

Summarizing data on the *Inchoatia* taxa, including *Inchoatia megdova bruggeni* subspec. nov. (Gastropoda, Pulmonata, Clausiliidae)

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Gittenberger, E. & D.R. Uit de Weerd. Summarizing data on the *Inchoatia* taxa, including *Inchoatia megdova bruggeni* subspec. nov. (Gastropoda, Pulmonata, Clausiliidae).

Zool. Med. Leiden 83 (8), 9.vii.2009: 577-587, figs 1-2.—ISSN 0024-0672.

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Key words: Gastropoda; Clausiliidae; *Inchoatia*; taxonomy; Greece.

An annotated checklist for the genus *Inchoatia* is provided. The old distributional data are converted into modern geographical names and completed with UTM codes. A new subspecies is described as *Inchoatia megdova bruggeni* subspec. nov.

Introduction

The recently introduced genus *Inchoatia* Gittenberger & Uit de Weerd, 2006, exemplifies that occasionally shell shape and distributional patterns provide more meaningful indications of phylogenetic relationships than parts of the genital tract, which are known to be highly informative in various other taxa. This illustrates Adolf Schmidt's (1868: 3) warning dictum that artificial systems result from the consistent application of a single principle ('Künstliche Systeme entstehen durch consequentes Geltendmachen eines einzelnen Princips'). In the past (Nordsieck, 1972, 1974; Zilch, 1981) species of the Alopiniae A.J. Wagner, 1913, have been classified with either *Carinigera* Moellendorf, 1873, or *Sericata* O. Boettger, 1878, on the basis of mainly the presence of either a penial papilla or a caecum. This dogmatic approach has led to a grouping together of clausiliid species with very different shells, which was eventually unmasked as unnatural by DNA analyses (Uit de Weerd & Gittenberger, 2004; Uit de Weerd et al., 2004; Gittenberger & Uit de Weerd, 2006a, b). This stand is not shared with Nordsieck (2007: 110), who lumped several genus-group taxa, which "can be characterized neither by shell nor by genital characters", in his view. In this paper we follow the prevailing attitude in modern systematics and phylogeny reconstruction, accepting molecular methods as a valid additional tool, irrespective of the fact that DNA sequencing may not always be easily available.

The fact that the *Inchoatia* taxa are very disjunctly distributed makes the distinction of species versus subspecies rank even more subjective than usual, because reproductive isolation under natural conditions cannot be investigated. An objective or a generally accepted method to weigh morphological differences does not exist. DNA analyses may be extremely helpful, but cannot always be considered decisive with regard to species or subspecies status. Molecular phylogeny reconstructions made clear that reproductive isolation and lineage splitting do not always run entirely parallel, resulting in paraphyletic species (Schilthuizen & Gittenberger, 1996; Gittenberger & Kokshoorn,

2008). In *Inchoatia*, with some island-like distributions of presumably high alpine taxa, this may also be the case (cf. Uit de Weerd et al., 2009).

Some *Inchoatia* taxa are insufficiently known even conchologically and have been classified without any clear reference to the underlying facts (cf. Nordsieck, 2007). The following annotated checklist is mainly a summary of the state of affairs, with references to the relevant literature, clarifications and corrections for the locality data, and some new distributional data, including the description of a subspecies new to science. The diagnoses should be used together with geographical data. With one exception (see Uit de Weerd et al., 2009), the taxonomic status of species and subspecies has not been changed.

Material and methods

The nominal taxa that are considered either species or subspecies of *Inchoatia* in the literature (Fauer, 1993; Hausdorf, 1987; Nordsieck, 1972, 1974, 2007; Zilch, 1981) are listed. For notes on their taxonomic ranking, see also Uit de Weerd et al. (2009). The locality data, which are often inaccurate in the literature (for example using "near" without direction and distance), and sometimes even misleading, are corrected whenever necessary and completed with a 1 km UTM code. That code may be rather arbitrarily fixed when for example an entire mountain chain is mentioned for a record. The distributional data are summarized in a UTM map (fig. 1). Samples referred to with RMNH are in the molluscan collection of the National Museum of Natural History, Leiden.

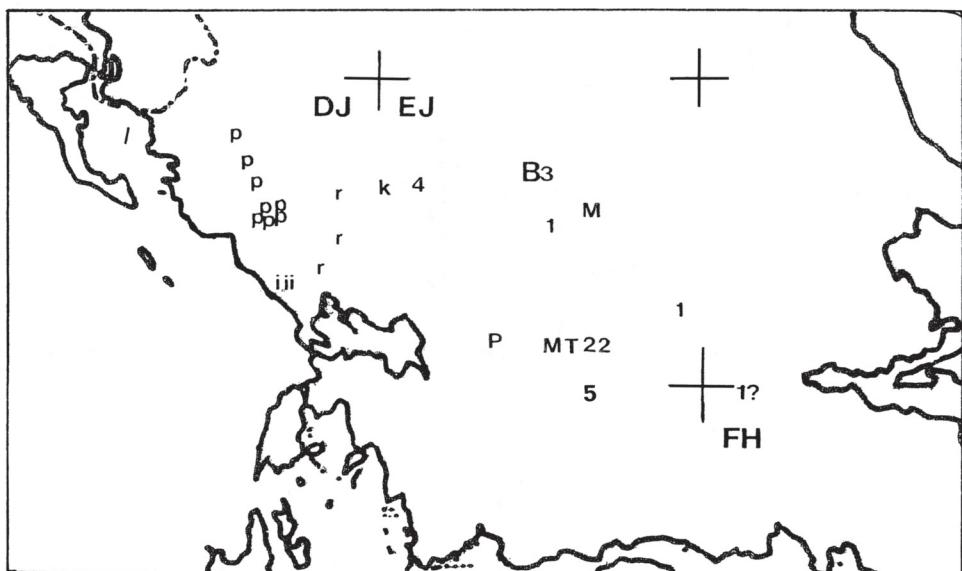


Fig. 1. UTM map with records for *Inchoatia* taxa. 1-5, *Inchoatia haussknechti*. 1, *I. h. haussknechti* and *I. h. orina* (1?); 2, *I. h. alticola*; 3, *I. h. hiltrudae*; 4, *I. h. refuga*; 5, *I. h. semilaevis*. i-r, *Inchoatia inchoata*. i, *I. i. inchoata*; k, *I. i. klemmi*; p, *I. i. paramythica*; r, *I. i. regina*. B-T, *Inchoatia megdova*. B, *I. m. bruggeni*; M, *I. m. megdova*; P, *I. m. palatalifera*; T, *I. m. tavropodensis*.

Systematic part

Clausiliidae J.E. Gray, 1855
Alopiinae A.J. Wagner, 1913
Medorini R. Brandt, 1961

Inchoatia Gittenberger & Uit de Weerd, 2006

Inchoatia Gittenberger & Uit de Weerd, 2006b: 131. Type species: *I. inchoata* (O. Boettger, 1889).

The species classified with *Inchoatia* are conchologically similar by the slender to very slender, small to medium-sized shells with more or less prominent papillae along the suture. The clausilial apparatus has the so-called N-type, with a lamella spiralis and a plica principalis. As in *Albinaria* Vest, 1867 (Kemperman, 1992), the genital tract shows a dimorphism in penial structure, with either a papilla or a caecum. See Uit de Weerd et al. (2009) for additional, molecular data. The species are distributed in limestone areas of the central and western part of mainland Greece, where some taxa are restricted to high altitudes.

Inchoatia haussknechti (O. Boettger, 1886)

For notes on both *I. haussknechti* and *I. megdova*, see sub *I. megdova*.

Inchoatia haussknechti haussknechti (O. Boettger, 1886)

Clausilia (*Albinaria*) *haussknechti* O. Boettger, 1886: 61 ('Gion Skala ad Pindi montes Agraphae'), pl. 2 fig. 6a-c.

Sericata (*Sericata*) *haussknechti haussknechti*; Nordsieck, 1972: 16, pl. 2 fig. 19 (lectotype).

Carinigera (*Carinigera*) *haussknechti haussknechti*; Zilch, 1981: 125, pl. 12 fig. 11 (lectotype).

Albinaria *haussknechti haussknechti*; Nordsieck, 2007: 48.

Material.—Greece, Thessalia, Karditsa: northern side of the Voutsikaki Mts (= 25 km WSW of Karditsa), type locality, c. EJ5350; Mesochori (= Papa), 34 km SSE of Karditsa, 650 m alt., EJ9325 (RMNH 107752); Do, 800 m alt., EJ9225 (RMNH 107753). Sterea Ellas, Fthiotida: Oros Iti, c. FH1097 (Nordsieck, 1974: 148).

Diagnosis.—The entire teleoconch with sharp, mostly whitened riblets; parietal side of the apertural border not protruding; lamella columellaris shortly protruding into the aperture; lamella parietalis moderately long, i.e. reaching slightly further than the lamella spiralis; lunella prominent.

Range.—The type locality 'Gion Skala', apparently a high, narrow passage, cut through the rocks at the northern side of the Voutsikaki Mts, could be located on the basis of the detailed excursion report by Stüssiner, in Boettger (1886: 47). The disjunct range of this subspecies is built up by three populations in the eastern Pindos Mts.

Notes.—The population that was discovered recently at an isolated limestone outcrop near Mesochori, is located 45 km SE of the type locality. The Mt Oiti (= Iti), where according to Nordsieck (1972: 16; 1974: 148) the same subspecies occurs (see sub *Inchoatia haussknechti orina*), is situated 35 km SE of Mesochori and 80 km SE of the

Voutsikaki Mts. It should be investigated whether these disjunctions, which are quite extreme when compared with the distributional patterns of the other subspecies, are not correlated with any taxonomically relevant differentiation.

Inchoatia haussknechti alticola (Nordsieck, 1974)

Carinigera haussknechti alticola Nordsieck, 1974: 148, 149 ("Katafiyion oberhalb Karpenission [an der Straße zum Schutzhause, 1900 m]"), pl. 3 fig. 9 (holotype).

Carinigera (Carinigera) haussknechti alticola; Zilch, 1981: 125, pl. 12 fig. 12 (holotype).

Carinigera hausknechti [sic]; Uit de Weerd & Gittenberger, 2004: 309, fig. 3B.

Albinaria semilaevia alticola; Nordsieck, 2007: 48.

Material.— Greece, Sterea Ellas, Evritania: 13 km from Karpenisi to Stenoma (Nordsieck, 1974: 149), EJ6512; 4 km N of Karpenisi, Mt. Timfristos ski resort, 1900 m alt. (type locality), EJ6910 (RMNH 107749); 5 km NNE of Karpenisi, near summit Mt. Timfristos, 2200 m alt., EJ7111 (RMNH 107750).

Diagnosis.— Initial teleoconch whorls with lengthened white papillae, without regular riblets; parietal side of the apertural border not protruding; lamella parietalis short; lamella columellaris (very) low; lunella rather prominent.

Range.— This subspecies is known from the Mt. Timfristos (= Veluchi) area, north of Karpenisi.

Notes.— Initially (Nordsieck, 1972) this form was not separated from *Inchoatia haussknechti semilaevia* (O. Boettger, 1889).

Inchoatia haussknechti hiltrudae (Nordsieck, 1974)

Carinigera haussknechti hiltrudae Nordsieck, 1974: 149 ("Pili bei Trikala [Türkenbrücke]"), pl. 4 fig. 10 (holotype).

Carinigera (Carinigera) haussknechti hiltrudae; Zilch, 1981: 125, pl. 12 fig. 13 (holotype).

Albinaria hiltrudae; Nordsieck, 2007: 48.

Material.— Greece, Thessalia, Trikala: 1 km W of Pyli (= Pili), near the classical bridge, 300 m alt., EJ5168 (RMNH 107755).

Diagnosis.— Initial teleoconch whorls with often whitened riblets, which become more irregular and are often not whitened on the lower whorls; parietal side of the apertural border usually protruding; lamella columellaris clearly protruding into the aperture; lamella parietalis moderately long, i.e. reaching slightly further than the lamella spiralis; lunella prominent.

Range.— This subspecies is only known from the type locality.

Inchoatia haussknechti orina (Westerlund, 1894)

Clausilia (Albinaria) orina Westerlund, 1894: 175 ('Koraki Besa im Oetagebirge').

Carinigera (Carinigera) haussknechti orina; Zilch, 1981: 125.

Albinaria haussknechti orina; Nordsieck, 2007: 48.

Material.— Greece, Fthiotida/Fokida, Mt. Oiti (= Iti), c. FH1097 (but see 'Range').

Diagnosis.— See the notes.

Range.— The type locality 'Koraki Besa im Oetagebirge' (Westerlund, 1894: 175) could not be located. The Mt Oeta is nowadays called Oiti or Iti Oros (situated 20 km SW of Lamia). Nordsieck (1974: 148) suggested that 'Koraki Besa' refers to the Korax Mtn (= Korakas) in the Vardousia Mts (about 35 km SW of Lamia), c. 15 km SW of the Oiti Oros. The area should be visited to get more certainty.

Notes.— Neither a detailed description nor a figure is available, but a lectotype has been selected by Nordsieck (1972: 16). Nordsieck (1972: 16; 1974: 148) considered this taxon a synonym of the nominate subspecies, whereas Zilch (1981: 125) and Nordsieck (2007: 48) listed it as a subspecies, without adding more data.

Inchoatia haussknechti refuga (Westerlund, 1894)

Clausilia (Albinaria) refuga Westerlund, 1894: 174 ('Tschumerka in Pindus').

Sericata (Sericata) haussknechti refuga; Nordsieck, 1972: pl. 2 fig. 21 (lectotype).

Carinigera (Carinigera) haussknechti refuga; Zilch, 1981: 125.

Albinaria haussknechti refuga; Nordsieck, 2007: 48.

Material.— Greece, Ipiros, Arta, Mt Tschumerka (= Tzoumerka, = Athamanon), 35 km NNE of Arta, c. EJ1264.

Diagnosis.— The entire teleoconch with sharp, mostly whitened riblets; parietal side of the apertural border protruding; lamella columellaris shortly protruding into the aperture; lower part of the lunella obsolete.

Range.— Only known from the type locality 'Katafiyi (800 m)' and 'Katafiyi (2000 m)', mentioned by Nordsieck (1972: 16), refer to Katafigio (= Katafiyion) at the western foot of the Tschumerka Mts.

Note.— The subspecies was characterized, with the designation of a lectotype, by Nordsieck (1972: 16).

Inchoatia haussknechti semilaevis (O. Boettger, 1889)

Clausilia (Albinaria) haussknechti var. *semilaevis* O. Boettger, 1889a: 25 ("Kaljakuda bei Karpenisi im Veluchi-Gebirge" [see below]).

Sericata (Sericata) haussknechti semilaevis; Nordsieck, 1972: 16, pl. 2 fig. 20 (lectotype).

Carinigera (Carinigera) haussknechti semilaevis; Zilch, 1981: 125, pl. 12 fig. 14 (lectotype).

Albinaria semilaevis semilaevis; Nordsieck, 2007: 48.

Material.— Greece, Sterea Ellas, Evritania: Kaliakouda Mt., 16 km SSW of Karpenisi, EH6596 (type locality).

Diagnosis.— Only the initial whorls of the teleoconch and the cervical part with sharp, partly whitened riblets; parietal side of the apertural border not protruding; lamella columellaris shortly protruding into the aperture; lunella prominent.

Range.— The type locality of this subspecies is indicated in a somewhat misleading way because the Mt Veluchi (= Velouhi) or Mt Timfristos is situated a few km N of Karpenisi, where *I. haussknechti alticola* occurs, whereas "Kaljakuda" refers to Mt Kaliakouda, 16 km SSW of Karpenisi. The localities 'Karpenission' and 'Timfristos-Geb. 13 km n. Karpenission', cited for this subspecies by Nordsieck (1972: 16), should be

transferred to *I. haussknechti alticola* (Nordsieck, 1974), though only the latter record is repeated (in a slightly different wording) by Nordsieck (1974: 149).

Inchoatia inchoata (O. Boettger, 1889)

Inchoatia inchoata inchoata (O. Boettger, 1889)

Clausilia (Agathylla) inchoata O. Boettger, 1889b: 33 ('Zalongo bei Libochovo'), pl. fig. 1.

Sericata (Sericata) inchoata inchoata; Nordsieck, 1972: 15, pl. 2 fig. 16 (lectotype).

Sericata inchoata; Uit de Weerd & Gittenberger, 2004: 309, fig. 3C.

Albinaria inchoata inchoata; Nordsieck, 2007: 44.

Material.—Greece, Ipiros, Preveza: Zalongo, 21 km NNW of Preveza, 200 m and 650–725 m alt., DJ7132; Kamarina, 1.5 km NNE of Zalongo, DJ7233 (Nordsieck, 1972: 16); 3 km NW Kastrosikia, 220 m alt., DJ6630 (RMNH 107759).

Diagnosis.—Shell hardly different from *I. i. paramythica*. Teleoconch with prominent white papillae, continuing as blunt riblets in the background shell colour, on most of the whorls; parietal side of the apertural border not protruding; lamella parietalis reaching the lamella spiralis or shorter; lamella columellaris very low.

Range.—This subspecies occurs in the mountains c. 20 km north of Preveza.

Inchoatia inchoata klemmi (Nordsieck, 1972)

Sericata (Sericata) inchoata klemmi Nordsieck, 1972: 15 ('Platanoussa bei Ioannina [650 m]'), pl. 2 fig. 17 (holotype).

Albinaria inchoata klemmi; Nordsieck, 2007: 44.

Material.—Greece, Ipiros, Ioanina: 28 km N of Arta, S-side Platanousa, 625 m alt., EJ0062 (RMNH 107760); Platanousa, 650 m alt., EJ0062 (RMNH 107761, ex colln Klemm).

Diagnosis.—With some white papillae on the initial teleoconch whorls only, following whorls rather glossy, without any riblets; parietal side of the apertural border not protruding; lamella columellaris very low.

Range.—This subspecies is only known from near Platanousa.

Inchoatia inchoata paramythica (Nordsieck, 1974)

Sericata (Sericata) inchoata paramythica Nordsieck, 1974: 127 ('Gliki 4 km Richtung Frosini'), pl. 4 fig. 11 (holotype).

Albinaria inchoata paramythica; Nordsieck, 2007: 44.

Material.—Greece, Ipiros, Preveza: Vouvopotamon, 2.5 km S of Gliki, DJ6551 (Nordsieck, 1974: 127). Do, Thesprotia: Plakoti, 12.5 km N of Paramithia, DJ5481 (Nordsieck, 1974: 127); Paramithia, 4 km from by-road to Ay. Kiriaki, DJ5871 (Nordsieck, 1974: 127); 2 km NE of Prodromi, 400 m alt., DJ6165 (RMNH 107764); N of Gliki, DJ6353 (RMNH 107770); Gliki, DJ6554 (Nordsieck, 1974: 127); 1 km N of Gliki, 300 m alt., DJ6654 (RMNH 107766); 18 km SSE of Paramithia, 115 m alt., DJ6753 (RMNH 107762); 2 km NNE Gliki, DJ6754 (RMNH 107765); Gliki, 4 km to Frosini, DJ6755 (Nordsieck, 1974: 127); 3.3 and 5.3 km N of Gliki near Tsangario, DJ6853 and DJ6854 (RMNH 107769, 107767); 6.8 km N of Gliki, DJ6856 (RMNH 107768); 4 km NE of Gliki, 500 m alt., DJ6956 (RMNH 107763).

Diagnosis.— Shell hardly different from *I. i. inchoata*. Teleoconch with prominent white papillae, continuing as blunt riblets, sometimes whitened but more often in the background shell colour, on most of the whorls; parietal side of the apertural border not protruding; lamella parietalis reaching beyond the end of the lamella spiralis; lamella columellaris very low.

Range.— *Inchoatia inchoata paramythica* is known from several localities at relatively low altitudes in Mt Paramithias and the adjoining mountain chains to the north and to the south.

Note.— This is by far the most common subspecies in *Inchoatia*.

Inchoatia inchoata regina (Nordsieck, 1972)

Sericata (Sericata) regina Nordsieck, 1972: 15 ('Louros-Durchbruch nahe Ay. Yeoryios bei Arta'), pl. 2 fig. 18 (holotype).

Sericata regina; Uit de Weerd & Gittenberger, 2004: 309, fig. 3D.

Albinaria regina; Nordsieck, 2007: 44.

Material.— Greece, Ipiros, Preveza, Thesprotika Mts near Stefani, DJ 8137 (Nordsieck, 1974: 127); 17.5 km NW of Arta, near paleolithic cave, DJ8647 (RMNH 107771,107772); Louros gorge near Ay. Yeoryios, DJ8661 (type locality).

Diagnosis.— Teleoconch with some white papillae on the initial whorls only, following whorls rather glossy, without any riblets; parietal side of the apertural border protruding; lamella columellaris somewhat protruding into the aperture.

Inchoatia megdova (Nordsieck, 1974)

The range of this species is very disjunct. Its alleged subspecies are known from one or two localities only. *Inchoatia megdova* and *I. haussknechti* are strictly vicarious, without any known transitional forms indicative of a subspecific status. *Inchoatia megdova tavropodensis* is found c. 10 km as the crow flies from *I. haussknechti alticola*, but both taxa are quite different ecologically, occurring at very different altitudes. The population with *I. megdova bruggeni* was found only 7 km from the type locality of *I. haussknechti hiltztrudae*. In this case, both taxa are found at relatively low altitudes, so that *I. haussknechti* cannot be considered a high alpine species versus a lowland *I. megdova*. See also the note sub *I. megdova tavropodensis*.

In *I. megdova* the shells are broader than 3.0 mm, i.e. larger than in *I. haussknechti*, sharp riblets are lacking even on the initial teleoconch whorls, and there is a prominent plica basalis, which is obsolete or lacking completely in *I. haussknechti*.

Inchoatia megdova megdova (Nordsieck, 1974)

Carinigera megdova Nordsieck, 1974: 147, 148 ("Morfovounion bei Messenikolas"), pl. 3 fig. 8 (holotype).

Carinigera (Carinigera) megdova; Zilch, 1981: 126, pl. 12 fig. 10 (holotype).

Material.— Greece, Sterea Ellas, Etoloakarnania: 2 km S of Ditiki Frangista, 600 m alt., EJ5311 (RMNH 107775; Hausdorf, 1987: 174). Do, Thessalia, Karditsa: Morfovouni, 1.25 km S of Mesenikolas, EJ6456 (type locality).

Diagnosis.— Teleoconch with rather inconspicuous sutural papillae; parietal side of the apertural border not or somewhat protruding; without upper palatal plica; lamella subcolumellaris not or hardly visible in frontal view.

Range.— The two localities reported for this subspecies are 40 km apart and situated in geographically quite different regions, whereas *I. m. tavropodensis* is reported from only a few km distant of the southern record for *I. m. megdova*. Also after a renewed investigation, based on newly collected material, the surprising observation by Hausdorf (1987) with regard to the distribution of *I. m. megdova*, was confirmed.

Inchoatia megdova tavropodensis (Fauer, 1993)

Carinigera (Carinigera) tavropodensis Fauer, 1993: 53, 54 ('am Fluß Tavropos, Kalkfelsen bei der Brücke, 26 km von Karpenision, etwa 340 m ü.M.') pl. 1 fig. 5 (holotype).

Carinigera megdova; Uit de Weerd & Gittenberger, 2004: 309, fig. 3A.

Albinaria semilaevia tavropodensis; Nordsieck, 2007: 48.

Material.— Greece, Sterea Ellas, Evritania: 11.5 km WNW of Karpenisi (road to Agrinio), 370 m alt., EJ5910 (RMNH 107776). Most probably this is also the type locality.

Diagnosis.— Teleoconch with conspicuous sutural papillae; parietal side of the apertural border not or slightly protruding; upper palatal plica prominent; lamella subcolumellaris not or hardly visible in frontal view.

Note.— According to Nordsieck (2007: 110) this taxon is "... clearly more similar to *C. semilaevia* than to *C. megdova*; its occurrence is nearer to the type locality of *C. semilaevia* than to that of *C. megdova*." The obvious similarity should have been specified to take this view into consideration. The location of type localities cannot be accepted as indicative here, especially not since according to Hausdorf (1987: 174), and personally reconfirmed, the closest congeneric population belongs to *I. m. megdova*.

Range.— This subspecies is only known from the type locality.

Inchoatia megdova palatalifera (Hausdorf, 1987)

Carinigera (Carinigera) megdova palatalifera Hausdorf, 1987: 176 ('Triklonon 5.5 km Richtung Chalkiopuli', fig. 5 (holotype).

Albinaria megdova palatalifera; Nordsieck, 2007: 48.

Material.— Greece, Sterea Ellas, Etoloakarnania: Triklono, 5.5 km to Chalkiopouli, EJ3513 (type locality).

Diagnosis.— Teleoconch with rather inconspicuous sutural papillae; parietal side of the apertural border protruding; upper palatal plica prominent; lamella subcolumellaris clearly visible in frontal view.

Range.— This subspecies is only known from the type locality.

Inchoatia megdova bruggeni subsp. nov.
(fig. 2)

Material.— Greece, Thessalia, Trikala: 7.5 km WNW of Pyli (= Pili), 8.5 km S of Elati along road to Agh. Prokopios, 675 m alt., EJ4669 (RMNH 107773/holotype, 107774/9 paratypes).

Diagnosis.— Teleoconch with conspicuous sutural papillae; parietal side of the apertural border not protruding; clausilial apparatus with a prominent but short plica basalis, a prominent white palatal knob, and a lamella subcolumellaris that is visible in frontal view.

Shell.— Sinistral, with a very slender spire, with nearly straight sides. With 11-12½ whorls; the uppermost whorls moderately convex and separated by an indented suture, the lower ones increasingly more flattened and separated by an increasingly more shallow suture. Yellowish brown, with a white sutural line and many prominent white papillae along the adapical border of the whorls. On the upper half of the shell, the papillae may be vaguely lengthened in the regular shell colour by striae that reach at most about the periphery of the shell; only the final quarter of the body whorl with irregular radial riblets. Cervical part of the body whorl with a rounded basal keel, separated by an indentation from a rather prominent dorsal hump.

Apertural lip thickened by a whitish callus, broadly reflected, continuous but not protruding at the parietal side. Clausilial apparatus with a prominent lamella parietalis, reaching about ¼ whorl into the aperture, where it ends next to the most frontal part of the lamella spiralis, which extends for about ½ whorl inside; lamella columellaris clearly protruding into the aperture and reaching slightly further than the lamella spiralis inside; lamella subcolumellaris prominent, slightly curved and clearly visible in frontal view. Plica principalis prominent, reaching less far inside than the lamella spiralis, but clearly further than the upper palatal plica, thickened in front where it is connected with a (very) conspicuous white knob, which is shortly lengthened inside, without coming close to the lunella. Lunella situated dorsolaterally; the short posterior part of the upper palatal plica is about as long as the short but relatively conspicuous plica basalis. Clausilial blade simple, without notches. Height 16.2-20.3 mm; width 3.6-4.0 mm.

Range.— Only known from the type locality.

Notes.— With great pleasure this taxon is named in honour of the well known malacologist, our friend and colleague for many years, Dr A.C. van Bruggen, on the occasion of his 80th birthday.

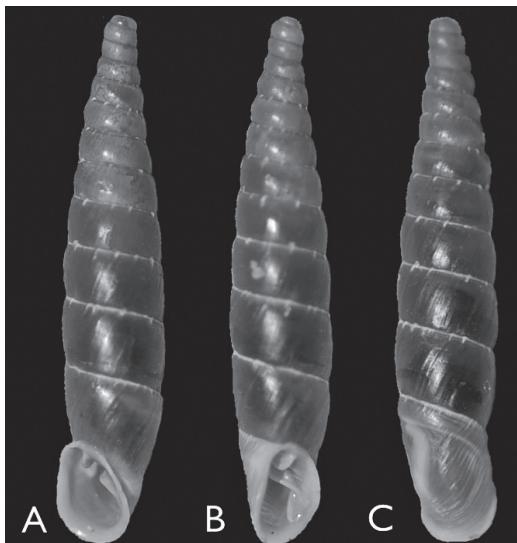


Fig. 2. *Inchoatia megdova bruggeni* subsp. nov., holotype (RMNH 107773), Greece, Thessalia, Trikala, 7.5 km WNW of Pyli (= Pili), 8.5 km S of Elati along road to Agh. Prokopios, 675 m alt., EJ4669; 17.6 × 3.4 mm.

Acknowledgements

We thank an anonymous referee for constructive criticism on the original text, which has been adapted and clarified accordingly.

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Received: 2.iv.2009

Accepted: 12.v.2009

Edited: A.S.H. Breure

