1995). Larvae of most species of this genus primarily feed on herbaceous hosts from several families of plants such as Salicaceae, Fagaceae, Polygonaceae, Plantaginaceae, Geraniaceae and Asteraceae (Taeger *et al.* 1998; Lacourt 1999).

Species of *Ametastegia* can be differentiated from other genera of Emprini by the following combination of characters: the anal cross vein of the forewing is perpendicular and not as oblique as in other genera of Emprini; absence of cells Rs and M in the hind wing; shallowly emarginated clypeus and bidentate mandibles. However, some males can be readily separated by distinct characters in the genitalia but there are a few or no reliable diagnostic characters for separation in many species. Consequently, most species are described based on the females. Most species have several generations per year. Mature larvae bore into special substrates such as apples or other fruits, berry canes and bark and construct a pupal cell. Such records do not constitute the true host on which the larva actually feeds. Larvae found in these secondary hosts are always prepupae, a stage that cannot be identified properly (Smith 1979).

According to the recent electronic world catalogue of Symphyta (Taeger and Blank 2011) and other literatures (Zirngiebl 1956; Benson 1968; Lacourt 1999) only two species of the genus *Ametastegia*, *A. glabrata* and *A. pallipes* have been previously recorded from Iran.

Three species of *Ametastegia* (e.g. *A. pallipes*, *A. alabastria* and *A. tenera*) have recently been reported from Iran of which the last two species were new records for Iranian fauna (Khayrandish *et al.* 2012). The

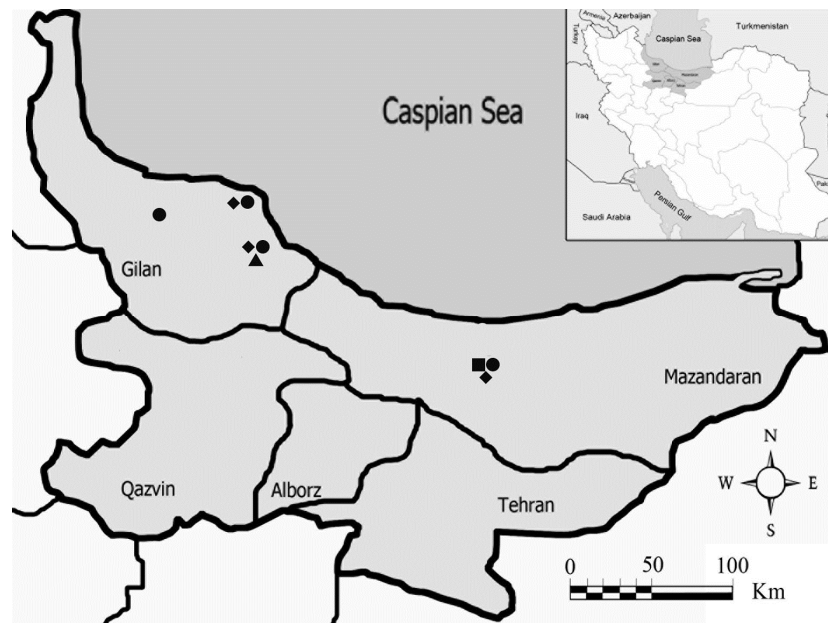
present study is an initial attempt to clarify the taxonomy of the genus *Ametastegia* and contribution to the knowledge of sawflies (Hymenoptera: Symphyta) in northern Iran.

### Materials and Methods

North region of Iran is characterized by great variation in plant community composition due to significant differences in topography and climatic changes. In terms of biodiversity, this region remarked as the end part extensions of two major biodiversity hotspots. Southern slopes of Alborz Mountains including Tehran, Alborz and Qazvin provinces (Fig. 1) situated in the Irano-Anatolian hotspot, whereas the northern one, where Gilan and Mazandaran provinces located, is the eastern extension of the Caucasus biodiversity hotspot (Myers *et al.* 2000).

The specimens were collected by sweeping net and Malaise traps during March to November in 2010 and 2011. Thirty Malaise traps were installed at various locations and altitudes in Gilan, Tehran, Alborz, Qazvin and Mazandaran provinces for a period of eight months. The collection bottles were filled with 70% ethanol. Samples were collected weekly or biweekly and collecting bottles were replaced with fresh ones. All specimens were collected from Gilan and Mazandaran provinces in northern slope of Alborz Mountains (Figs. 2-5).

The localities, habitats, sampling dates and geographic coordinates for each species was recorded. For preparation of genitalia, the abdomen of specimens were dissected and macerated in 10% KOH for 12-20 hours at room temperature and then washed in distilled water. Female genitalia were put in spot dish in a drop of glycerin for illustration.



**Figure 1.** Geographic map of the collected species of *Ametastegia* in the North of Iran. *A. alabastria* (●), *A. pallipes* (▲), *A. persica* (◆), *A. tenera* (■).



**Figures 2-5.** Sampling localities in North of Iran: **2.** Eshmankomachal, Astaneyeh Ashrafiyeh, Gilan province, **3.** Ziaz, Rahimabad, Rudsar, Gilan province, **4.** Orkom, Rahimabad, Rudsar, Gilan province, **5.** Qazychak, Rahimabad, Rudsar, Gilan province.

Digital photos of whole specimens were taken with a JVC KYF-F75U camera attached to a Leica Z6 APO zoom system or alternatively with a Leica DFC450 C camera attached to a Leica M205 C stereomicroscope. Lighting was either from a cold light source attached to double light guides or from a reversed LED ring light. The specimens were illuminated indirectly by diffused light reflected from the inner surface of a styrofoam cup or a styrofoam hemisphere set up around the specimen. Ovipositors and aedeagus valves were imaged with the KYF-F75U camera attached to an Olympus BX51 compound microscope. Composite images with an extended depth of field were created using the software CombineZ5, CombineZP or alternatively AutoMontage 5.01.

The specimens were identified mostly using the keys of Benson (1952), Smith (1979), Zhelochovtsev (1994) and Zombori (1982). The morphological terminology used in this work follows Richards (1977). Type material studied in this paper are deposited in the following collections: **TMUT** = Tarbiat Modares University, Faculty of Agriculture, Department of Entomology, Tehran, Iran; **SDEI** = Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany; **SBUK** = Shahid Bahonar University, Faculty of Agriculture, Department of Plant Protection, Kerman, Iran; **IRIPP** = Iranian Research Institute of Plant Protection, Tehran, Iran.

The following taxonomic abbreviations used in this study:

POL: The distance between the inner margins of the lateral ocelli.

OOL: The distance from the lateral ocellus to the inner margin of the compound eye.

OCL: The distance from the lateral ocellus to the occipital carina or posterior margin of the head.

## Results

In this survey, a total of 271 specimens (86 females and 185 males) of the genus *Ametastegia* were collected from northern Iran consisting of four species, of which one species is new to science (Table 1).

### Genus *Ametastegia* Costa, 1882

*Ametastegia* Costa, 1882: 198. Type species: *Ametastegia fulvipes* Costa, 1882

*Aomodyctium* Ashmead, 1898: 309. Type species: *Strongylogaster abnormis* Provancher, 1885.

*Protemphytus* Rohwer, 1909: 92. Type species: *Emphytus coloradensis* Weldon, 1907.

*Ametastegia* (*Emphytina*) Rohwer, 1911: 399-400. Type species: *Emphytina pulchella* Rohwer, 1911

*Simplemphytus* MacGillivray, 1914: 363. Type species: *Simplemphytus pacificus* MacGillivray, 1914

*Unitaxonus* MacGillivray, 1921: 32. Type species: *Unitaxonus repentinus* MacGillivray, 1921

*Ocla* Malaise, 1957: 13. Type species: *Ocla albinigripes* Malaise, 1957.

### Key to the species of the genus *Ametastegia* known from Iran

- 1- Forewing with cells 1R1 and IRs separated by first free of radial sector veins (=Rs) (Fig. 6) (Subgenus *Ametastegia*).....2
- Forewing with cells 1R1 and IRs fused, first free of radial sector vein (=Rs) absent (Fig. 7) (Subgenus *Protemphytus*) .....3
- 2- Abdomen entirely black.....*A. glabrata*
- Abdomen yellow except the first black tergite (Figs. 12, 14).....*A. alabastrina*
- 3- Postspiracular sclerite white (Fig. 8), lancet with 15 serrulae (Fig. 28) ..... *A. persica* sp. n.
- Postspiracular sclerite black (Fig. 9)..... 4
- 4- Hind legs and tegulae mostly white (Fig. 10); scutellum dull with dense surface striations between the punctures .....*A. pallipes*
- Hind legs and tegulae entirely black (Fig. 11); scutellum usually more or less punctate in the middle .....*A. tenera*

**Table 1.** Updated list of the species of *Ametastegia* (Hym., Tenthredinidae) in Iran.

Scientific name	Previous recorded species	Collected species	New species	Reference
<i>Ametastegia alabastria</i>	*	*		Khayrandish <i>et al.</i> (2012);
<i>Ametastegia glabrata</i>	*			Zirnegiebl (1956)
<i>Ametastegia pallipes</i>	*	*		Benson (1968); Lacourt (1999)
<i>Ametastegia persica</i>		*	*	Khayrandish <i>et al.</i> (2012);
<i>Ametastegia tenera</i>	*	*		Current study
<b>Total</b>	<b>4 species</b>	<b>4 species</b>	<b>1 species</b>	Khayrandish <i>et al.</i> (2012)

***Ametastegia alabastria* (Konow, 1898)**

*Taxonus alabastrius* Konow, 1898: 238.

**Material examined:** IRAN, Gilan province: Qazvin-Rasht highway, Stalkhjan, [36°56'30"N 49°32'54"E] 144 m, 05.V.2011, 2♂, 10.V.2011, 1♀; Astaneyeh Ashrafiyeh, Eshman Komachal, [37°22'06"N, 49°57'54"E] -1 m, 05.IV.2010, 4♂, 12.IV.2010, 1♀, 1♂, 19.IV.2010, 1♀, 2♂, 26.IV.2010, 1♀, 3♂, 10.V.2010, 1♀, 3♂, 17.V.2010, 1♀, 24.V.2010, 3♀, 07.VI.2010, 2♀, 30.VIII.2010, 2♀, 06.IX.2010, 1♀, 13.IX.2010, 4♀, 2♂, 20.IX.2010, 1♀, 1♂, 04.X.2010, 3♂, 11.X.2010, 1♀, 2♂, 18.X.2010, 5♀, 3♂, 25.X.2010, 3♀, 1♂, 01.XI.2010, 1♀, 1♂, 15.XI.2010, 1♀; Rudсар, Ziaz, [36°52'30"N 50°13'24"E] 490 m, 12.IV.2010, 2♀, 26.IV.2010, 1, 10.V.2010, 1♂, 24.V.2010, 2♀, 31.V.2010, 2♀, 5♂, 07.VI.2010, 3♀, 12♂, 14.VI.2010, 3♀, 6♂, 21.VI.2010, 1♂, 05.VII.2010, 1♂, 09.VIII.2010, 1♂, 06.IX.2010, 2♂, 04.X.2010, 1♂; Rudсар, Orkom, [36°45'42"N 50°18'12"E] 1235 m, 12.IV.2010, 1♂, 26.IV.2010, 1♂, 17.V.2010, 1♀, 2♂, 24.V.2010, 1♀, 07.VI.2010, 2♀, 14.VI.2010, 1♀, 1♂, 13.IX.2010, 1♂; Rudсар, Qazychak, [36°45'54"N 50°19'36"E] 1803 m, 17.V.2010, 1♀, 31.V.2010, 1♂, 14.VI.2010, 1♂; Mazandaran province: Chamestan, Jourband, [36°26'18"N 52°07'12"E] 275 m, 11.V.2011, 2♂, 25.V.2011, 6♂, 08.VI.2011, 1♂; Chamestan, Tangehvaz, [36°21'54"N 52°06'12"E] 687 m, 26.IV.2011, 3♀, 2♂,

11.V.2011, 2♀, 2♂, 25.V.2011, 5♀, 3♂, 08.VI.2011, 1♂, 28.VI.2011, 1♀, 2♂, 13.VII.2011, 11♂, 03.IIX.2011, 1♀, 3♂, leg.: M. Khayrandish.

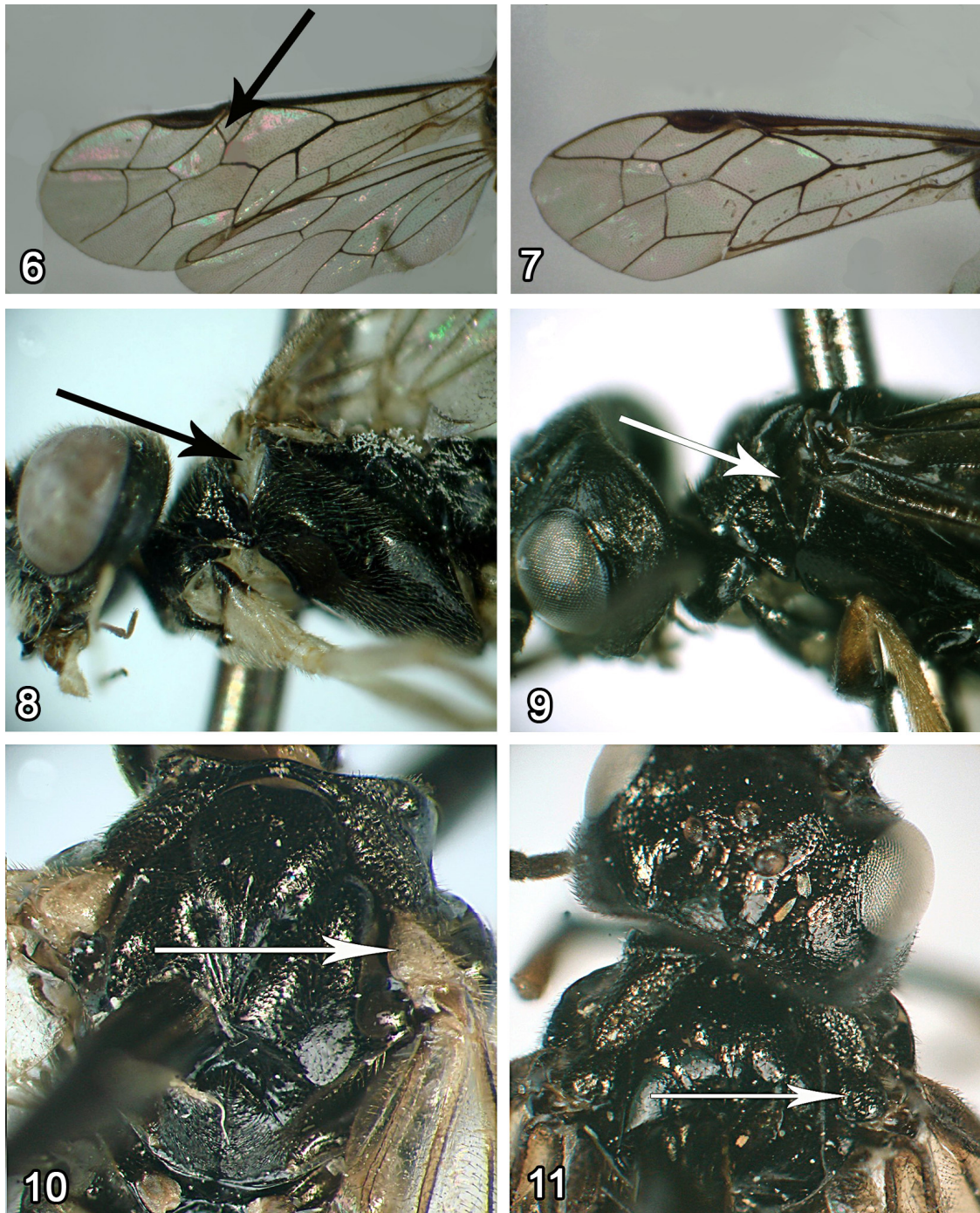
**Distribution:** Armenia and Azerbaijan (Taeger and Blank 2011), Iran (Khayrandish *et al.* 2012).

**Larval host plant:** Unknown.

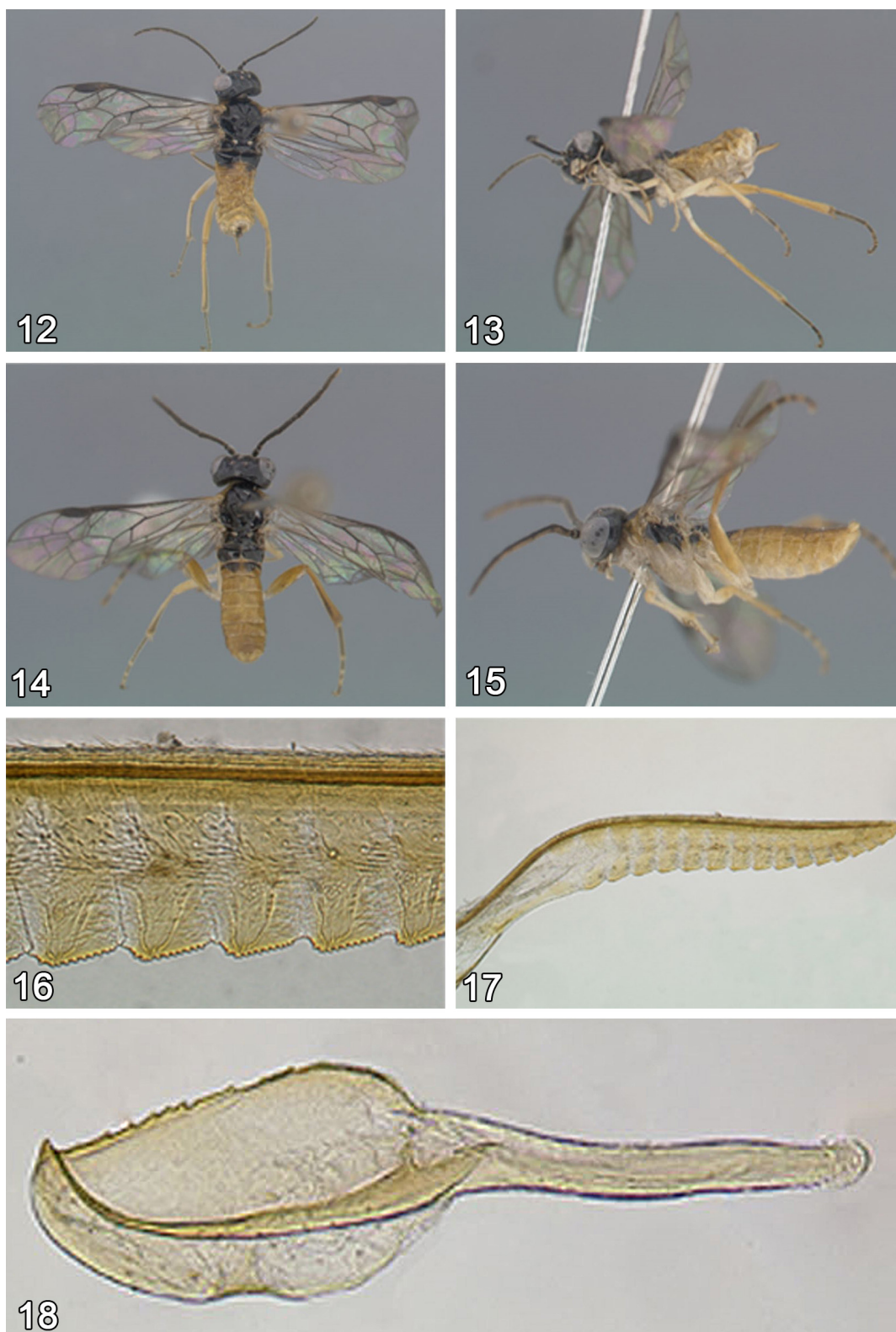
**Short description:** Female. Length, 6.5–7.2 mm.; frontal crest, clypeus, labrum, mandibles, maxillae, labium, maxillary and labial palps yellow and other portion of head black; dorsal surface of thorax black except tegulae and lateroposterior of pronotum yellow; cenchri dirty white; legs yellow, the end of hind tibiae a little dark and tarsi darker; upper part of pleura black and lower part yellow; sternum yellow, usually mesosternum or sometimes section of it black; abdomen yellow except the first basal tergite black, sawsheath black (Figs. 12–13), lancet with 16 serrulae (Figs. 16–17).

**Male.** Length, 5.6–6.2 mm. Color similar to female except mesosternum yellow (Figs. 14–15). Aedeagus valve as in Fig. 18.

**Remarks.** The specimens have been collected from April to mid November. In total, 149 specimens were collected at altitudes from 0 to 700 m and others (12) from higher altitudes. 158 specimens were collected by Malaise traps, two specimens from *Pteridium* and the one from *Rubus* by sweeping net.



**Figures 6-11.** *Ametastegia* spp.: 6. Wing of subgenus *Ametastegia*; 7. Wing of subgenus *Protemphytus*; 8. Lateral view of thorax of *Ametastegia persica* **sp. n.**; 9. Lateral view of thorax of *Ametastegia tenera*; 10. Dorsal view of thorax of *Ametastegia pallipes*; 11. Dorsal view of thorax of *Ametastegia tenera*.



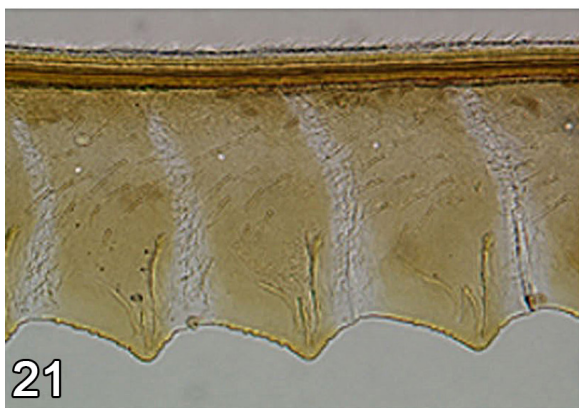
**Figures 12-18.** *Ametastegia alabastria*: **12.** Female, dorsal view; **13.** Female, lateral view; **14.** Male, dorsal view; **15.** Male, lateral view; **16-17.** Ovipositor; **18.** Aedeagus valve.

***Ametastegia pallipes* (Spinola, 1808)***Tenthredo pallipes* Spinola, 1808: 19.*Tenthredo* (*Emphytus*) *grossulariae* Klug, 1818: 283.*Dolerus* (*Emphytus*) *leucopodus* Lepeletier, 1823: 119.*Dolerus leucopodus* Serville, 1823: 56.*Tenthredo lapponica* Zetterstedt, 1838: 350.*Emphytus pallipes* Provancher, 1878: 66–67*Emphytus canadensis* W.F. Kirby, 1882: 204.*Emphytus pallidipes* Dalla Torre, 1894: 119.*Empria cavata* MacGillivray, 1911: 305.*Empria cetaria* MacGillivray, 1921: 33–34.*Emphytus hyacinthus* MacGillivray, 1923: 16.*Emphytus hospitus* MacGillivray, 1923: 15–16.*Emphytus haesus* MacGillivray, 1923: 13.*Emphytus heroicus* MacGillivray, 1923: 14–15.*Emphytus hiatus* MacGillivray, 1923: 15.

**Material examined:** IRAN, Gilan province: Rudsar, Rahimabad, Ziaz, [36°52'30"N 50°13'24"E] 490 m, 07.VI.2010, 1♀; Rudsar, Rahimabad, Orkom, [36°45'42"N 50°18'12"E] 1235 m, 10.V.2010, 1♀, 17.V.2010, 1♀, 24.V.2010, 1♀, 07.VI.2010, 1♀; Rudsar, Rahimabad, Qazychak, [36°45'54"N 50°19'36"E] 1803 m, 07.VI.2010, 1♀, leg.: M. Khayrandish.

**Distribution:** Widely distributed in the European part of the West Palearctic and has reported from Canada and U.S.A in Nearctic (Taeger and Blank 2011), Iran (Benson 1968; Lacourt 1999; Khayrandish *et al.* 2012).

**Larval host plants:** *Viola canina*, *V. odorata*, *V. tricolor* and *Vicia* (Taeger *et al.* 1998).



**Figures 19–22.** *Ametastegia pallipes*: 19. Female, dorsal view; 20. Female, lateral view; 21–22. Ovipositor.



**Short description:** Length 7.1–7.8 mm; antenna and head black; apical part of clypeus sometimes brownish; labrum, maxillary and labial palpi whitish; thorax black; tegulae white; legs mostly white with base of each coxa black; one-fourth of hind femur, apical part of hindtibia, and all tarsi sometimes infuscated; abdomen black (Figs. 19–20); clypeus approximately shallow, circularly emarginated, malar space about twice diameter of front ocellus;; first free of radial sector vein absent (Fig. 7); lancet with 14 serrulae (Figs. 21–22).

**Remarks:** The specimens have been collected in May and June by Malaise traps at various altitudes (from 500–1800 m).

*Ametastegia persica* Khayrandish, Talebi & Blank, sp. n. (Figs 23–30).

**Type material:** HOLOTYPE, female, IRAN, Gilan, Rudsar, Rahimabad, Orkom [36°45'42"N 50°18'12"E] 1235 m, 17.V.2010, Malaise trap; leg., M. Khayrandish, deposited in TMUT; Paratypes: Gilan, Rudsar, Rahimabad, Orkom; 17.V.2010, 1♀ (SBUK), 1♂ (SDEI), 1♀ (TMUT), 31.V.2010, 2♀ (TMUT), 7.VI.2010, 1♂ (SBUK), 1♀ (TMUT), 14.VI.2010, 1♂ (SBUK), 28.VI.2010, 2♂ (TMUT), 5.VII.2010, 1♂ (SBUK), 3♂ (TMUT), 12.VII.2010, 1♀ (TMUT), 7♂ (IRIPP), 26.VII.2010, 1♂ (TMUT), 9.VIII.2010, 2♂ (SBUK), 1♂ (TMUT), 16.VIII.2010, 1♀ (SBUK), 1♂ (TMUT), 23.VIII.2010, 2♀, 2♂ (SBUK), 2♂ (TMUT), 30.VIII.2010, 1♂ (TMUT), 6.IX.2010, 13.IX.2010; Gilan, Rudsar, Rahimabad, Ziaz, [36°52'30"N 50°13'24"E] 490 m, 17.V.2010, 1♀, 1♂ (SBUK), 1♀ (SDEI), 24.V.2010, 1♂ (SBUK), 1♂, 2♀ (TMUT), 31.V.2010, 2♂ (SBUK), 3♂ 2♂ (TMUT), 7.VI.2010, 2♀, 4♂ (SBUK), 3♂ (TMUT), 14.VI.2010, 4♂ (SBUK), 3♂ (TMUT), 21.VI.2010, 1♂ (TMUT), 28.VI.2010, 1♂ (SBUK), 12.VII.2010, 3♂ (SBUK), 19.VII.2010, 1♂ (SBUK), 26.VII.2010, 1♂ (SBUK), 1♂ (TMUT), 13.IX.2010, 1♂ (SBUK), 4♂ (TMUT); Gilan, Rudsar, Rahimabad, Qazyachak, [36°45'54"N 50°19'36"E] 1803 m, 17.V.2010,

14.VI.2010; Gilan, Astaneyeh Ashrafiyeh, Eshman Komachal, [37°22'06"N 49°57'54"E] –1 m, 6.IX.2010 1♂ (TMUT), 4.X.2010, 1♂ (TMUT); Mazandaran, Nour, Chamestan, Tangehvaz, [36°21'54"N 52°06'12"E] 687 m, 26.V.2011, 1♀ (SDEI), 28.VI.2011, 1♂ (SDEI), 13.VII.2011, 3♂ (TMUT), 3.VIII.2011, 3♂ (TMUT), 5.IX.2011, 1♂, 1♀ (TMUT); Mazandaran, Nour, Chamestan, Chmestan-Gaznasara road, [36°18'54"N, 52°07'48"E] 1291 m, 10.V.2011, 1♂ (TMUT), 9.VI.2011, 1♂ (SBUK), 1♀ (SDEI), 13.VII.2011, 1♂ (SBUK), 1♂ (TMUT), 6.VIII.2011, 1♂ (SBUK), 1♂ (SDEI); 16.VIII.2011, 1♂ (TMUT), Malaise trap, leg., M. Khayrandish.

**Female.** Length, 7.2–7.8 mm. (Figs. 23, 25, 27–28).

**Colour.** Head black, ventral surface of apical antennomeres brown, labrum, maxillary and labial palpi and sometimes anterior edge of clypeus yellowish or dirty yellow; medial part of mandible red and shiny; thorax black, posterior margin of pronotum white, tegulae usually not entirely black, antero-lateral area pale (sometimes completely black or one half of it white), post-spiracular sclerite white; coxae black but in basement white, trochanter white, profemur white but two third of inner surface dark brown (sometimes only one third of inner surface black), mesofemur like profemur but with a pale brown border on outer (or without border), metafemur in one third of basal white and the rest of it black (sometimes half or two third of metafemur white and the rest black), protarsus and mesotarsus infuscated, metatarsus darker; wing hyaline, veins brown, apex of costa near the stigma and stigma darker; abdomen black, sawsheath and cerci black sometimes dark brown, saw almost yellow to pale brown and shiny.

**Head.** Distal edge of clypeus roundly emarginate over complete width, emargination 0.19 times as deep as length of clypeus, without tooth at center; malar

space ca 0.35 times as long as diameter of front ocellus; lengths of flagellomeres about 0.86: 0.61: 0.53: 0.3: 0.26: 0.25: 0.26 mm; width of first and second flagellomeres 0.14 and 0.13 mm., respectively; comparison lengths (width) of flagellomeres about 1 (0.16): 0.71 (0.15): 0.61: 0.34: 0.3: 0.29: 0.3; third antennomere  $1.4 \times 4^{\text{th}}$  and so longer than three apical antennomeres together. POL: OOL: OCL = 1: 1.65: 1.75.

**Thorax.** Shiny and smooth except scutellum punctate in the posterior half; coxae conical and prominent, hind basitarsus subequal in length to tarsomeres 2–5 combined, tibiae with two apical spur that one of them a little bit longer than the other, longer foretibial spur with a small tooth near the end, tarsal claws bifid; forewing without first free sector of vein Rs (Fig. 7).

**Legs.** Hind basitarsus subequal in length to tarsomeres 2–5 combined.

**Wing.** Apex of costa near the stigma; Forewing without first free sector of vein Rs.

**Abdomen.** Shiny and smooth; cerci small and one segmented; sawsheath shiny, smooth and straight, rounded at apex; lancet with 15 serrulae (Figs. 27–28).

**Male.** Length, 5.8–7.2 mm. Color similar to female except two third apical of hind basitarsus brown to dark (Figs. 24, 26). Structure similar to that of female but malar space ca 0.3 times as long as front ocellus and POL: OOL: OCL = 1: 1.6: 1.65; aedeagus valve as in Figs. 29–30.

**Distribution:** Iran (Gilan and Mazandaran provinces).

**Larval host plant:** Unknown

**Etymology.** The species name, *persica*, is derived from its geographic range of distribution: Iran, known formerly as Persia.

**Diagnosis.** This species is closely to *Ametastegia pallipes* and *A. carpini*, but it can be easily distinguished from the both species by having the white postspiracular

sclerite as well as different colors of legs. It can also easily be separated from *A. tenera* by the white postspiracular sclerite and different colors of clypeus and pronotum.

***Ametastegia tenera* (Fallén, 1808)**

*Tenthredo tenera* Fallén, 1808: 109.

*Tenthredo* (*Emphytus*) *patellata* Klug, 1818: 283–284.

*Dolerus* (*Emphytus*) *luctuosus* Lepelletier, 1823: 119.

*Dolerus* (*Emphytus*) *nigritus* Lepelletier, 1823: 120.

*Dolerus nigritus* Serville, 1823: 57.

*Dolerus luctuosus* Serville, 1823: 57.

*Tenthredo trunculi* Vallot, 1845: 51.

*Simplemphytus pacificus* MacGillivray, 1914: 363–364.

*Emphytina vanduzeei* Rohwer, 1915: 205–206.

*Emphytus haustus* MacGillivray, 1923: 14.

*Emphytus haliartus* MacGillivray, 1923: 14.

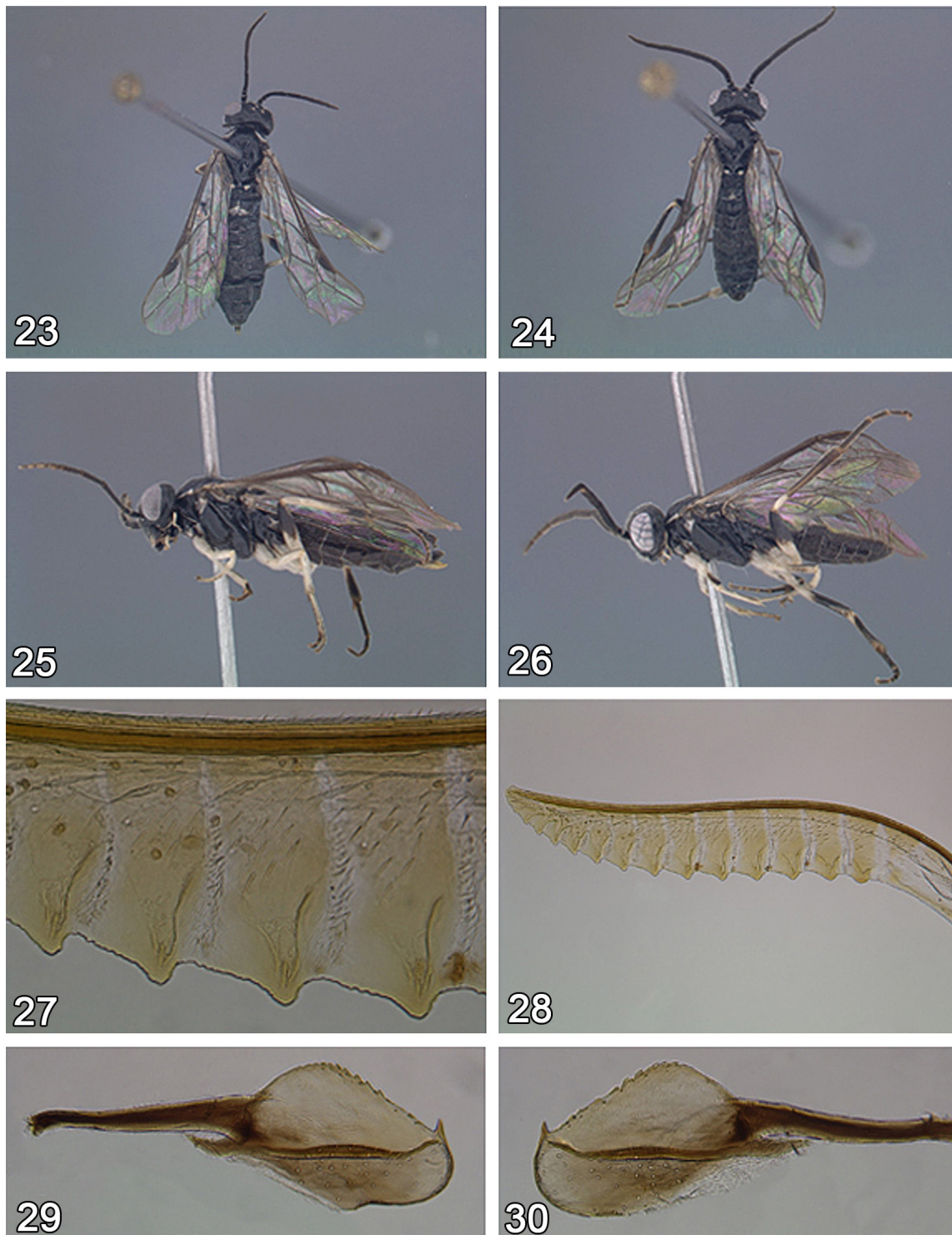
*Empria columna* MacGillivray, 1923: 54.

**Material examined:** IRAN, Mazandaran province, Nour, Chamestan, Gaznasara, [36°16'54"N 52°10'54"E] 2035 m, 26.V.2011, 1♀, Malaise trap, leg., M. Khayrandish.

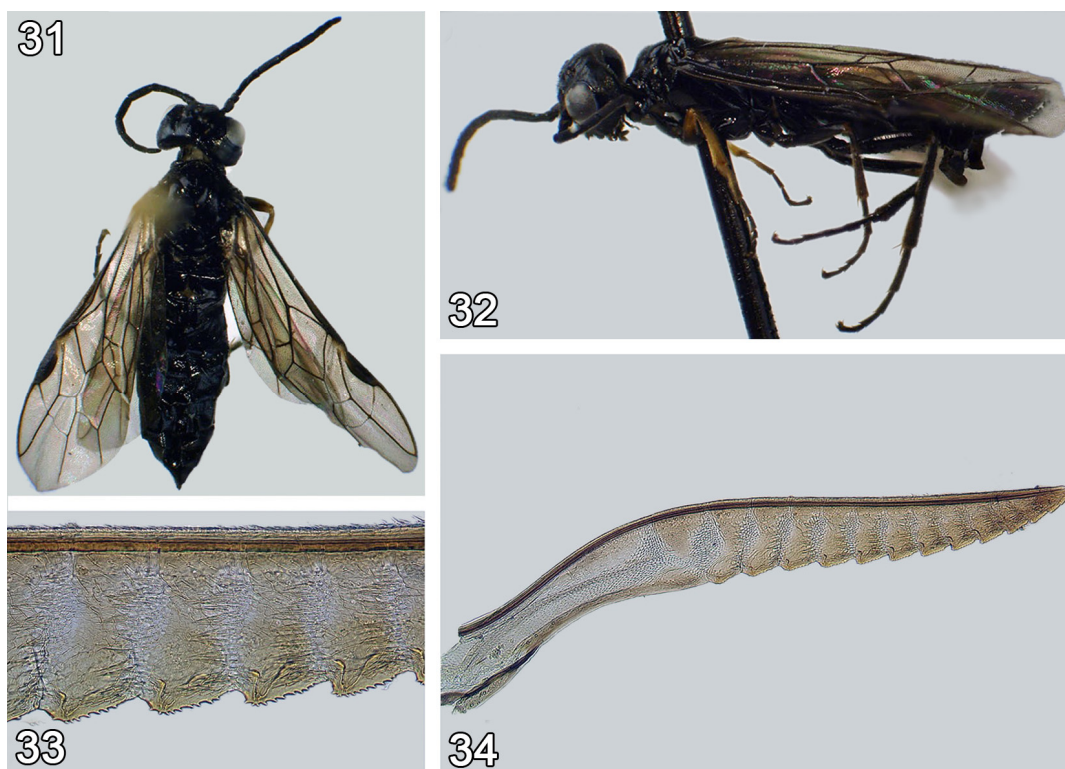
**Distribution:** Widely distributed in the European part of the West Palaearctic, eastwards to China and has reported from Canada and U.S.A in Nearctic (Taeger and Blank 2011), Iran (Khayrandish *et al.* 2012).

**Larval host plants:** *Rumex* and *Cirsium* are the main host plants for *A. tenera* but the larvae burrow into the various plant stems to pupate. Therefore some of host plants may be due to erroneous information (Taeger *et al.* 1998).

**Short description:** Body length 6 mm; entirely black (Figs. 31–32); apical of fore femur and fore tibia whitish; wings uniformly, lightly infuscated; clypeus slightly deep, V-shaped emarginated, malar space nearly twice diameter of front ocellus, first free of radial sector vein absent (Fig. 7); lancet with 14 serrulae (Figs. 33–34).



**Figures 23–30.** *Ametastegia persica* sp. n.: 23. Female, dorsal view; 24. Male, dorsal view; 25. Female, lateral view; 26. Male, lateral view; 27–28. Ovipositor; 29. Aedeagus valve (left); 30. Aedeagus valve (right).

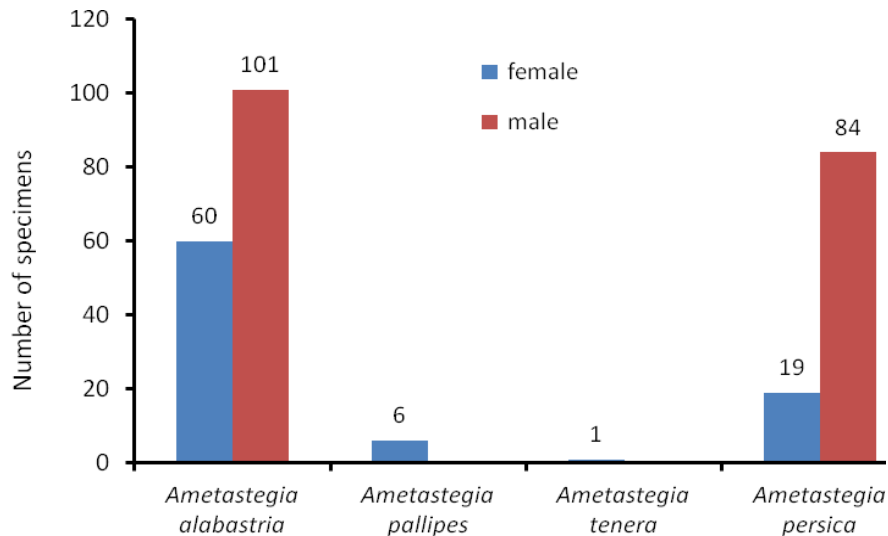


**Figures 31–34.** *Ametastegia tenera*: **31.** Female, dorsal view; **32.** Female, lateral view; **33–34.** Ovipositor.

### Discussion

Taeger and Blank (2011) listed two species of the genus *Ametastegia* occurring in Iran (*A. glabrata* and *A. pallipes*). Khayrandish *et al.* (2012) reported three species of this genus (e. g. *A. pallipes*, *A. tenera* and *A. alabastria*). With description a new species (*A. persica* **sp. n.**) in the present study, the number of recorded species of *Ametastegia* in Iran have been increased to five. Collected species in this study are common in some countries from West Palaearctic, for example two species similar to France, Germany, England, Russia (Liston 1995; Taeger and Blank 2011), and Turkey fauna (Benson 1968; Çalmasur and Özbek 2004; Taeger and Blank 2011), 1 species with Greece, Armenia and Azerbaijan (Taeger and Blank 2011). The present study revealed that Iran's *Ametastegia* fauna has the most similarity with France (Liston 1995; Lacourt 1999; Taeger and Blank 2011), Germany (Liston 1995; Taeger *et al.*

1998; Taeger and Blank 2011), England (Benson 1952; Liston 1995; Taeger and Blank 2011), Russia (Zhelochovtsev 1994; Liston 1995; Taeger and Blank 2011) and Turkey (Benson, 1968; Çalmasur and Özbek 2004; Taeger and Blank 2011) fauna with three common species. *A. alabastria* has only been reported from Armenia and Azerbaijan (Taeger and Blank 2011) but other species have been reported from many countries and regions (Taeger and Blank 2011). Within the species of *Ametastegia*, *A. alabastria* with 161 specimens (58% of all *Ametastegia* collected specimens) is the most abundant species of this genus in northern Iran (Fig. 35) followed by *A. persica* **sp. n.** (38%). Number of *Ametastegia* species in the West Palaearctic increa se to eleven with description of *A. persica* **sp. n.** Most probably, some other species of *Ametastegia* may distributed in Iran (similar to reported species from neighboring countries or the Palaearctic region), which needs further studies.



**Figure 35.** Comparison of abundance of *Ametastegia* species in the North of Iran.

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مطالعه جنس *Ametastegia* (Hymenoptera: Tenthredinidae: Allantinae) در شمال ایران  
همراه با توصیف یک گونه جدید

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**چکیده:** زنبورهای جنس *Ametastegia* Costa 1882 (Hymenoptera: Tenthredinidae: Allantinae) در شمال ایران مورد مطالعه قرار گرفت. نمونه‌ها با استفاده از تور حشره‌گیری و تله مالیز در طی ماه‌های اسفند ۱۳۸۸ تا آبان ۱۳۸۹ و اسفند ۱۳۸۹ تا آبان ۱۳۹۰ جمع‌آوری شدند. چهار گونه از این جنس جمع‌آوری و شناسایی گردید که از بین آن‌ها گونه *Ametastegia persica* Khayrandish, Talebi & Blank **sp. n.** به عنوان گونه جدید برای دنیای علم توصیف شد. کلید مصور برای شناسایی گونه‌های جنس *Ametastegia* در ایران تهیه گردید.

**واژگان کلیدی:** Symphyta، گونه جدید، کلید شناسایی، رده‌بندی