

RESEARCH PAPER

Drymini of Madagascar, with description of a new genus and three new species (Hemiptera: Heteroptera: Rhyparochromidae)András ZÁMBÓ^{1,*}, Petr BAŇAŘ², Szilvia KOVÁCS^{3,4} & Előd KONDOROSY^{3,5,*}¹) Fesztetics Doctoral School, Hungarian University of Agriculture and Life Sciences, Georgikon Campus, str. Deák F. 16, Keszthely, H-8360 Hungary; e-mail: zamboandras88@gmail.com; <https://orcid.org/0000-0002-6979-1125>²) Department of Zoology, Fisheries, Hydrobiology and Apiculture, Faculty of AgriSciences, Mendel University, Zemědělská 1, Brno, CZ-613 00, Czech Republic; e-mail: petrbanar@seznam.cz, pbanar@mzm.cz; <https://orcid.org/0000-0003-0931-1836>³) Department of Conservation Biology, Hungarian University of Agriculture and Life Sciences, Georgikon Campus, str. Deák F. 16, Keszthely, H-8360 Hungary⁴) E-mail: Kovacs.Szilvia.georg@uni-mate.hu; <https://orcid.org/0000-0002-6479-8088>⁵) E-mails: Kondorosy.Elod@uni-mate.hu, kondorosy.ee@gmail.com; <https://orcid.org/0000-0001-7162-0862>

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Abstract. *Malgadrymus* Zámbo & Kondorosy, gen. nov., the first endemic genus of Drymini (Hemiptera: Heteroptera: Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Rhyparochrominae), with two new species is described from Madagascar. A key to the species is provided and relationships to other drymine genera are discussed. *Appoloni* *madagascariensis* Zámbo & Kondorosy, sp. nov., the first member of the genus from the island, is described from Madagascar. A list of Malagasy Drymini, including 5 genera and 16 species (3 undescribed), and a key to the genera from Madagascar are given. We provide new distribution data for the following species: *Salaciola acutangulata* Slater, 1994, *Salaciola caliginosa* Slater, 1989, *Salaciola nana* Bergroth, 1906, *Salaciola signaticornis* Linnavuori, 1978, *Sinierus capensis* Dallas, 1852, and *Sinierus nudus* Scudder, 1984. *Salaciola nana* is also recorded from the Republic of the Congo for the first time.

Key words. Hemiptera, Heteroptera, Drymini, *Appoloni*, key to genera, new genus, new species, Madagascar, Afrotropical Region

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Introduction

Drymini, with 58 genera and 304 known recent species, represent the third most diverse tribe of Rhyparochromidae, and the second one in generic richness (DELLAPÉ & HENRY 2022; E. Kondorosy, unpubl. data). For comparison, Myodochini contain 359 recent species in 80 genera and Rhyparochromini 350 recent species in 47 genera (DELLAPÉ & HENRY 2022; E. Kondorosy, unpubl. data). However, the majority of Drymini taxa are distributed in the Eastern Hemisphere (only 2 genera and 34 species are endemic to America – mostly in the Nearctic Region) while Myodochini species are distributed mainly in the Nearctic and Neotropical Regions (43 genera and 227 species endemics); hence Drymini are the second largest tribe in the Eastern Hemisphere (after Rhyparochromini). Drymini are evenly diverse in the Palaearctic, Oriental and Afrotropical Regions (with 80, 80, and 78 species, respectively); however, only 15 genera occur in tropical

Africa (10 of them being endemic) while 31 genera occur in Southeastern Asia.

121 Lygaeoidea species, among them 63 Rhyparochromidae and 11 Drymini, are known from Madagascar (KMENT et al. 2016, KONDOROSY et al. 2020, KONDOROSY & ZÁMBÓ 2021). The first species of Drymini described and recorded from Madagascar was *Salaciola nana* Bergroth, 1906, later found in continental Africa as well. SCUDDER (1984) described *Sinierus nudus* Scudder, 1984 from Madagascar and recorded the more widely distributed *Sinierus capensis* (Dallas, 1852). SLATER (1989, 1994) described further two endemic species from Madagascar: *Salaciola caliginosa* Slater, 1989 and *S. acutangulata* Slater, 1994, and recorded *S. signaticornis* Linnavuori, 1978 as well (SLATER 1989). Recently, KONDOROSY & ZÁMBÓ (2021) recorded five species of the genus *Stilbocoris* Bergroth, 1893: *Stilbocoris distinctus* Scudder, 1963, *S. galla* Linna-



vuori, 1978, *S. triangularis*, Linnavuori, 1978, and two new species, *S. scudderi* Kondorosy & Zámbo, 2021 and *S. slateri* Kondorosy & Zámbo, 2021. Nowadays, 5 endemic and 6 non-endemic Drymini species are known from Madagascar. It is a relatively low percentage comparing to most other Lygaeoidea groups: e.g., 38 endemic Blissidae species (SLATER 1967), 4 endemic Geocoridae (KÓBOR & KONDOROSY 2016), and 10 out of 13 described Lethaeini (KONDOROSY et al. 2020) are endemic to Madagascar. Otherwise, in Lygaeidae only 12 out of 20, in Myodochini 2 out of 7, and in Rhyparochromini 10 out of 21 known species are endemic to Madagascar (KMENT et al. 2016; E. Kondorosy, unpubl. data).

During our studies of Rhyparochromidae fauna of Madagascar we found a new species belonging to the genus *Appoloni* Distant, 1901 and some colourful specimens, resembling to Myodochini species at first sight. Later detailed examination revealed they belong to an undescribed genus of Drymini, which we describe here.

Material and methods

The authors studied the Heteroptera collections of several European museums, containing material from Madagascar. The abbreviations of collections mentioned in this paper are as follows:

CAS	California Academy of Sciences, San Francisco, United States;
EHIA	Ernst Heiss Collection, Innsbruck, Austria;
EKKH	Előd Kondorosy Collection, Keszthely, Hungary;
HNHM	Hungarian Natural History Museum, Budapest, Hungary;
MMBC	Moravian Museum, Brno, Czech Republic;
MNHN	Museum National d'Histoire Naturelle, Paris, France;
NHMW	Natural History Museum, Wien, Austria;
NMPC	National Museum, Praha, Czech Republic;
RMCA	Royal Museum of Central Africa, Tervuren, Belgium;
USMB	Upper Silesian Museum, Bytom, Poland;
ZMHB	Natural History Museum, Berlin, Germany.

We examined the specimens with an Olympus SZ11 stereomicroscope and we measured the main characters using an ocular eyepiece. While measuring the head and pronotum, the relevant body part was in strictly horizontal position; when taking the total body length measurements, the scutellum and hemelytra were in horizontal position.

Photographs of the specimens were taken using a Panasonic Lumix DMC G-6 camera and a Zeiss Discovery V8 stereomicroscope and a Nikon D60 camera attached with an AF-S Micro NIKKOR 60mm f/2.8G ED objective, using Helicon Focus 7.7.5. software.

Localities were illustrated with SimpleMappr using the following layers: “country”, “lakes (blue)”, “rivers”, “ocean (blue)” and “relief (alternate)” (Figs 12–14).

We follow the morphological terminology of KMENT et al. (2016), O'DONNELL (1991), TSAI et al. (2011), TSAI & RÉDEI (2017), and the nomenclature of antennomeres follows ZRZAVÝ (1990).

In quoting the labels of the specimens, a slash (/) is used to divide data on different lines of one label, a double slash (//) is used to divide data on different labels, authors' comments are given in square brackets [], and the following abbreviations are used: hw = handwritten, pr = printed (the latter is only marked when the label is partially handwritten).

Results

Key to the genera of Drymini of Madagascar

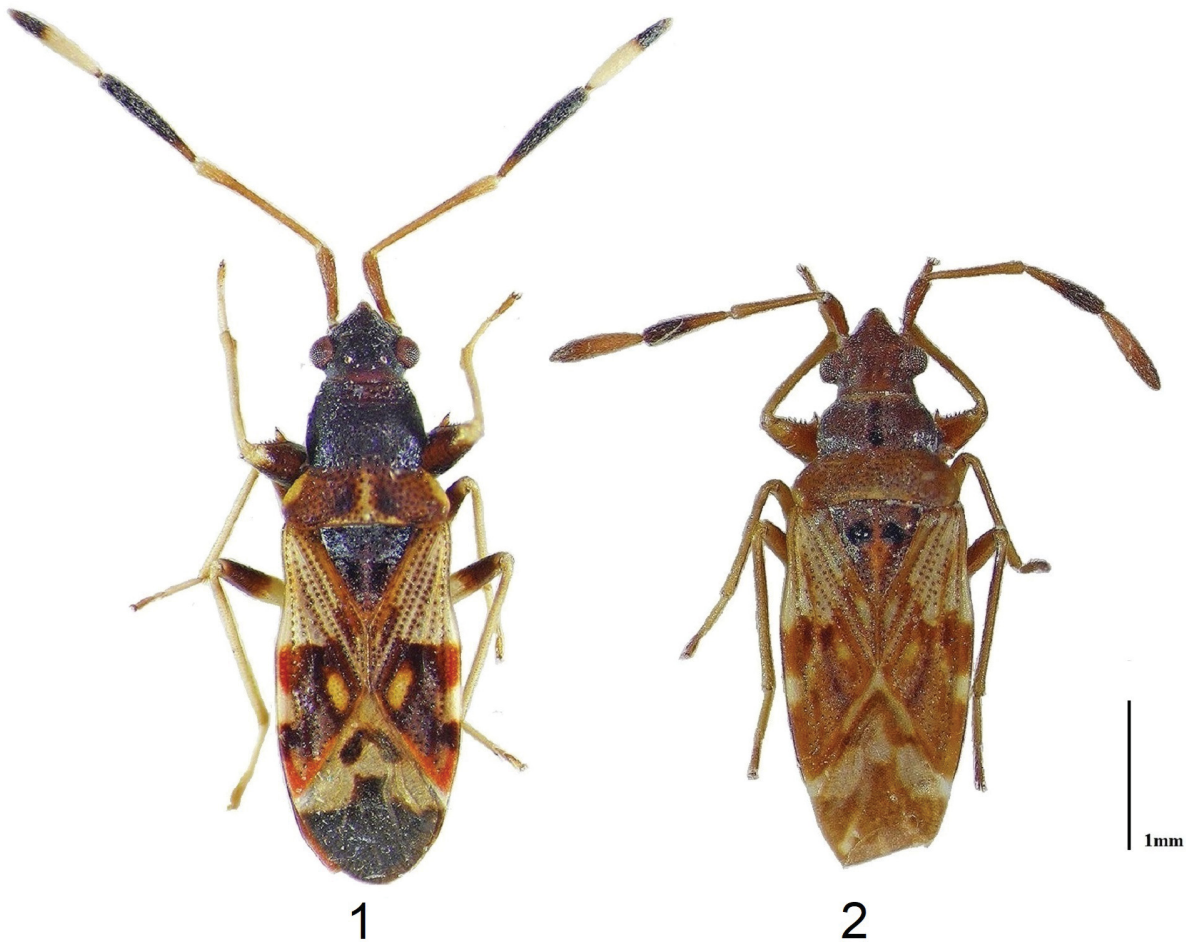
- 1 Head almost vertical, at least 0.8 times as wide as body; eye long (length of about half head length); antenniferous tubercles curving strongly inwards, so antennae inserted much nearer to each other than inner margin of eyes. *Appoloni* Distant, 1901
- Head nearly horizontal, at most 0.6 times as wide as body; eye much shorter than half head length; antenniferous tubercles nearly parallel, antennae erected not nearer to each other than inner margin of eyes. 2
- 2 Basi- and distiflagellum somewhat clavate and thick; membrane at least apically dark; abdominal venter without pruinose spot. 3
- Antenna slender and rather linear; membrane translucent; abdominal venter with large pruinose spot. *Stilbocoris* Bergroth, 1893
- 3 Profemora always unarmed; eyes with fine setae; lateral margin of pronotum carinate; hemelytra unicolorous brown or basally paler without characteristic pattern. *Sinierus* Distant, 1901
- Profemora usually with one or more teeth anteroventrally; eyes bare; lateral margin of pronotum from indistinct to laminate; hemelytra with conspicuous pale and dark spots. 4
- 4 Eyes always sessile and slightly protruding laterally; lateral margin of pronotum not distinct; humeral angles of pronotum rounded; basal part of ventral side of meso- and metafemora mostly armed with a tooth; basal half of corium pale. *Malgadrymus* Zámbo & Kondorosy, **gen. nov.**
- Shape of eyes very variable; lateral margin of pronotum distinct and from carinate to slightly laminate; meso- and metafemora unarmed ventrally; base of corium almost always dark. *Salaciola* Bergroth, 1906

Description of new taxa

Malgadrymus Zámbo & Kondorosy, **gen. nov.**

Type species. *Malgadrymus pameroides* Zámbo & Kondorosy, sp. nov., here designated.

Description. *Head* inconspicuously convex in lateral view, about 1.3 times as wide as long, with rather deep punctures both dorsally and ventrally. Eyes moderately large (head 3.17–4.28 times as wide as width of eye), protruding laterally, almost reaching anterior margin of pronotum, with single trichobothrial seta at inner margin. Ocelli relatively small and situated medioposteriad of eyes; distance between eyes 1.6–2.3 times as long as distance between ocelli. Antennae about 0.6 times as long as body; scape widened in distal 2/3 (its apex 1.42–1.53 times thicker than base), 1.6–1.8 times thicker than most parts of pedicel, and surpassing clypeus in about 1/3 of its length; pedicel subcylindrical, slightly widened apically and narrower than other antennomeres; basi- and distiflagellum almost fusiform, distiflagellum acute. Length of antenniferous tubercles about half the length of eyes in dorsal view and slightly divergent anteriad. Maxillary



Figs 1–2. Dorsal view of *Malgadrymus* species. 1 – *M. pameroides* Zábó & Kondorosy, sp. nov.; 2 – *M. bimaculatus* Zábó & Kondorosy, sp. nov. (Photos by Csaba Pintér).

plates inconspicuously protruding. Labium bearing few short erect setae and mostly reaching mesocoxae (sometimes slightly shorter but never surpassing mesocoxae), labiomere I thicker than others, not reaching base of head.

Thorax. Pronotum wider than long, anterior lobe densely punctate, posterior lobe slightly sparser. Collar well limited, punctate, at least as wide as diameter of pedicel. Callar area elevated both in dorsal and lateral views. Transverse impression of pronotum complete and strong. Anterior margin of pronotum hardly concave; lateral margin almost absent, pronotum laterally more or less rounded in anterior part, markedly concave at level of transverse impression and more or less straight in posterior part; humeral angles more or less rounded. Scutellum convex, about as long or hardly longer than wide, with variably developed Y-shaped elevation. Scutellum relatively densely punctate with deep punctures; those on lateral part forming more or less regular rows. Clavus with three dense rows of punctures. Both inner rows (along claval furrow and middle one) very dense, middle row in posterior half more or less suddenly approaching corial row, row along scutellum often very sparse, sometimes vestigial, denser only at scutellar apex and along claval commissure. Punctation of corium deep, veins hardly detectable, indicated by rows of punctures. Two dense regular rows of punctures

parallel with vein Cu along entire length, punctures closer to each other than their diameter, similar to rows along corial fracture and costal area. Area between Cu and corial fracture punctate, leaving large area free in apical part. Corial fracture well visible, limited with punctures at least on costal side; area between that and costal row in anterior half impunctate, in posterior part with dense, irregular punctures. Anterior fifth of laminate lateral margin of corium more or less straight, narrower than base of pedicel, from anterior fifth to almost middle strongly widening, at half-length at least as thick as scape (body widest here as well); lateral margin in posterior half slightly convex. Straight apical margin of corium bordered by vestigial row of punctures, apex of corium acute. Membrane with four well visible veins reaching at least apex of abdomen. Sternum coarsely punctate with well separated punctures, except for shiny, markedly elevated middle area of mesosternum (being very densely punctate with extremely fine shallow punctures). Ostiolar peritreme short, oriented slightly posteriad. Evaporatorium of moderate size, lateral margin convex, hardly separable from other parts of sternum. Coxae unarmed. Profemora of equal structure in both sexes, strongly thickened, much thicker than others (1.6–1.8 times as thick as mesofemora) and armed anteroventrally with 1 large strong tooth in middle region

(about as long as half width of eye and about 0.25 times as broad as width of eye) and short strong teeth (3.2–3.8 times shorter than length of large single tooth) in two parallel (anteroventral and posteroventral) rows (7–11 teeth in one row) in entire length. Width of meso- and metafemora subequal, metafemora slightly thicker. Meso- and metafemora usually armed with one short, strong tooth on proximal one third and metafemora mostly bearing very tiny hardly visible tubercles in rows. Tibiae straight and mostly bearing very tiny tubercles in four rows along their entire length. Tarsomere I of metatarsi 1.31–1.47 times as long as tarsomere II and tarsomere III combined.

Abdomen. Venter of males densely punctate with tiny shallow punctures and sometimes also slightly coriaceous, abdominal venter of females slightly coriaceous (very finely transversely striate) and sometimes also with sparse punctures, as well.

Differential diagnosis and systematic placement. *Malgadrymus* gen. nov. – although this new genus resembles many Myodochini taxa – belongs to the tribe Drymini based on the arrangement of the abdominal trichobothria and spiracles. However, it is clearly distinguishable from most known Drymini genera. The most characteristic feature is the Myodochini-like shape of the pronotum: almost as long as wide, clearly divided and strongly concave at the transverse furrow, with not or hardly carinate lateral margin. This feature is similarly present only in four out of the 56 genera of Drymini (*Mizaldus* Distant, 1901, *Neomizaldus* Scudder, 1968, *Notochilaster* Breddin, 1907, and *Udalricus* Distant, 1903). In some other genera (*Dudia* Bergroth, 1918, *Esinerus* Scudder, 1969, *Rhodiginus* Distant, 1901, and *Sinierus* Distant, 1901) the lateral margin of pronotum is also hard to distinguish but the pronotum is rather short; in many more genera (*Bexiocoris* Scudder, 1969, *Carvalhodrymus* Slater, 1995, *Entisberus* Distant, 1903, *Heissodrymus* Kondorosy, 2006, *Hirtomydrus* Scudder, 1978, *Ibexocoris* Scudder, 1963, and *Retoka* China, 1935) the shape of the pronotum is more or less similarly strongly concave at the transverse furrow but the lateral margin is clearly carinate. The fusiform basiflagellum is also different from most Drymini; it is mostly (sub)cylindrical in Drymini (strongly fusiform in *Appoloni* and *Malipatilius* Kondorosy, 2013; also, more or less fusiform in *Brentiscerus* Scudder, 1962, *Latidrymus* Kondorosy, 2017, *Notochilus* Fieber, 1864, *Pseudodrymus* Gross, 1965, *Rhodiginus* and in some *Retoka*, *Salaciola* Bergroth, 1906 and *Scolopostethus* Fieber, 1860 species). The armature of the profemora is less unique, being similar in *Appoloni*, *Bexiocoris*, and *Udalricus*.

A very rare feature is the presence of a tooth on basal part of ventral side of meso- and metafemora but this tooth is missing in several specimens. This feature is known only in 3 Oriental and Australian Drymini genera, namely in: *Grossander* Slater, 1976, *Notochilaster* Breddin, 1907 and *Retrodrymus* Gross, 1965.

From the genera with a similar shape of the pronotum, *Malgadrymus* gen. nov. differs as follows: the genera *Mizaldus* and *Neomizaldus* have a special U-shaped keel on the scutellum, very concave apical margin of corium and unar-

med femora. *Notochilaster* has always a small ventral tooth on the head at each side of the labium; profemur is also unarmed. *Esinerus* and *Sinierus* have unarmed profemora and stouter pronotum (and body): pronotum width 1.7–2.1 times larger than length while in *Malgadrymus* this ratio is between 1.1 and 1.6. The very concave apical margin of the corium, the unarmed profemora and the much shorter pronotum are also characteristic for *Rhodiginus*. The Indian (Myanmar) *Udalricus* is the most similar genus, having also similar armature on the profemur. However, its scutellum is elongate, ending in an erect spiniform process, the eyes are very small and located far from the anterior margin of the pronotum and, the antenniferous tubercle is very long.

The relationships within the very diverse and variable Drymini are not clear yet; among the Afrotropical genera none seems to be close to *Malgadrymus*. Concerning the key of SLATER (1993, modified in 1995), *Malgadrymus* runs to the couplet 13, the genus *Salaciola*. However, *Salaciola* species are more oval, and have a sometimes slightly but mostly clearly laminate lateral margin on the pronotum. Material for molecular studies is very needed to clarify affinities within this generic complex.

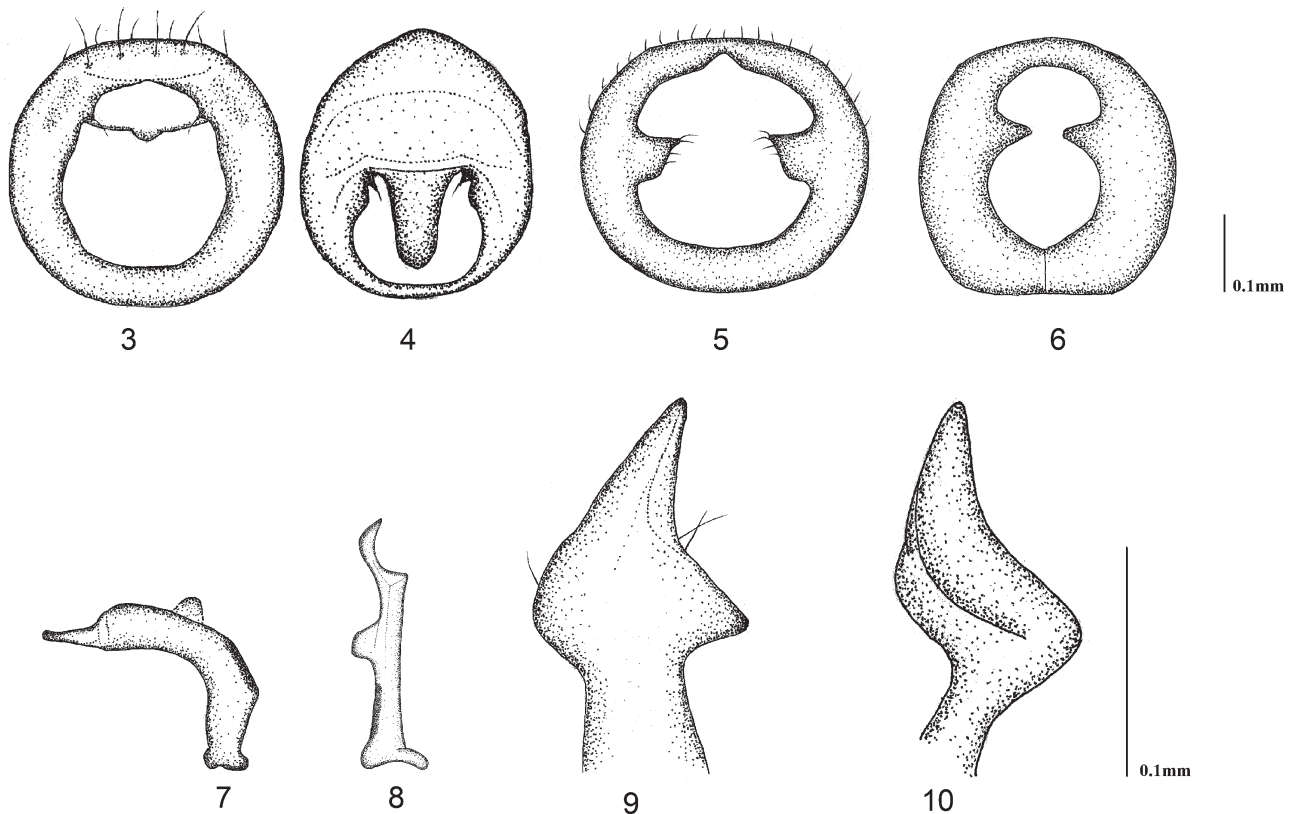
Etymology. The first part of the scientific name refers to the Malagasy people of Madagascar, the second one refers to the type genus of the tribe, *Drymus* Fieber, 1860. Masculine.

***Malgadrymus pameroides* Zámbo & Kondorosy, sp. nov.**

(Figs 1, 5, 9, 12)

Type locality. Central Madagascar, Ranomafana National Park, Antseranana district, Marovato village (S14°24'18.18" E 47°42'50.80").

Type material. HOLOTYPE: ♂, Madagascar C / 6-10. I. 1998, Ranomafana / (pr. Fianarantsoa) / P. Pacholátko leg. // HOLOTYPUS [pr] / *Malgadrymus* / *pameroides* [hw] / det. Zámbo & Kondorosy [pr, red label] (NHMW). PARATYPES: N. Madagascar / Antseranana distr. / Sambirana riv. / Marovato vill., 2001 / D. Hauck leg. 5.-12.12. (1 ♂, EHIA); N Madagascar, 7.-16. i. 2015 / Mt. de Ambre N. P., 1042m / upper camp near Ambohitra / S12°31'37.7" E49°10'19.1" / M. Trýzna leg. (1 ♀, MMBC); Coll. Mus. Tervuren / N. E. Madagascar: / Fizon IX. 1959 / J. Vadon (1 ♀, RMCA); Coll. Mus. Tervuren / Madagascar: Fampanambo / 1962 / J. Vadon (1 ♀, RMCA); Coll. Mus. Tervuren / Madagascar: Fampanambo / 1961 / J. Vadon (1 ♀, RMCA); Coll. Mus. Tervuren / Madagascar: Fampanambo / 1960 / J. Vadon (1 ♂, RMCA); E Madagascar / Tamatave distr. / Andasibe, 17.-30.12. / D. Hauck leg. 2001 (1 ♀, EHIA); Madagascar East / distr. Mananara-N. / Antanambe VIII / Vadon et Peyrieras (1 ♀, EKKH); Madagascar-Est / Distr. Mananara-N / Seranombe / Vadon-Peyrieras / VII.1965 [hw] (1 ♀, MNHN); RNF / Jan 2017 FIT / E Madagascar 2017 / Ranomafana N. P.; 10.-14. i. / S21°15'46" E47°25'17", 981m / Flight Interc. Trap, P. Baňáň lgt. (1 ♂, MMBC); Madagascar 1995 / Fianarantsoa Distr. / Ranomafana en., Nov. 29 / Dec. 1., J. Stolarczyk leg. // 5977/23631 / coll. Upper Silesian Museum / (USMB) Bytom, Poland (1 ♀, USMB); Mus. Roy. Afr. Centr. / Madagascar Est: / Ambodivoangy [correctly Ambodivoahangy] I. 1960 / J. Vadon (1 ♂, RMCA); MADAG.: Ste. Marie / Manandriana-Fluss / 15.-26.11.1993 / leg. Madl (1 ♀, NHMW); Madagascar: Andasibe (Peri / net) E von Moramanga Berg- / regenwald am Flussufer, 920m / 18°55'40"S / 48°24'56"E / leg. U. Göllner, 28.-29. x. 2003 [blue label] / Zool. Mus. Berlin [green label] (1 ♀, ZMHB); CE Madagascar, 2.-4. ii. 2016 / Mantadia N. P., "circ. Eulophia" / S18°48'03.5" E48°25'44.5" (2 ♂♂, MMBC); CE Madagascar, 5. ii. 2016 / Andasibe N. P., "circ. Indri 2" / S18°56'22.2" E48°25'08.4", M. Trýzna leg. (1 ♀, MMBC); Madagascar, 1000m / Ranomafana N. P., circuit / Talatakeley, 8.-12. i. 2019 / S21°15'47.2" E47°25'20.7" / primary forest, M. Trýzna leg. (1 ♀, NMPC); Madagascar: 2.5km NE von / Anara, SW von Iarintsena / ca. 975m NN, Buschtal / 21°51'03"S / 46°50'34"E /



Figs 3–10. Male genitalia of *Malgadrymus* and *Appoloniuss* species. 3–4 – *Malgadrymus bimaculatus* Zámbo & Kondorosy, sp. nov. (3 – pygophore, dorsal view; 4 – same, caudodorsal view); 5 – Pygophore of *M. pameroides* Zámbo & Kondorosy, sp. nov. (dorsal view); 6 – Pygophore of *Appoloniuss madagascariensis* Zámbo & Kondorosy, sp. nov. (dorsal view); 7–8 – Left paramere of *Malgadrymus bimaculatus* Zámbo & Kondorosy, sp. nov. (different views); 9 – Left paramere of *Malgadrymus pameroides* Zámbo & Kondorosy, sp. nov. (ventral view); 10 – Paramere of *Appoloniuss madagascariensis* Zámbo & Kondorosy, sp. nov. (ventral view). (Drawings by Sz. Kovács).

leg. U. Göllner, 6. xi. 2003 [blue label] / Zool. Mus. Berlin [green label] (1 ♀, ZMHB); Madagascar: Ranomafana / NW von Infanadiana, 630m NN / sek. Bergregenwald / 21°15'40"S / 47°27'23"E / leg. U. Göllner, 2. xi. 2003 [blue label] / Zool. Mus. Berlin [green label] (1 ♀, ZMHB); SE Madagascar: 9km of NO of / Ft. Dauphin, 17.2.2004 / Foret de Mandena, 20m / 24°57'S 47°00'E, J. Janák lgt. (1 ♂, EHIA); Madagascar: Province / Fianarantsoa, Parc National / Ranomafana, radio tower / at forest edge, elev. 1130m / 21-28 January 2002 / 21°15.05'S, 47° 24.43'E / coll. M. Irwin, R. Harin'Hala / California Acad. of Sciences / malaise, mixed tropical / forest MA-02-09B-13 (in ethanol) (1 ♀, CAS); MADAGASCAR: Fianarantsoa Province, Parc National d'Isalo / Sahanafa River, 29.2 km 351° / N Ranohira 10-13 Feb 2003 / 22° 18' 48" S, 045° 17' 30" E / coll. Fisher, Griswold et al. / California Acad. of Sciences / general collecting gallery forest / elev 500m code: BLF7650 (in ethanol) (1 ♂, CAS); Madagascar: Fianarantsoa / Tsaranoro Massif, Catta / Camp 9 km SE Vohitsaoka / 22° 04' 56" S / 46° 46' 32", 950m / rivulet near Camp, shore / with bushes and trees / leaf litter sievings / 16.-18. iv. 2007, lg. M. Uhlig [blue label] / Museum für Naturkunde, Berlin (1 ♀, ZMHB); Madagascar: Fianarantsoa / Tsaranoro Massif, Catta / Camp 9 km SE Vohitsaoka / 22° 04' 59" S / 46° 46' 34", 950m / rivulet forest, shore / with bushes and trees / leaf litter sievings / 18. iv. 2007, lg. M. Uhlig [blue label] / Museum für Naturkunde, Berlin (1 ♂, ZMHB).

Description. Colour. Body (Fig. 1) fuscous (sometimes pale brown); proximal half (or more) of distiflagellum except for narrowly brown base, at least anterior half of clavus along corial margin and one spot at apex of clavus (sometimes entire clavus white and basal claval spot rather pale yellow), proximal half of corium and one spot on posterior part of lateral margin, meso- and metafemora except for more or less wide subapical ring and basal and inner margin of membrane widely and arcuately (except a fuscous subbasal

reverse V-shaped spot) white; pedicel (dark ochraceous contrasting to other yellow body parts), labium except for fuscous apex of labiomere IV, one spot on each lateral margin of posterior pronotal lobe (often extending onto humeral angles but sometimes absent) and one inverse T-shaped spot in middle of posterior pronotal lobe (being often white), one relatively large subquadrangular subapical spot on corium close to claval commissure, often apex of profemora, tibiae and tarsi pale yellow; scape yellowish-brown (sometimes rather pale brown); apical and lateral margin of corium usually red (often fuscous); often posterior half of pronotum, dark parts of corium, metepimeroid and dorsal side of abdomen with connexiva paler brown.

Pilosity. Dorsal surface of head except for pair of long cephalic trichobothria with hardly visible decumbent pubescence, better visible on anterior part, antenniferous tubercles mostly bearing 1–2 somewhat elongate fine erect setae on ventral part, antennomeres densely covered with rather short fine decumbent and very sparsely with fine semierect setae (except for pedicel); head ventrally sparsely covered with short fine semidecumbent setae. Dorsal surface of body and sternum bare, abdominal venter densely covered with short fine decumbent setae. Legs sparsely covered with short fine decumbent setae, profemora bearing 4–6 elongate fine erect setae relatively far from each other in row ventrally; tibiae with short fine stiff semierect setae, tarsi dorsally with some elongate fine semierect setae as well.

Structure. Mostly shiny except for dull scutellum and sometimes parts of pronotum, sternum dull except for shiny mesosternum. Abdomen shiny. Scutellar row of punctures on clavus always very sparse, consisting of less than 10 punctures. Area between corial furrow and row along Cu with some sparse punctures proximally, apical part without punctures between rows (excluding apical row). Body 3.0–3.2 times (males: 3.1–3.2, females: 3.0–3.2) longer than wide. Eyes 2.1–2.4 times wider than length of rather short antenniferous tubercles. Widest part of pronotum 1.1–1.4 times (males: 1.1–1.2, females: 1.2–1.4) wider than entire length, anterior lobe of pronotum 1.1–1.4 times (males: 1.1–1.3, females: 1.1–1.4) longer than posterior one.

Male abdomen and genitalia. Abdomen more or less evenly flat. *Pygophore*: Subglobose (Fig. 5), dorsal aperture more or less round and large: entire length of pygophore about 1.5 times as long as dorsal aperture; both parts separated with large triangular projection (with slightly indented anterior side), distance between projections similar to length of each one; posterior margin with triangular incision (Fig. 5). Entire surface covered with numerous short fine decumbent setae, posterior part with long fine erect setae, as well. *Paramere*: Blade (Fig. 9) elongate triangular (length of blade about half entire length of paramere), about 1.4 times longer than widest part and ending in long and relatively narrow apex (Fig. 9), inner projection triangular and about as long as wide, outer projection more or less straight in anterior three quarters and slightly rounded in posterior one quarter (and hardly protruding as well), shank well developed.

Female abdomen. Abdominal sternite VI medially strongly narrowed (posterior margin forming “V”), sternite VII medially almost as long as sternites IV–VI together. Abdomen higher, 1.49–1.58 times longer than high, outline of sternite VII straight, connecting to sternite VI in angle of about 45°.

Measurements (in mm). *Males* (n = 9; holotype in parentheses). Total body length: 3.47–4.05 (3.99); head: length 0.51–0.66 (0.57), width 0.56–0.75 (0.59), interocular space 0.36–0.45 (0.42); length of antennomeres: I 0.30–0.53 (0.48), II 0.75–0.94 (0.91), III 0.62–0.87 (0.81), IV 0.61–0.72 (0.72); length of labiomeres: I 0.36–0.42 (0.42), II 0.39–0.51 (0.51), III 0.23–0.27 (0.27), IV 0.17–0.18 (0.18); pronotum: length 0.75–1.02 (1.02), width 0.96–1.14 (1.07); scutellum: length 0.51–0.63 (0.59), width 0.49–0.59 (0.57).

Females (n = 15). Total body length: 2.91–3.93; head: length 0.54–0.60, width 0.60–0.76, interocular space 0.39–0.45; length of antennomeres: I 0.37–0.45, II 0.65–0.99, III 0.62–0.75, IV 0.62–0.71; length of labiomeres: I 0.39–0.43, II 0.41–0.57, III 0.23–0.30, IV 0.17–0.19; pronotum: length 0.81–0.96, width 0.90–1.17; scutellum: length 0.59–0.75, width 0.50–0.75.

Etymology. The scientific name “*pameroides*” refers to the resemblance to the shape of the pronotum of different *Myodochini* genera; *Pamera* Say, 1831 was the old collective name for them, the suffix *-oides* means ‘resembling, -like’.

Collecting circumstances. Specimens of *M. pameroides* were collected by various collecting methods, namely (P. Baňář and M. Trýzna) by sifting of forest leaf litter,

sweeping of vegetation, beating of trees and shrubs, by flight interception traps, and they were also attracted to light; a single female was also collected in a Malaise trap. According to various localities and habitats of the type series (see e.g. Fig. 15), as well as large spectrum of collecting methods this species seems to be ecologically rather flexible.

Distribution. Endemic to Madagascar (Fig. 12).

***Malgadrymus bimaculatus* Zámbo & Kondorosy, sp. nov.**

(Figs 2, 3–4, 7–8, 16)

Type locality. Central Madagascar, Ranomafana National Park, 21°14'51" S 47°24'13"E.

Type material. HOLOTYPE: ♂, Madagascar-CE 2010 / Ranomafana N. P.; 16.-18. xi. / S21°14'51" E47°24'13" / 1079m sifting, P. Baňář lgt. // HOLOTYPUS [pr] / *Malgadrymus* / *bimaculatus* [hw] / det. Zámbo & Kondorosy [pr, red label] (MMBC). PARATYPES: Madagascar-N / Montagne d'Ambre N. P. / 26.-30. x. 2010, surr. camp. / sweeping; P. Baňář lgt. (1 ♀, MMBC); Madagascar, 2007, / Lokato env., near / Andasibe-Mantadia N.P., / M. Trýzna leg., 9.-10.i. (1 ♀, EHIA); ASB / light Madagascar / Andasibe N. P.; 12. iv. 2011 / 943m; forest edge, at light / S18°56'09.5" E48°25'08.2" / P. Baňář & local collectors lgt. (1 ♂, MMBC); Madagascar-CE 2010 / border of Andasibe N. P.; 916m / „Parc d' Orchidées”; 3.-6. xi. / S18°55'59.9" E048°24'46.5" / at light; P. Baňář and loc. coll. lgt. (1 ♀, MMBC); Madagascar-CE 2010 / border of Andasibe N. P.; 916m / „Parc d' Orchidées”; 3.-6. xi. / S18°55'59.9" E048°24'46.5" / M. Trýzna & loc. coll. lgt. (3 ♂♂, EHIA); Madagascar-CE 2010 / Ranomafana N. P.; 16.-18. xi. / S21°14'51" E47°24'13" / 1079m sifting, P. Baňář lgt. (2 ♂♂ 1 ♀, MMBC, 1 ♂, EKKH, 1 ♂, NMPC); Madagascar-CE; 1170m / Ranomafana N. P.; 17. xi. 2010 / Amboditanimena env.; at light / S21°12'14.9" E047°22'05.2" / secondary forest; P. Baňář lgt. (1 ♀, MMBC); Madagascar-CE 2010 / Ranomafana N. P.; 11.-18. xi. / S21°15'22.6" E47°25'17.8" / 958m; at light; P. Baňář lgt. (1 ♂ 3 ♀♀, MMBC, 1 ♀, HNHM, 1 ♀, NMPC); Madagascar-CE 2010 / Ranomafana N. P.; 14. xi. 2010 / Vohiparana env. 1130m / S21°14'26.0" E047°23'40.2" / pasture, at light; P. Baňář lgt. (1 ♂ 1 ♀, MMBC); CE Madagascar 2014 / Fianarantsoa pr., main ent- / rance of Ranomafana N. P. / 21°15.380' S 47°25.323' E / 933m, 3. ii., M. Trýzna leg. (1 ♂ 2 ♀♀, MMBC); Madagascar / Adivoangy [corr.: Ambodivoahangy] / XI. 1950 Vadon [hw] (1 ♀, MNHN).

Description. Colour. Body (Fig. 2) brown (from pale to dark); scape from yellowish-brown to rather yellow; apical part or whole basiflagellum, in some specimens also apical part of distiflagellum, relatively wide midline of anterior pronotal lobe, 1-1 round large sublateral spots on scutellum and trichobothrial spots of sternites black; pedicel, labium and legs (except for coxae and mostly partially brown femora) yellow; anterior part of lateral half of clavus and subapical spot on its inner part, anterior part of corium until level of apex of scutellum, small subapical spot on exocorium in middle of dark part more or less reaching anteriorly toward branch of R+M veins and spot of variable size between R and Cu veins and several spots of membrane (base in inner half, large subbasal spot in lateral half, large elongate spot in inner part and veins at least in apical part) more or less yellowish white; base (at most basal half) of basiflagellum and, basal third to half of distiflagellum red.

Pilosity similar to previous species.

Structure. Head and thorax dull except for mesosternum, antennae and legs, latter being shiny with abdomen. Scutellar row of punctures on clavus only sometimes sparse, consisting of more than 10 punctures. Area between corial furrow and row along Cu with numerous punctures especially proximally but often apical part with some

punctures. Body 2.5–3.1 times (males: 2.8–3.1, females: 2.5–2.8) longer than wide. Antenniferous tubercles rather short (eye 2.3–2.9 times as long as them).

Male abdomen and genitalia. Abdomen of males more or less evenly flat. *Pygophore*: Subglobose, dorsal aperture nearly hexagonal (Fig. 3), slightly longer than wide, posterior sinus more than 1.50 times narrower than anterior one, separated with very small tooth-like projection. Entire pygophore sparsely covered with fine longer and shorter erect setae. Cup-like sclerite huge, strongly elongate dorsally, markedly emerging above aperture (see Fig. 4). *Paramere*: very different from any known Drymini paramere, elongate stick-like, shank strongly curved ventrally, inner projection almost semicircular, apical part of blade slender, curved backwards (Figs 7–8).

Female abdomen. Abdominal sternite VI medially only slightly narrowed (posterior margin straight), sternite VII medially shorter than sternite IV, about as long as sternite V. Abdomen flatter, 2.04–2.17 times longer than high, outline of sternite VII clearly convex.

Measurements (in mm). *Males* (n = 10, holotype in parentheses). Total body length: 2.88–3.30 (3.00); head: length 0.42–0.48 (0.48), width 0.57–0.66 (0.60), interocular space 0.33–0.40 (0.39); length of antennomeres: I 0.24–0.30 (0.30), II 0.33–0.54 (0.48), III 0.33–0.50 (0.45), IV 0.33–0.51 (0.51); length of labiomeres: I 0.27–0.39 (0.30), II 0.30–0.40 (0.36), III 0.20–0.30 (0.21), IV 0.18–0.26 (0.18); pronotum: length 0.57–0.65 (0.57), width 0.93–1.02 (0.93); scutellum: length 0.54–0.66 (0.60), width 0.48–0.56 (0.54).

Females (n = 11). Total body length: 3.54–4.23; head: length 0.48–0.51, width 0.66–0.81, interocular space 0.39–0.48; length of antennomeres: I 0.27–0.42, II 0.48–0.60, III 0.39–0.54, IV 0.45–0.54; length of labiomeres: I 0.30–0.50, II 0.33–0.56, III 0.25–0.35, IV 0.23–0.30; pronotum: length 0.69–0.96, width 1.14–1.50; scutellum: length 0.66–0.90, width 0.63–0.87.

Differential diagnosis. *Malgadrymus bimaculatus* Zámbo & Kondorosy, sp. nov. is superficially similar to *M. pameroides* Zámbo & Kondorosy, sp. nov. but they can be easily distinguished from each other. The main structural differences are: the anterior and posterior pronotal lobe are of similar length in *M. bimaculatus* while in *M. pameroides* the anterior lobe is much longer (1.54–1.68 times) than the posterior lobe; the male pygophore and paramere (see Figs 3A–D) and the last abdominal segments of the female are also very different in both species. The most important colour differences are the following: 1) most of the basal part of distiflagellum of *M. pameroides* is white but reddish in *M. bimaculatus*, 2) anterior pronotal lobe of *M. pameroides* is unicoloured while it shows a wide longitudinal black spot in middle in *M. bimaculatus*, 3) posterior pronotal lobe with pale humeral spots and a long inverse T-shaped pale spot in middle in *M. pameroides* while in *M. bimaculatus* it exhibits 3 pale longitudinal stripes (humeral part dark), 4) scutellum of *M. pameroides* uniformly dark coloured while in *M. bimaculatus* the scutellum is paler brown and with large 1-1 large black spots sublaterally.

Etymology. The scientific name “*bimaculatus*” refers to the two dark spots of scutellum; adjective.

Collecting circumstances. Several specimens of *M. bimaculatus* were collected by sifting of forest leaf litter (Fig. 16), most of them were attracted to light traps, sometimes also in disturbed habitats (pasture, secondary forest margin).

Distribution. This species is endemic to the island, it was found in various localities of evergreen rain forest from northern to central Madagascar so far (Fig. 12).

Key to the species of *Malgadrymus* *Zámbo & Kondorosy* gen. nov.

- 1 Most of basal part of distiflagellum white, callar region strongly elevated and anterior pronotal lobe 1.54–1.68 times as long as posterior one, uniformly fuscous, posterior lobe of pronotum coloured as in Fig. 1, scutellum uniformly dark, abdomen of females rather high, 1.49–1.58 times longer than high, blade of paramere triangular.
..... *M. pameroides* Zámbo & Kondorosy, sp. nov.
- Most of basal part of distiflagellum reddish, callar region slightly elevated and anterior pronotal lobe about as long as posterior one, with black longitudinal spot in middle, coloured as Fig. 2, scutellum pale brown with 1-1 large black sublateral spots, abdomen of female specimens rather flat, 2.04–2.17 times longer than high, blade of paramere slender.
..... *M. bimaculatus* Zámbo & Kondorosy, sp. nov.

Appoloni *madagascariensis* Zámbo & Kondorosy, sp. nov. (Figs 6, 10–12)

Type locality. Southwestern Madagascar, Atsimo-Andrefana Region, Sakaraha, Ilakaka, S 22°43'16.10" E 45°12'24.27".

Type material. HOLOTYPE: ♂, Sakaraha / Ilaka [= probably Ilakaka; Ilaka is more than 800 km from Sakaraha] / III-56 A. R. // Institute / Scientifique / Madagascar // HOLOTYPUS [pr] / Appoloni / madagascariensis [hw] / det. Zámbo & Kondorosy [pr, red label] (MNHN). PARATYPE: 1 ♂, Coll. Mus. Tervuren / Madagascar: Tanandava / (lumière) 1963 / 1964 / G. Schmitz (RMCA).

Description. Male. Colour. Body (Fig. 11) fuscous; apical third of pedicel, posterior pronotal lobe (except for yellow spots: medial spot not reaching posterior margin, two oblique longitudinal spots from edges of scutellum oriented to middle of anterior margin and two tiny spots on humerus), distal half of clavus (except for pair of connected elongate spots between two rows of punctures along scutellum), spot in middle of exocorium, posterior third of corium connected through vein R with spot on posterior fourth of vein Cu (except for very apex of corium and large oval spot between veins R and Cu), veins of membrane in apical half, profemora except for apex, rather narrow subapical rings of meso- and metafemora and abdomen brown; apex of clypeus, more than apical third of distiflagellum, supracoxal plates, posterolateral part of proepimeron and metepimeroid reddish-brown; scape, labium, abovementioned spots of posterior pronotal lobe, hemelytra, peritreme and legs (except for dark parts of femora) yellow; lateral margin of pronotum except for brown posterior third, oval spot near inner angle of corium and membrane whitish.

Pilosity. Head and thorax (including hemelytra) nearly

glabrous, only with extreme tiny setae hardly emerging from punctures, all antennomeres densely covered (scape less densely) with relatively short, fine decumbent setae and scattered slightly longer (but also not reaching diameter of any antennomere) erect setae (on apex of antennomeres some stronger dark setae); legs with hardly visible fine semidecumbent setae, inner margin of tibiae with a few preapical stiff setae; abdominal venter sparsely covered with relatively short, fine, decumbent setae.

Punctuation. Head and thorax very densely punctate with minute well separated punctures, some of them slightly larger, especially on posterior lobe of pronotum, on scutellum and on corium along vein R+M. Clavus with 3 full and regular rows of punctures, rows along corium approaching each other apically. Corium evenly punctate except for impunctate exocorium and pale spot at inner angle, regular rows present along clavus and exocorium only. Anteriad of mesocoxae shiny area with micropunctures only. Evaporative area with scattered punctures as well. Mediane of posterior pronotal lobe, supracoal lobes and metepimeroid impunctate. Abdominal venter densely punctate on middle area, laterally with hardly detectable micropunctures.

Structure. Body dull (except for shiny membrane, medial part of abdominal venter and legs), rather slender (2.70–2.75 times longer than wide). Head declivent, relatively broad, 0.81–0.84 times wider than maximal width of pronotum, vertex slightly convex. Eyes sessile, large and protruding laterally. Antenniferous tubercles on base slightly divergent, strongly convergent anteriad (similarly to most *Appoloni* species), base of antennae about 0.55 times shorter than diameter of vertex (= distance of inner margins of eyes). Antennae relatively long, slightly shorter than half length of body. Scape, pedicel and basiflagellum subcylindrical (slightly widening apically), distiflagellum fusiform, diameter of basiflagellum and distiflagellum subequal, pedicel slightly narrower than other antennomeres (widest part 0.80–0.82 times as wide as scape and 0.75–0.78 times as wide as basi- and distiflagellum). Labium reaching mesocoxae, labiomere I reaching base of head, labiomere II reaching procoxae. Bucculae rather high, covering about half height of labiomere, reaching almost base of head. Pronotum subquadrate, relatively wide, nearly as wide as maximum width of body, callar area rather high, distinctly elevated above head, transverse impression of pronotum complete and strong, anterior lobe not much longer than posterior one, humeral angles rounded, anteriad of corner with tiny acute protrusion. Lateral margin of pronotum straight, except for shallow concavity at level of transverse impression, detectably explanate (in anterior third about 0.50 times wider than base of pedicel and at level of transverse impression 1.60 times wider than base of pedicel). Scutellum elongate, convex, with blunt Y-shaped elevation, subbasally with pair of large oval humps touching each other medially, in posterior half with slightly emergent median keel. Clavus rather narrow, scutellum 3.18–3.60 times longer than claval commissure. Lateral margin of corium parallel in anterior two-thirds, slightly narrowing posteriad; exocorium anteriorly upturned; veins of corium hardly visible. Membrane surpassing



Fig. 11. Dorsal view of *Appoloni madagascariensis* Zámbo & Kondorosy, sp. nov. (Photo by A. Zámbo).

abdomen a little, veins weak. Metathoracic scent gland evaporatorium large, covering more than half of metapleuron, lateral margin almost straight, narrowly reaching lateral margin along posterior margin of mesopleuron. Ostiole and peritreme straight, peritreme short (distance of peritreme from lateral margin of evaporatorium similar to its length), oriented slightly posteriad, ostiole oriented slightly anteriad, not widening laterad. Coxae unarmed. Profemora incrassate (1.30–1.40 times wider than metafemora) anteroventrally in apical fourth armed with 7–8 very short teeth in row, posteroventral surface with many tiny humps; meso- and metafemora unarmed. Tibiae straight, protibia slightly widening toward apex. Abdominal sternite VI (of male) medially strongly narrowing, more than 3 times narrower than laterally, therefore sternite VII strongly arched and genital segment situated ventrally.

Male genitalia. *Pygophore* somewhat elongate (Fig. 6), dorsal aperture sexangular (nearly hexagonal), posterior margin of ventral aperture semicircular, anterior margin (= posterior margin of teeth) straight, teeth large, but considerably shorter than distance of them. *Paramere*: Shank (Fig. 10) very short (about as long as one-fifth of entire length of paramere), blade subtriangular, apex blunt.

Measurements (in mm, $n = 2$, holotype in parentheses): Total body length: 2.76 (2.55); head: length 0.56 (0.52), width 0.90 (0.84), interocular space 0.48 (0.45); length of antennomeres: I 0.16 (0.17), II 0.30 (0.27), III missing on paratype (0.33), IV missing on paratype (0.45); length of

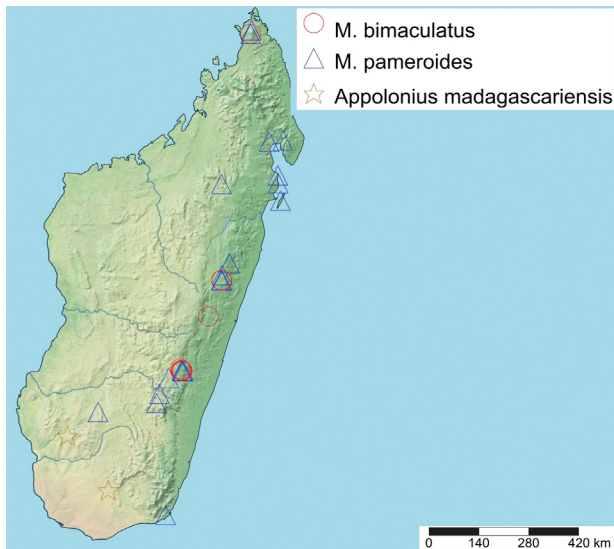


Fig. 12. Distribution of *Appolonius madagascariensis* Zábó & Kondorosy, sp. nov. and species of the genus *Malgadrymus* Zábó & Kondorosy, gen. nov.

labiomeres: I 0.32 (0.30), II 0.36 (0.34), III 0.36 (0.36), IV 0.18 (0.16); pronotum: length 0.75 (0.63), width 1.08 (0.93); scutellum: length 0.57 (0.51), width 0.62 (0.54); claval commissure length 0.16 (0.15).

Female. Unknown.

Differential diagnosis. *Appolonius madagascariensis* Zábó & Kondorosy, sp. nov. is a typical member of the genus *Appolonius* (currently including 12 species from the tropical regions of the Eastern Hemisphere). The main characters of the genus are vertical head with large protruding eyes, convergent antenniferous tubercles (antennae markedly nearer to each other than inner margins of eyes), thick antennae and long prominent bucculae, nearly quadrate pronotum with almost straight lateral margin widened at transverse impression, clavus having three rows of punctures, and profemora with one anteroventral row of small teeth.

Appolonius madagascariensis Zábó & Kondorosy, sp. nov. share with most *Appolonius* species having translucent membrane (all non-Afrotropical species, one of the 2 known Afrotropical species and some undescribed ones), while *A. salacioloides* Slater, 1994 from Southern Africa has dark membrane. Many species have a unicolorous (yellow, brown or black) posterior lobe of the pronotum; 3 longitudinal streaks are present in the Indian *A. picturatus* Distant, 1918, the African *A. quadratus* Scudder, 1956 and the Australian *A. territorialis* Gross, 1965; and it is also sometimes rather apparent in two other Indian species, *A. cincticornis* (Walker, 1872) and *A. indicus* Chopra & Singal, 1982; at last *A. salacioloides* shows only a pale midline. Most species have a rather pale corium, only *A. madagascariensis* sp. nov., the Australian *A. robustus* Gross, 1965, *A. salacioloides* and often *A. quadratus* show corium with totally dark apical fourth.

The Afrotropical species (*A. madagascariensis* sp. nov., *A. quadratus*, and *A. salacioloides*) agree in several features. The closest relative of the Madagascan species is probably *A. quadratus* which differs in 1) body length

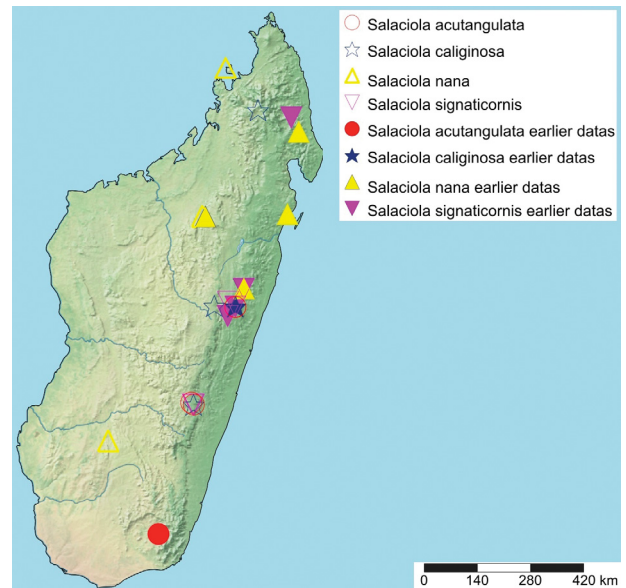


Fig. 13. Distribution of *Salaciola* species in Madagascar.

(*A. quadratus* is above 3 mm, while *A. madagascariensis* sp. nov. is under 2.8 mm; 2) apex of pedicel colouration: brownish-black in *A. madagascariensis*, while yellow or black in *A. quadratus*; 3) colouration of corium: less than half of corium of *A. madagascariensis* is black, with big pale spot at inner angle, contrary to *A. quadratus* where the posterior two-thirds of the corium are dark and with only smaller pale patches.

Etymology. The species epithet “*madagascariensis*” refers to the distribution of this species; adjective.

Habitat. Most probably (according to type locality) collected south of Isalo National Park in southwestern Madagascar, in strictly seasonal low canopy forest mixed with savannah; the holotype was collected at the end of rainy season (March).

Distribution. Endemic to Madagascar, known only from southwestern part of the island (Fig. 12).

New records

Salaciola acutangulata Slater, 1994

(Figs 13, 17)

Material examined. MADAGASCAR: Madagascar-CE 2010 / border of Andasibe N. P.; 916m / “Parc d’ Orchidées” /; 3.-6. xi. / S18°55’59.9” E048°24’46.5” / at light; P. Baňar & bc. coll. lgt. (1 ♂ 1 ♀, EKKH, 1 ♀, NMPC); Madagascar-CE 2010 / Ranomafana N. P.; 16. xi. / Ambatolahy vill.; Riana / view point; 895m; at light / S21°15’05.3” E047°25’41.2” / P. Baňar & J. M. Ramasy (1 ♂ 1 ♀, EKKH); Madagascar-CE 2010 / 1170m / Ranomafana N. P.; 17. xi. 2010 / Amboditanimena env.; at light / S21°12’14.9” E047°22’05.2” / secondary forest; P. Baňar lgt. (1 ♀, EKKH); Madagascar: Toamasina / Reserve Mitsinjo 1.5km ESE / Andasibe, river, lux / 18°56’22”S / 48°24’52”E / 12. iv. 2007, leg. M. Uhlig [blue label] / Museum für Naturkunde, Berlin [white label] (1 ♀, ZMHB).

Habitat. All listed specimens were attracted to light in evergreen rainy forest of central eastern Madagascar (Andasibe-Mantadia NP and its surroundings, Ranomafana NP).

Distribution in Madagascar (Fig. 13). This species was known only from Ranomafana until now (SLATER 1994).

General distribution. Endemic to Madagascar.

***Salaciola caliginosa* Slater, 1989**

(Figs 13, 18)

Material examined. MADAGASCAR: North and Central East Madagascar: Madagascar-CE 2010 / Ranomafana N. P.; 11-18. xi. / S21°15'22.6" E047°25'17.8" / 958m; at light; P. Baňář lgt. (1 specimen without abdomen, MMBC); Madagascar: 4km W von / Mandroka, 1250m NN / (E von Manjakandriana) / 18°54'43" S 47°54'51"E / leg. U. Göllner, 28.-31. x. 2003 (2 ♂♂ 2 ♀♀, ZMHB); Madagascar: 4km W von / Mandroka, 958m NN / (E von Manjakandriana) / 18°54'43" S 47°54'51"E / M. Trýzna lgt, 28.-31. x. 2003 (1 ♀, EHIA); Madagascar Nord / Région Tsaratanana / N. W. Mangidrano / Analabana / 10 / 20-IV-1964 / I. 640m-P. Soga // MUSEUM PARIS [blue label] (1 ♂, MNHN).

Habitat. Collected from northern (Tsaratanana massif) to central eastern Madagascar (Ranomafana NP), in evergreen rainy forests.

Distribution in Madagascar (Fig. 13). This species was known only from Eastern Coast of Madagascar (Perinet = Analamazaotra forest, part of the Andasibe-Mantadia NP) until now (SLATER 1989).

General distribution. Endemic to Madagascar.

***Salaciola nana* Bergroth, 1906**

(Figs 13, 19)

Material examined. MADAGASCAR: SW Madagascar / Isalo N. P. / Zahavola for. / cca. 850m; 21. i. 2013 / M. Trýzna leg. (3 ♂♂ 6 ♀♀, MMBC); Madagascar Est / Ambatombe pr. / Andilamena, 17. 1. 1995 / G. Dunay+J. Janák lgt. / 900m / forêt dégradée / prairie second, lux (1 ♀, MMBC); MTD / Jan. 2017/2 / II-FIT, C-Madagascar / Andasibe-Mantadia N.P.; 19.-22. i. 2017, Mantadia, circuit "Eulophia", 958m, S18°48'16" E48°25'43" / P. Baňář lgt. (2 ♀♀, MMBC). **REPUBLIC OF THE CONGO:** Soil-Zoological Exp. / Congo-Brazzaville / Brazzaville / ORSTOM Park // 22. 12. 1963. No. 495 / light trap / leg. Endrödy-Younga (1 ♂, HNHM).

Habitat. Collected from evergreen rainy forests of eastern Madagascar to seasonal forest in central Madagascar (Isalo NP), also in secondary and disturbed habitats.

Distribution in Madagascar (Fig. 13). Slater mentioned this species only from northeastern Madagascar (SLATER 1989) but in Madagascan *Salaciola* material we also found some specimens from southwestern part of country.

General distribution. Botswana, Cameroon, Central Africa, Chad, Democratic Republic of the Congo, Ghana, Kenya, Liberia, Madagascar, Nigeria, Sierra Leone, South Africa, and Tanzania (BERGROTH 1906, KRÜGER 2019, KRÜGER & DECKERT 2016, SCUDDER 1962, SLATER 1989). New record for the Republic of the Congo.

***Salaciola signaticornis* Linnavuori, 1978**

(Figs 13, 20)

Material examined. MADAGASCAR: Madagascar-CE 2010 / Ranomafana N. P.; 11.-18. xi. / S21°15'22.6" E47°25'17.8" / 958m; at light; P. Baňář lgt. (2 ♂♂ 2 ♀♀, MMBC, 1 ♂, NMPC); Madagascar-CE 2010 / Ranomafana N. P.; 11.-18. xi. / S21°14'51" E47°24'13" / 1079m sifting; P. Baňář lgt. (1 ♂ 1 ♀, MMBC); Madagascar-CE / Ranomafana N. P.; 14. xi. 2010 / Vohiparara env. 1130m / S21°14'26.0" E047°23'40.2" / pasture, at light; P. Baňář lgt. (1 ♂ 3 ♀♀, MMBC); Madagascar-CE 2010 / Ranomafana N. P.; 16. xi. / Ambatolahy vill.; Riana / view point; 895m; at light / S21°15'05.3" E047°25'41.2" / P. Baňář & J. Ramasy lgt. (1 ♂, MMBC); Madagascar, 2007 / Ranomafana Nat. Park / near Ranomafana vill., M. Trýzna leg., 26.-31. i. (1 ♀, EKKH); Madagascar / Ambodivoahangy / Vadon. XII. 1949 [hw] (1 ♀, MNHN); Madagascar Est / Ambohimananarivo / S of Ifanadiana / J. Janák leg.; 1-2. 2. 1995 (3 ♀♀, MMBC); SW Madagascar / Isalo N. P., Zahavola for. / cca. 850m; 21. i. 2013 / M. Trýzna leg. (1 ♂ 2 ♀♀, MMBC).

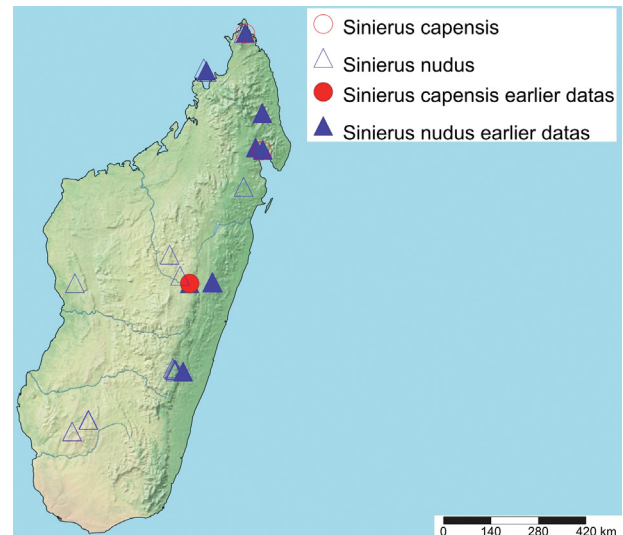


Fig. 14. Distribution of *Sinierus* species in Madagascar.

Habitat. Collected from evergreen rainy forests of eastern Madagascar to seasonal forest in central Madagascar (Isalo NP), also in secondary and disturbed habitats, frequently attracted to light.

Distribution in Madagascar (Fig. 13). SLATER (1989) published it from northeastern and eastern Madagascar.

General distribution. Eritrea, Ethiopia (LINNAVUORI 1978) and Madagascar. This distribution pattern is unusual; however, we did not find any important difference between the original description and the specimens from Madagascar.

***Salaciola* sp. (undescribed)**

(Fig. 21)

Material examined. MADAGASCAR: Southwestern Madagascar, Isalo National Park, Analalava forest (2 ♂♂, MMBC).

Comment. During studying Madagascan *Salaciola* material, two male specimens were found in a seasonal forest of Isalo Massif which do not belong to any described species. Therefore, this species will be described when further specimens (including females) are found. The specimens are very similar to those of *Salaciola caliginosa* Slater, 1989 but also differ in many features.

***Sinierus capensis* Dallas, 1852**

(Figs 14, 22)

Material examined. MADAGASCAR: N Madagascar / Antsiranana / distr. Sambirano riv. / Marovato VIII., 2001 / J. Rolcik leg. 5-12. 12. (1 ♂, EKKH); Coll. Mus. Tervuren / N. E. Madagascar: / Maroantsetra VII. 1959 / J. Vadon (1 ♀, RMCA); Madagascar 1995 / Antananarivo Distr. / Manankazo env., Dec. / 9-13., J. Stolarczyk leg. // 5977/23670 / coll. Upper Silesian Museum / (USMB) Bytom, Poland (1 ♀, USMB).

Distribution in Madagascar (Fig. 14). The species was recorded in Madagascar by Scudder from Andobo (Antsingy forest) (SCUDDER 1984); we found one male and one female in northern and northeastern Madagascar.

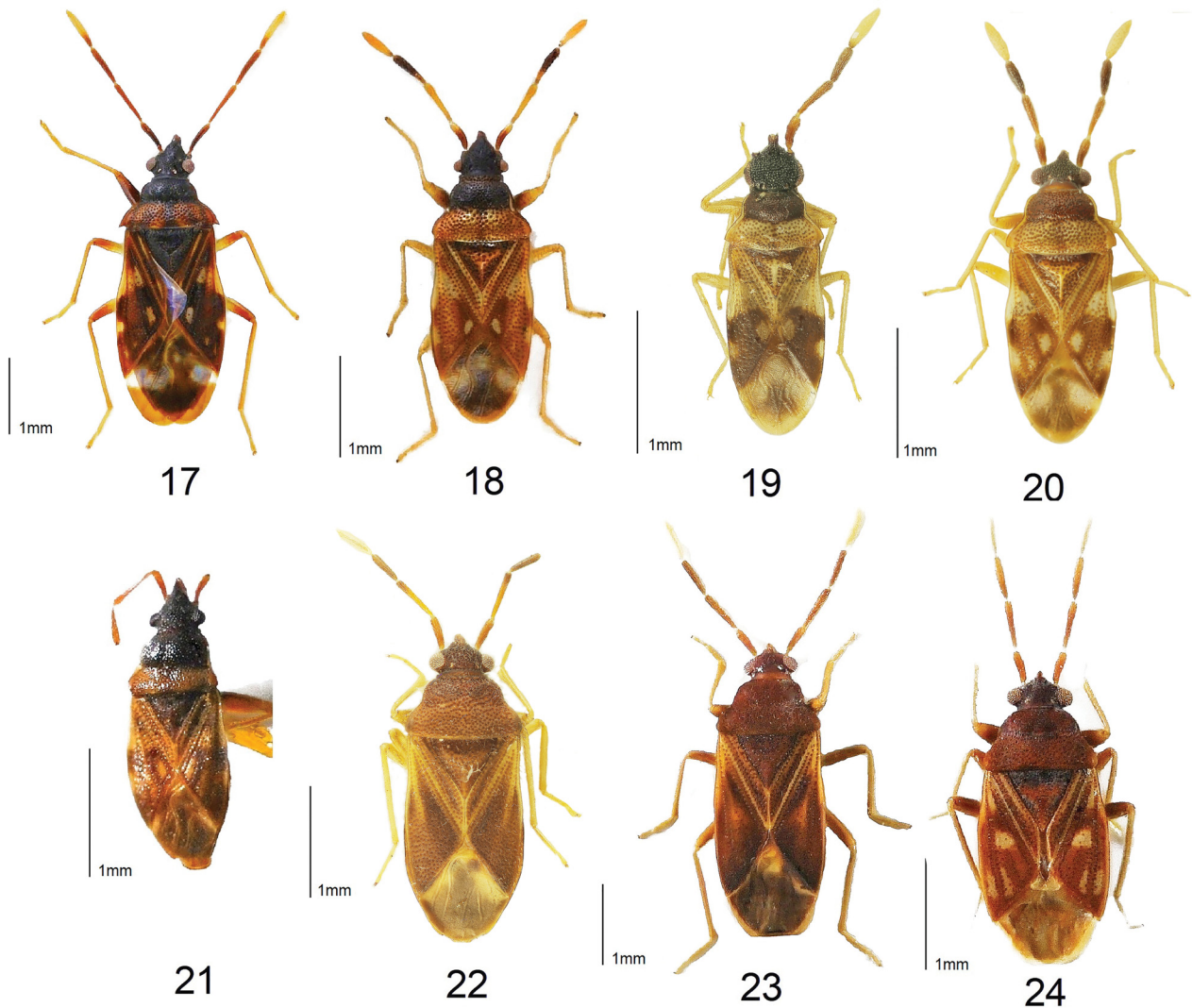
General distribution. Democratic Republic of the Congo (former Congo Belge), Madagascar, Republic of the Congo, South Africa, Sudan, Tanzania, and Uganda (SCUDDER 1984).



Fig. 15. Andasibe-Mantadia National Park, collecting site of *Malgadrymus pameroides* Zábó & Kondorosy, sp. nov. (Photo by M. Trýzna).



Fig. 16. Ranomafana National Park, microhabitat sifting of *Malgadrymus bimaculatus* Zábó & Kondorosy, sp. nov. (Photo by P. Baňar).



Figs 17–24. Dorsal view of Madagascarian *Salaciola* and *Sinierus* species. 17 – *Salaciola acutangulata* Slater, 1994; 18 – *Salaciola caliginosa* Slater, 1989; 19 – *Salaciola nana* Bergroth, 1906; 20 – *Salaciola signaticornis* Linnavuori, 1978; 21 – *Salaciola* sp. nov.; 22 – *Sinierus capensis* Dallas, 1852; 23 – *Sinierus nudus* Scudder, 1984; 24 – *Sinierus* sp. nov. (Photos by A. Zámbo & P. Baňar).

Sinierus nudus Scudder, 1984

(Figs 14, 23)

Material examined (Fig. 14). **MADAGASCAR:** N Madagascar / Antsaranana / distr. Sambirana riv. / Marovato VIII., 2001 / J. Rolcik leg. 5-12. 12. (1 ♀, MMBC); 2007 / Lokato env., near / Andasibe-Mantadia N. P. / M. Trýzna leg., 9.-10. i. (1 ♀, EKKH); Madagascar, 2007 / Andasibe-Mantadia N. P. / Analamazaotra forest, / M. Trýzna leg., 2-14. ii. (1 ♀, EHIA); Madagascar-CE 2010 / border of Andasibe N. P.; 916m / „Parc d' Orchidées”; 3-6. xi. / S18°55'59.9" E048°24'46.5" / at light; P. Baňar & loc. coll. lgt. (1 ♂ 2 ♀♀, MMBC); Madagascar: Toamasina / Reserve Mitsinjo 1.5km ESE / Andasibe, river, lux / 18°56'22"S / 48°24'52"E / 12. iv. 2007, leg. M. Uhlig [blue label] / Museum für Naturkunde, Berlin (1 ♀, ZMHB); CE Madagascar 2014 / Toamasina pr., Andasibe- / Mantadia N. P. 961m / Analamazaotra forest / 18°56.324'S 48°25.396'E / 961m; 9.-12. ii. M. Trýzna lgt. (2 ♀♀, MMBC); ASB / light Madagascar / Andasibe N. P.; 12. iv. 2011 / 943m, forest edge, at light / S18°56'09.5" E48°25'08.2" / P. Baňar & local collectors lgt. (3 ♂♂ 2 ♀♀, MMBC); Madagascar 2011 / Ambohitately Spec. Res. / S18°11'51" E047°17'03" / 1530m; at light, 24-29. xi. / M. Trýzna lgt. (1 ♀, EHIA); Madagascar, Madagascar Est / 4. 2. 1995 / P. N. Ranomafana env. / Sahavondrona / 1150-1250m / foret humide, lux / G. Dunay + J. Janák lgt. (1 ♀, EKKH); CE Madagascar 2014 / Fianarantsoa pr., main ent- / rance of Ranomafana N. P. / 21°15.380'S 47°25.323'E / 933m, 3. ii., M. Trýzna leg. (5 ♀♀, MMBC); Madagascar-CE 2010 / Ranomafana N. P.; 11-18. xi. / S21°15'22.6"

E047°25'17.8" / 958m; at light; P. Baňar lgt. (2 ♂♂ 1 ♀, MMBC); Madagascar, 2007 / Ranomafana Nat. Park / near Ranomafana vill. / M. Trýzna leg., 26-31. i. (2 ♀♀, EKKH); Madagascar-CE, 1170m / Ranomafana N. P.; 17. xi. 2010 / Amboditanimena env.; at light / S21°12'14.9" E047°22'05.2" / secondary forest; P. Baňar lgt. (6 ♂♂ 6 ♀♀, MMBC, 1 ♂ 1 ♀, NMPC); Madagascar-CE / Ranomafana N.P.; 16.-18. xi. 2010 / Vohiparara env, 1130m / S21°14'26.0" E047°23'40.2" / pasture, at light, P. Baňar (4 ♂♂ 7 ♀♀, MMBC); RNF / Sept. / 2012 / 08 Madagascar / Ranomafana N. P.; 4. x. 2012 / S21°17'33.6" E47°25'57.6"; 1163m / Vatoharanana; sifting litter, Winkler / app. extr.; L. S. Rahanitrianiaina lgt. (1 ♂, MMBC); Madagascar-CE 2010; 14. xi. 2010 / Vohiparara env. 1130m / S21°14'26.0" E047°23'40.2" pasture, at light, P. Baňar (1 ♂ 2 ♀♀, MMBC); Madagascar-CE 2010 / Ambalahy vill.; Riana / view point, 895m, at light / S21°15'05.3" E047°25'41.2" / P. Baňar & J. M. Ramasy lgt. (1 ♀, MMBC); Madagascar Est / Ambohimarivo / S of Ifanadiana / 1-2. 2. 1995 J. Janák lgt. (1 ♀, MMBC); E Madagascar 1995 / Ambatombe pr. / Andilamena 17. i. / G. Dunay & J. Janák lgt. / Coll. Petr Baňar / petrbanar@seznam.cz (1 ♂, MMBC); Madagascar Est / Ambatombe pr. / Andilamena, 17. i. 1995 / G. Dunay + J. Janák lgt. / 900m / forêt dégradée / prairie second, lux (2 ♀♀, MMBC); SW Madagascar 2013 / Isalo N. P., Analalava for. / Antanambao vill. env., 720m / S22°35' E045°07'; 16-19. i. / M. Trýzna leg. (1 ♀, EKKH); SW Madagascar 2013 / Zombitse N. P.; (main entr.) / Ambakintany forest, 816m / S22°53'11" E044°41'31" / 24-27. i. M. Trýzna leg. (1 ♂, EKKH); SW Madagascar 2013 / Zombitse N. P.; (main entr.) / Ambakintany forest, 816m / S22°53'11" E044°41'31"

/ 24-27. i. M. Trýzna leg. (8 ♀♀, MMBC); ISL / Jan. 2013 / 04 Madagascar / Isalo N. P., Analalava forest, 725m / S22°35'05.0" E045°07'51.8"; 17. i. 2013 / sifting litter, Winkler app. extr.; L. S. / Rahanitriinaia & E. M. Rabotoson lgt. (2 ♂♂, MMBC); SW Madagascar 2015 / Isalo N. P., Analalava for. / Antanambao vill., 720m / S22°35' E045°07', 16.-19. i. / M. Trýzna leg. (1 ♂ 5 ♀♀, MMBC); SW Madagascar 2013 / Zombitse N. P.; (main entr.) / Ambakintany forest, 816m / S22°53'11" E044°41'31" / 24-27. i. M. Trýzna leg. (1 ♀, MMBC).

Habitat. Collected from evergreen rainy forests of eastern Madagascar to seasonal forest in central Madagascar (Isalo NP and Zombitse – Vohibasia NP).

Distribution in Madagascar (Fig. 14). SCUDDER (1984) described it from the northern and eastern part, we found specimens from the central and western part as well.

General distribution. Endemic to Madagascar.

Sinierus sp. (undescribed)

(Fig. 24)

Material examined. MADAGASCAR: Northwestern Madagascar, Ankarana mountains, Ambondromifehy (1 ♀, NMPC).

Comment. In the *Sinierus* material one female specimen was found from Ankarana National Park (North Madagascar), which does not belong to any described species. This species will be described when males or at least more females are found. The new species share some features with *Sinierus capensis* and *Sinierus nudus*; however, the new species differs in coloration from both.

List of Drymini species of Madagascar

Appolonius madagascariensis Zámbo & Kondorosy, sp. nov.
Malgadrymus bimaculatus Zámbo & Kondorosy, sp. nov.
Malgadrymus pameroides Zámbo & Kondorosy, sp. nov.
Salaciola acutangulata Slater, 1994 (SLATER 1994)
Salaciola nana Bergroth, 1906 (BERGROTH 1906, SLATER 1989)
Salaciola signaticornis Linnavuori, 1978 (LINNAVUORI 1978)
Salaciola sp. (undescribed)
Sinierus capensis Dallas, 1852 (SCUDDER 1984)
Sinierus nudus Scudder, 1984 (SCUDDER 1984)
Sinierus sp. (undescribed)
Stilbocoris distinctus Scudder, 1962 (KONDOROSY & ZÁMBÓ 2021)
Stilbocoris galla Linnavuori, 1978 (KONDOROSY & ZÁMBÓ 2021)
Stilbocoris scudderi Kondorosy & Zámbo, 2021 (KONDOROSY & ZÁMBÓ 2021)
Stilbocoris slateri Kondorosy & Zámbo, 2021 (KONDOROSY & ZÁMBÓ 2021)
Stilbocoris triangularis Linnavuori, 1978 (KONDOROSY & ZÁMBÓ 2021)
Stilbocoris sp. (undescribed) (KONDOROSY & ZÁMBÓ 2021)

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