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Review of Imatidiini genera (Coleoptera: Chrysomelidae: Cassidinae)

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Abstract. Genera of Imatidiini Hope, 1840 are revised and keyed. Colour images demonstrating general habitus of all genera are also given. The following genera are removed from synonymy and their status restored: Caloclada Guérin-Méneville, 1844, stat. restit., Pseudimatidium Aslam, 1966, stat. restit., and Xenispa Baly, 1858, stat. restit. Xanthispa Baly, 1858, stat. nov., is raised to full generic rank. Caloclada fasciata Guérin-Méneville, 1844 is designated as the type species of Caloclada. Demotispa pulchella Baly, 1858 is confirmed as the type species of Demotispa Baly, 1858 because it was fixed in the original publication. Solenispa Weise, 1905 is transferred to Hybosispini Weise, 1910 because it has no pronotal setae and carinate internal margin of eve. Demotispa and Parimatidium Spaeth, 1938 are reclassified because of misapplication of the type species. In addition, six genera are described as new: Cyclantispa gen. nov., Katkispa gen. nov., Lechispa gen. nov., Parentispa gen. nov., Weiseispa gen. nov., and Windsorispa gen. nov. Two species are removed from synonymy and their species status is restored: Demotispa sanguinea (Champion, 1894) stat. restit., and Xenispa elegans (Baly, 1875) stat. restit. Species status of Xenispa pulchella Baly, 1858, stat. restit., is restored and its replacement name Demotispa magna Weise, 1910 is suspended. The following new synonymies are proposed: Caloclada Guérin-Méneville, 1844 = Octocladiscus Thomson, 1856, syn. nov., and Demotispa Baly, 1858 = Stilpnaspis Weise, 1905, syn. nov. = Rhodimatidium Aslam, 1966, syn. nov.; Demotispa pulchella Baly, 1858 = Stilpnaspis bicolorata Borowiec, 2000, syn. nov.; Pseudimatidium limbatum (Baly, 1885) = Homalispa limbifera Baly, 1885, syn. nov.; Pseudimatidium procerulum (Boheman, 1862) = Demotispa brunneofasciata Borowiec, 2000, syn. nov.; Weiseispa bimaculata (Baly, 1858) = Demotispa biplagiata Pic, 1923, syn. nov. Based on new synonymies, changes in generic system, and study of type material, the following new combinations are proposed: Cephaloleia basalis (Weise, 1910) comb. nov., C. bondari (Monrós, 1945) comb. nov., C. nigronotata (Pic, 1936) comb. nov.; Cyclantispa gracilis (Baly, 1885) comb. nov., C. subelongata (Pic, 1936) comb. nov.; Demotispa coccinata (Boheman, 1862) comb. nov., D. filicornis (Borowiec, 2000) comb. nov., D. fulva (Boheman, 1850) comb. nov., D. fuscocincta (Spaeth, 1928) comb. nov., D. impunctata (Borowiec, 2000) comb. nov., D. marginata (Weise, 1905) comb.

nov., D. marginata (Weise, 1905) comb. nov., D. monteverdensis (Borowiec, 2000) comb. nov., D. nevermanni Uhmann, 1930 comb. nov., D. panamensis (Borowiec, 2000) comb. nov., D. rubiginosa (Boheman, 1862) comb. nov., D. rubricata (Guérin-Méneville, 1844) comb. nov., D. sanguinea (Champion, 1894) comb. nov., D. scarlatina (Spaeth, 1938) comb. nov., D. tambitoensis (Borowiec, 2000) comb. nov., D. tricolor (Spaeth, 1938) comb. nov.; Katkispa elongata (Pic, 1934) comb. nov.; Lechispa parallela (Pic, 1930) comb. nov., P. rosariana (Maulik, 1931) comb. nov.; Parentispa formosa (Staines, 1996) comb. nov., P. gracilis (Baly, 1878) comb. nov., P. vagelineata (Pic, 1926) comb. nov.; Pseudimatidium bondari (Spaeth, 1938) comb. nov., P. discoideum (Boheman, 1850) comb. nov., P. florianoi (Bondar, 1942) comb. nov., P. gomescostai (Bondar, 1943) comb. nov., P. limbatum (Baly, 1885) comb. nov., P. limbatellum (Boheman, 1862) comb. nov., P. madoni (Pic, 1936) comb. nov., P. neivai (Bondar, 1940) comb. nov., P. pallidum (Baly, 1885) comb. nov., P. pici (Staines, 2009) comb. nov., P. procerulum (Boheman, 1862) comb. nov., P. rufum (Pic, 1926) comb. nov.; Pseudostilpnaspis curvipes (Uhmann, 1951) comb. nov., P. lata (Baly, 1885) comb. nov.; Stenispa minasensis (Pic, 1931) comb. nov., S. viridis (Pic, 1931) comb. nov.; Weiseispa angusticollis (Weise, 1893) comb. nov., W. bimaculata (Baly, 1858) comb. nov., W. cavenensis (Pic, 1923) comb. nov., W. membrata (Uhmann, 1957) comb. nov., W. peruana (Weise, 1910) comb. nov.; Xenispa atra (Pic, 1926) comb. nov., X. baeri (Pic, 1926) comb. nov., X. bahiana (Spaeth, 1938) comb. nov., X. bicolorata (Uhmann, 1948) comb. nov., X. boliviana (Weise, 1910) comb. nov., X. carinata (Pic, 1934) comb. nov., X. clermonti (Pic, 1934) comb. nov., X. collaris (Waterhouse, 1881) comb. nov., X. columbica (Weise, 1910) comb. nov., X. consobrina (Weise, 1910) comb. nov., X. costaricensis (Uhmann, 1930) comb. nov., X. cvanipennis (Boheman, 1850) comb. nov., X. elegans (Baly, 1875) comb. nov., X. exigua (Uhmann, 1930) comb. nov., X. fallaciosa (Pic, 1923) comb. nov., X. fulvimana (Pic, 1923) comb. nov., X. garleppi (Uhmann, 1937) comb. nov., X. germaini (Weise, 1905) comb. nov., X. grayella (Baly, 1858) comb. nov., X. jataiensis (Pic, 1923) comb. nov., X. ovatula (Uhmann, 1948) comb. nov., X. plaumanni (Uhmann, 1937) comb. nov., X. pygidialis (Uhmann, 1940) comb. nov., X. romani (Weise, 1921) comb. nov., X. scutellaris (Pic, 1926) comb. nov., X. sulcicollis (Champion, 1920) comb. nov., X. testaceicornis (Pic, 1926) comb. nov., X. tibialis (Baly, 1858) comb. nov., X. tricolor (Weise, 1905) comb. nov., X. uhmanni (Pic, 1934) comb. nov., X. zikani (Spaeth, 1938) comb. nov.; Windsorispa bicoloricornis (Pic, 1926) comb. nov., W. latifrons (Weise, 1910) comb. nov., W. submarginata (Pic, 1934) comb. nov. The replacement name Cephaloleia pici nom. nov. is proposed for Cephaloleia basalis Pic, 1926 not Weise, 1910. Two species: Demotispa sallei Baly, 1858 and Melanispa bicolor Zayas, 1960 are considered as Imatidiini incertae sedis because they do not fit in any currently recognized genus. Lectotypes are designated for Demotispa pulchella Baly, 1858 and Himatidium mauliki Bondar, 1942 to stabilize the nomenclature in the group.

Key words. Coleoptera, Chrysomelidae, Cassidinae, Imatidiini, entomology, taxonomy, new genus, new synonymy, new combination, lectotype designation, Neotropical Region

Introduction

Imatidiini Hope, 1840 is a New World tribe of tortoise beetles (Coleoptera: Cassidinae) distributed from the United States to northern Argentina with about 400 described species. Most species are distributed in the Andes from Nicaragua to Bolivia and in various regions of Brazil. Within Brazil particularly species rich areas are the Atlantic forest (i.e. Bahia, Rio de Janeiro), the Amazon, and the central Brazilian plateau (Goiás, Minas Gerais). Brazil is currently the most species-rich country with 129 known species, which could be due to its enormous size. However, if the actual area of the country is considered, the most species-rich would be Costa Rica (78) and Panama (75) which had incredible diversity despite the smaller geographic scale. Other countries organized by number of species are as follows: Colombia (65), Ecuador (58), Peru (50), Bolivia (33), French Guyana (30), Mexico (28), Guatemala (26), Venezuela (23), Argentina (13), Nicaragua (10), Surinam and Paraguay (each 7), Guyana (4), Belize (3), Cuba, Honduras, Jamaica, Trinidad, and USA (each 2), Dominica, Dominican Republic, Guadeloupe and Uruguay (each 1) (UHMANN 1957a, 1964; STAINES 2014). Based on the aforementioned enumerations, it is evident that species numbers abruptly decreases in subtropical areas. Many countries in reality most likely have much more diverse fauna, but are insufficiently sampled such as Bolivia, Colombia, Ecuador, Peru, and Venezuela. Further sampling of these countries might prove that their species diversity is much higher. even comparable to Brazil, due to the presence of the Andes. This would be particularly true for Colombia and Ecuador as these two countries also contain a high diversity of potential Imatidiini host plants.

All Imatidiini, with a one exception, are associated with various monocots, particularly Zingiberales and Arecaceae. This may explain the high diversity of Imatidiini in Costa Rica and Panama as these two countries represent a diversity hot spot for Zingiberales, particularly Heliconiaceae and Marantaceae. In Brazil, the diversity of Heliconiaceae and Marantaceae is not as high thus Imatidiini frequently use other plant families such are Poaceae and Cyperaceae.

Imatidiini is currently composed of what was traditionally regarded as two independent tribes within two separate subfamilies (Cephaloleiini in Hispinae and Imatidiini in Cassidinae), a system established by CHAPUIS (1875) and followed by most authors until recently. However, even WEISE (1910b), pointed out that both tribes as well as both subfamilies have transitional taxa and are insufficiently separated. This proved to be true and both families were synony-mized (i.e. CHEN 1940, 1964). MONRÓS & VIANA (1947) were the first to formally synonymize Cephaloleiini with Imatidiini, however, it was not fully respected by subsequent authors, thus BOROWIEC (1995) and STAINES (2002) resynonymized the tribes and used Cephaloleiini Chapuis, 1875 as the valid name for both. Recently, BOUCHARD et al. (2011) corrected the name to Imatidiini Hope, 1840, following the principle of priority as HOPE (1840) was first who published an available name for that group.

Imatidiini genera were reviewed not long ago (STAINES 2002), however, recent examination of extensive type material showed that some genera were misapplied and that there are some species not fitting in the currently recognized genera. This mainly applies to the traditionally problematic genus *Demotispa* Baly, 1858, used as a collective taxon with problems with its classification having been pointed out several times in the past (i.e. WEISE 1910b, UHMANN 1948, BOROWIEC 2000). STAINES (2009) first attempted to rearrange the *Demotispa* species,

however, without reconsideration of the generic system and being based on invalid type species designation, his taxonomic changes proved to be erroneous. Below I provide a review of the Imatidiini genera with correction of *Demotispa* type species designation and appropriate new combinations. The history of *Demotispa* species and their past and present classification is summarized in Table 1.

Material and methods

All taxonomic changes were made upon study of respective type material. Several species were placed in their genera based on primary descriptions only, this fact is always mentioned and these are treated as tentative placements. Each genus is provided with diagnostic characters, range, and summary of biological information. Newly described genera and those with changed concept are catalogued to clearly summarize taxonomic acts proposed in this paper. However, the catalogue is presented in a shortened form that includes references to primary descriptions only, in taxa currently recognized as synonyms the source where the synonymy was proposed is given. For a complete catalogue see STAINES (2014). Each catalogue entry contains the primary reference, followed by the type locality in its original spelling as it appeared in the primary description, and the depository of the respective type specimen(s). Type specimens I have studied are denoted with an exclamation mark '!'. Included are also additional remarks and distribution. Distribution of individual species is given based on published information only and original sources are always cited. When known, I also include the respective topmost administrative divisions (i.e. states for Brazil and Venezuela; regions for Peru; departments for Bolivia and Colombia; districts for Belize; and provinces for remaining countries). Distribution of genera is based on that of species currently included in the respective genus (i.e. see UHMANN 1957a).

Genitalia were studied in most taxa, however, they proved to be very uniform and without classification value at the generic level, and thus are not described or discussed further. They might become potentially useful at the species-level, however, the differences are minor and closely related species have them nearly identical.

For species provided with lectotype designations, the original type material is also given and is cited in original spelling as the data appeared on the respective labels. Double vertical bar (||) separates data on different labels and a single vertical bar (|) separates rows within each label. Additional comments are placed in square brackets.

All genera are provided with a colour photograph of a typical representative to demonstrate external morphology. Photographs were taken using an Olympus SZX16 stereomicroscope with mounted Olympus DP73 digital camera. Each photograph was taken as 40–80 separate stacks and then composed in Helicon Focus software.

The key is based mainly on well visible dorsal characters as many Imatidiini specimens are usually glued on cards. The antennae of many genera are very fragile and many specimens in collections have them missing. This is particularly true for genera with very thin antennae like *Imatidium* Fabricius, 1801, *Demotispa* Baly, 1858 and *Calliaspis* Dejean, 1836. Therefore I attempt to use antennal characters as late as possible in the key. However, some genera can be easily separated by these antennal, as well as ventral characters, thus I give a paragraph

depicting these distinctive characters after the key, which may help to separate some genera more easily.

ASLAM (1966) published a review of *Imatidium*. The publication appeared in the volume 8 of 13th series of *The Annals and Magazine of Natural History* with the year listed as 1965, however, the publication was actually published as late as on 6 July 1966, as is printed on wrappers. Therefore publication year for the taxa described in that paper is changed here to 1966.

Acronyms of the collection depositories:

- BMNH Natural History Museum, London, United Kingdom (Max Barclay);
- DBET Department of Biodiversity and Evolutionary Taxonomy, Wrocław, Poland (Lech Borowiec);
- SDEI Senckenberg Deutsches Entomologisches Institut, Münchenberg, Germany (Stephan M. Blank);
- MMUE Manchester Museum, Manchester, United Kingdom (Dmitri Logunov);
- MNHN Muséum National d'Histoire Naturelle, Paris, France (Antoine Mantilleri);
- MNRJ Museu Nacional, Rio de Janeiro, Brazil (Miguel and Marcela Monné);
- MTD Museum für Tierkunde, Dresden, Germany (material not studied);
- NHRM Naturhistoriska Riksmuseet, Stockholm, Sweden (Bert Viklund);
- USNM National Museum of Natural History, Smithsonian Institution, Washington, D. C., USA (material not studied);
- ZMHB Museum für Naturkunde, Berlin, Germany (Johannes Frisch, Joachim Willers).

Additional abbreviations: HT – holotype; LT – lectotype; PT – paratype; ST – syntype(s); ! – respective type specimen(s) and collection was examined in this study.

Taxonomy

Imatidiini Hope, 1840

Imatidiidae Hope, 1840: 152

Himatidiini Chapuis, 1875: 361 (as Himatidiites, unjustified emendation; type genus: *Himatidium* Latreille, 1804) Cephaloleiini Chapuis, 1875: 277 (as Céphaloléites)

Cephaloliini Weise, 1910b: 75 (unjustified emendation; type species: *Cephalolia* Gemminger & Harold, 1876) Imatidiini Hincks, 1952: 332 (objective junior synonym of Imatidiini Hope, 1840)

Distinguishing characters. Imatidiini species can be easily distinguished from other New World tribes by the head being visible from above, elytra smooth and without striae, ribs, or strongly impressed punctures, the presence of setae in the anterior corners of the pronotum, and onisciform larvae. Smooth elytra are also present in Arescini Chapuis, 1875, Hybosispini Weise, 1910, Prosopodontini Weise, 1910, and Spilophorini Chapuis, 1875 which might in some respects appear similar to the Imatidiini. Spilophorini differs in the presence of setae in all four pronotal corners and exophagous larvae bearing an exuvial shield on the apical furca. Prosopodontini have a seta present in each posterior corner of the pronotum and larva with a widened abdominal plate. Arescini has similar onisciform larvae but it has the margin above the head divided forming two flaps, while Imatidiini larvae have the anterior margin complete; Arescini adults differ by the head with interantennal projection and first antennomere (except of *Xenarescus monoceros* (Olivier, 1808)) with a projecting internal lobe, while Imatidiini do not have an interantennal projection, only a more or less distinct carina and the first antennomere is always without a lobe. Hybosispini

are the most similar, but differ in the pronotum without setae in any corner and having the internal eye margin carinate.

Genera excluded from Imatidiini. SEKERKA et al. (2014) transferred the genus *Cladispa* Baly, 1858 to Spilophorini based on adult and larval morphology. Here I transfer the genus *Solenispa* Weise, 1905 to Hybosispini Weise, 1910 because it does not have any setae on the pronotum and has a carinate internal margin of the eye.

Biology. The tribe is associated with various monocots, mainly Zingiberales (Costaceae, Heliconiaceae, Marantaceae, and Zingiberaceae), Arecaceae, Poaceae, and Bromeliaceae. Several species are also associated with Cyperaceae, Cyclanthaceae, and Orchideaceae. Host plants were summarized by STAINES (2004, 2014). A single species, *Imatidium rufiventre* Boheman, 1850, was recorded from a dicot tree, *Inga marginata* Willd, belonging to the Fabaceae (GILBERT et al. 2001). Other published associations with dicots must be regarded as doubtful because they were not based on feeding damage by adults or larvae.

Imatidiini larvae are onisciform, rather uniform in shape, and pupate inside the last larval skin. Larvae of most species live hidden in young rolled or folded leaves. Immature stages were recently described in detail by GARCÍA-ROBLEDO et al. (2010) and SEKERKA et al. (2013).

History of the classification of the tribe. CHAPUIS (1875) was the first to establish a complex tribal classification of the Hispinae and Cassidinae, however he did not use Latin for the tribal names. He proposed the names Céphaloléites and Himatidiites, the latter based on Himatidium Latreille, 1804, an unjustified emendation of *Imatidium* Fabricius, 1801. WEISE (1910b) proposed the name Cephaloliini, based on Cephalolia Gemminger & Harold, 1876, an unjustified emendation of Cephaloleia Chevrolat, 1836, and did not mentioned Chapuis's paper. SPAETH (1929) was to Latinize Himatidiites as Himatidiitae and considered Chapuis as the author of the name. MONRÓS & VIANA (1947) synonymized both tribes, considering Cephaloliini as valid and accrediting Chapuis as author of both names. HINCKS (1952) emended Himatidiites Chapuis and Himatidiitae Spaeth to Imatidiini and considered the tribe as valid. UHMANN (1957a) emended Cephaloliini Weise to Cephaloleiini and considered himself as the author of the name. Borowiec (1995) and Staines (2002) considered Imatidiini Chapuis a synonym of Cephaloleiini Chapuis and this system was followed until recently. BOUCHARD et al. (2011) considered both tribes as valid and changed the authorship of Imatidiini from Chapuis, 1875 to Hope, 1840 without any note. HOPE (1840) proposed the name Imatidiidae which has a Latin ending and being available from its original publication. Both tribes are beyond doubt synonymous, differing only in a single character – explanate margin of the elytra, however, this character appears to have evolved several times independently as it occurs in nearly all genera and is variable within each genus. Because of the synonymy, the valid name must be Imatidiini Hope, 1840 as it is the oldest available.

Groups based on mouthparts. Imatidiini genera can generally be divided into three groups on the basis of mouthparts. The first group has the mouthparts hypognathous, with all parts visible only from the underside, and the labrum facing ventrally (*Aslamidium* Borowiec, 1984, *Caloclada* Guérin-Méneville, 1844, *Parentispa* gen. nov., and *Weiseispa* gen. nov.; as in Fig. 33). The second group contains genera with prognathous mouthparts and the labrum facing anteriorly thus not visible from underside, but not projecting forward and not visible from above either (*Calliaspis* Dejean, 1836, *Cephaloleia* Chevrolat, 1836, *Demotispa* Baly, 1858, *Imatidium*

Fabricius, 1801, *Katkispa* gen. nov., *Melanispa* Baly, 1858, *Lechispa* gen. nov., *Parimatidium* Spaeth, 1938, *Pseudimatidium* Aslam, 1966, *Pseudostilpnaspis* Borowiec, 2000, *Spaethaspis* Hincks, 1952, *Stenispa* Baly, 1858, and *Xenispa* Baly, 1858; as in Figs 30–32, 34). Finally, the third group comprises genera with fully prognathous mouthparts, strongly projecting forward, thus the labrum is visible dorsally (*Cyclantispa* gen. nov., *Homalispa* Baly, 1858, and *Xanthispa* Baly, 1858; Figs 1–3, 29). However, some genera are transitional between the groups. For instance *Katkispa*, *Demotispa*, and *Pseudostilpnaspis* have the mouthparts slightly projecting forward, thus partly visible from above, but the labrum is still not visible from above (Figs 12, 17, 30). *Cephaloleia* species also display some variability in the position of the mouthparts. In most species it is diagonally oriented, thus subventral, but the labrum is always facing anteriorly.

Key to Imatidiini genera

1	Mouthparts prognathous and strongly projecting forward (Fig. 29), thus easily visible from above. Labrum enlarged and visible from above. Habitus: Figs 1–3
_	Mouthparts prognathous or hypognathous not or slightly projecting forward (Figs 30–34), thus not visible or only palps partly visible. Labrum not visible from above. Habitus: Figs 4–25.
2	Antennae short, as long as pronotal base and with two basal glabrous antennomeres. Antennomere III ca 1.8 times longer than IV, I and II combined only slightly longer than III. Pronotum not emarginate above head, with anterior corners weakly marked and anterior margin protruding anteriad.
_	Antennae long, about 1.5 times longer than pronotal base, and with one basal glabrous antennomere. Antennomere III ca. 1.2 times longer than IV, I and III combined distinctly much longer than III. Pronotum deeply emarginate above head with anterior corners angulate. Habitus: Fig. 1
3	Anterior margin of labrum convex, maxillary palps short, as long as two basal antenno- meres (Fig. 29). Interantennal space with obtuse, low and narrow carina, thus appearing impressed. Body nearly parallel-sided, pronotum pale and elytra metallic blue. Habitus: Fig. 2
_	Anterior margin of labrum emarginate, maxillary palps as long as three basal antennomeres and very prominent. Interantennal space with large strongly elevated and broad carina. Body widened posteriorly, drop-shaped and uniformly red. Habitus: Fig. 3
4	Pronotum semicircular with distinctly rounded lateral sides
_	Pronotum subquadratic and parallel-sided or trapezoidal 15
5	Head with sharp interantennal carina
-	Interantennal carina absent, head between antennae impressed or convex 10
6	Pronotum without impression and with regularly convex and even surface. Body dorsally usually red to brown and without pattern
-	Pronotum with large latero-basal impression on each side, thus its surface uneven. Dorsum yellow with black pattern. Habitus: Fig. 5

7	Body elongate. Antennae 11 segmented
_	Body shortly oval or circular. Antennae 10 segmented. Habitus: Fig. 7.
8	Antennae filiform without pectinate or triangular antennomeres
_	Antennomeres IV–X pectinate in male and triangular in female. Habitus: Fig. 25
9	Explanate margin of elytra broadly explanate, disc of elytra slightly convex. Body dorsally red or brown. Habitus: Fig. 18
_	Explanate margin of elytra narrow, body moderately convex. Body dorsally metallic blue <i>Cephaloleia</i> Chevrolat, 1836 (partim) ¹
10	Interantennal area flat or convex and broader than first antennomere
_	Interantennal area with deep, pit-like fovea and narrower than first antennomere 13
11	Pronotum broadly semicircular, 1.9–2.3 times wider than long. Body broadly oval, sub- circular or elongate, but not widened posteriorly. Mouthparts more or less projecting, thus usually at least palps visible from above
_	Pronotum narrow, 1.5 times wider than long. Body widened from base posterior-
	ly. Interantennal area flat. Mouthparts never visible from above. Habitus: Fig. 19.
12	Antennae long and filiform, first two antennomeres elongate. Body broadly oval with
	broad explanate margin. Habitus: Figs 14–15 Demotispa Baly, 1858
_	Antennae short and thick, first two antennomeres globose. Body elongate, parallel-sided,
13	explanate margin narrow. Habitus: Fig. 17 <i>Pseudostilpnaspis</i> Borowiec, 2000 Tarsal claws simple
_	Tarsal claws with large basal tooth. Habitus: Fig. 16 <i>Parimatidium</i> Spaeth, 1938
14	Lateroapical margins of elytra smooth. Antennae filiform and short, shorter than basal
	width of pronotum. Habitus: Fig. 4 Imatidium Fabricius, 1801
_	Lateroapical margins of elytra serrate. Antennae moderately thick and long, as long as or slightly longer than basal width of pronotum. Habitus: Fig. 9.
	<i>Xenispa</i> Baly, 1858 (partim) ²
15	Lateroapical margin of elytra smooth
_	Lateroapical margin of elytra finely to coarsely serrate
	Body stout with broadly explanate margin of elytra, widened around midlength 17
-	Body elongate with narrow explanate margin of elytra, mostly parallel-sided or widened posteriorly
17	Anterior corners of pronotum narrow and obtuse. Head with sharp interantennal carina.
1/	Tarsal claws simple. Habitus: Fig. 13
_	Anterior corners of pronotum broad and rounded. Interantennal area convex, without
	carina. Tarsal claws with large basal tooth. Habitus: Fig. 8 Spaethaspis Hincks, 1952

¹ Here belong two *Cephaloleia* species, *C. barroi* Uhmann, 1959, *C. sandersoni* Staines, 1996 and *Demotispa* sallei Baly, 1858. Quite likely these three species belong to a different genus. See more comments in the *Cephaloleia* chapter.

² Here belong eight (possibly ten) species with semicircular pronota.



Figs 1–11. Dorsal habitus. 1 – Homalispa batesii Baly, 1858, French Guyana: Mt. Kaw; 2 – Cyclantispa gracilis (Baly, 1885), Panama: La Fortuna; 3 –Xanthispa cimicoides (Guérin-Méneville, 1844), French Guyana: Le Larivot; 4 – Imatidium thoracicum Fabricius, 1801, Ecuador: Cascada San Rafael; 5 – Aslamidium (s. str.) capense (Herbst, 1799), French Guyana: Fourgassie; 6 – Aslamidium (Neoaslamidium) pichinchaensis Borowiec, 1998, Ecuador: Puerto Misahuallí; 7 – Calliaspis sachaensis Borowiec & Stojczew, 1998, Ecuador: Shushufindi; 8 – Spaethaspis lloydi Hincks, 1952, Ecuador: Río Puno. 9 – Xenispa testaceicornis (Pic, 1926), Bolivia: Refugio Los Volcanes; 10 – Xenispa costaricensis (Uhmann, 1930), Panama: La Fortuna; 11 – Euxema insignis Baly, 1858, syntype, Panama: Volcan de Barú. All scale bars = 2.5 mm.



Figs 12–24. Dorsal habitus. 18 – *Katkispa insignis* (Pic, 1934), syntype, Venezuela: Colonia Tovar; 13 – *Weiseispa angusticollis* (Weise, 1893), Ecuador: Río Palenque; 14 – *Demotispa pulchella* Baly, 1858, lectotype, Peru; 15 – *Demotispa rubiginosa* (Boheman, 1862), Panama: Chiriquí; 16 – *Parimatidium rubrum* (Boheman, 1850), French Guyana: St. Laurent du Maroni; 17 – *Pseudostilpnaspis lata* (Baly, 1885), Panama: Santa Clara; 18 – *Pseudimatidium elaeicola* Aslam, 1966, Colombia: Calima area; 19 – *Windsorispa latifrons* (Weise, 1910), Colombia: Santo Antonio; 20 – *Cephaloleia flavipennis* Baly, 1869, Ecuador: Río Hollín; 21 – *Melanispa* sp., Guadeloupe; 22 – *Parentispa formosa* (Staines, 1996), Panama: La Fortuna; 23 – *Stenispa attenuata* Baly, 1875, Panama: Gamboa; 24 – *Lechispa parallela* (Pic, 1930), syntype, Argentina: Rosas. All scale bars = 2.5 mm.



Figs 25–28. Dorsal habitus and pygidia. 25 – *Caloclada fasciata* Guérin-Méneville, 1844, French Guyana: Mt. Kaw; 26–27 *Parentispa formosa* male and female last ventrite and pygidium; 28 – *Lechispa parallela* (Pic, 1930), pygidium in posterior view. Scale bars: Fig. 25 = 5 mm, Figs 26–28 = 0.5 mm.

18 Body variously shaped but at most 2.7 times longer than wide. Pygidium visible or not
but never with sharp and protruding horizontal carina
- Body narrow, ca. 4.5 times longer than wide. Pygidium dorsally mostly visible, with sharp
and strongly protruding horizontal carina (Fig. 28). Habitus: Fig. 24.
19 Pronotum parallel-sided or widening anteriorly. Pygidium visible from above. Various
regions, mainly continental South and Central America
- Pronotum trapezoidal, strongly narrowed anteriorly. Pygidium not visible from above.
Endemic to Guadeloupe. Habitus: Fig. 21 Melanispa Baly, 1858
20 Mouthparts prognathous, labrum facing anteriorly. Pygidium in both sexes of same size,
never with parabolic cavity. Apex of elytra usually rounded, only one species with truncate
apex. Habitus: Fig. 20 Cephaloleia Chevrolat, 1836 (most species)



Figs 29–34. Ventral aspects of head. 29 – *Cyclantispa gracilis* (Baly, 1885); 30 – *Katkispa insignis* (Pic, 1934); 31 – *Windsorispa latifrons* (Weise, 1910); 32 – *Weiseispa angusticollis* (Weise, 1893); 33 – *Parentispa formosa* (Staines, 1996); 34 – *Lechispa parallela* (Pic, 1930). Scale bars = 0.5 mm.

_	Mouthparts hypognathous, labrum facing ventrally. Pygidium in males (Fig. 26) greatly enlarged, almost as long as wide and parabolic, in females (Fig. 27) slightly longer than wide and convex, with low and weakly indicated transverse carina. Habitus: Fig. 22.
21	Pronotum even, without impressions. Body usually metallic blue or black, never with a
	pattern. All species with known associations feed on Poaceae
_	Pronotum uneven, with large latero-basal impression on each side. Body trapezoidal, yellow with variable black pattern. On Marantaceae. Habitus: Fig. 6.
	Aslamidium subgen. Neoaslamidium Borowiec, 1998
22	Body elongate oval, subparallel-sided or widened posteriorly
_	Body cuneiform, in apical third strongly tapered posteriorly. Habitus: Fig. 23
	<i>Stenispa</i> Baly, 1858
22	Anterior corners of pronotum indistinct or weakly marked, anterior margin convex and
	distinctly reaching behind anterior corners
_	Pronotum with distinctly protruding anterior corners, thus area above head emarginate, anterior margin sometimes slightly convex, never reaching behind anterior corners 25
24	Anterior margin strongly protruding anteriad, anterior corners small but distinct, lateral
24	
	sides smooth. Body slightly widened posteriorly. Antennomere I only slightly shorter than
	second. Habitus: Fig. 11
_	Pronotum without distinct anterior corners, only with small tubercle possessing setae,
	anterior margin regularly convex, lateral sides slightly serrate. Body parallel-sided.
	Antennomere I extremely short, second 3.6 times longer than first. Habitus: Fig. 12
	Katkispa gen. nov.
25	Body dorsally finely punctate. Elytra uniformly metallic blue or black, pronotum uniformly
	yellow or dark. Habitus: Fig. 10
-	Body dorsally coarsely punctate. Elytra with pale explanate margins, pronotum pale with
	median metallic stripe Cephaloleia Chevrolat, 1836 (partim) ¹

Characteristic morphological features instantly distinguishing some genera

Antennae 10-segmented: Calliaspis (Fig. 7).

Antennomeres IV-X pectinate or triangular: Caloclada (Fig. 25).

- Mouthparts strongly projecting anteriad: *Homalispa* (long antennae, Fig. 1), *Xanthispa* (short antennae + emarginate labrum, Fig. 3), and *Cyclantispa* (short antennae + convex labrum, Fig. 2).
- Pronotum with large latero-basal impressions: *Aslamidium* (pronotum semicircular nominotypical subgenus, Fig. 5; pronotum parallel-sided – subgenus *Neoaslamidium*, Fig. 6).

Pronotum trapezoidal and strongly narrowing anteriorly: Melanispa (Fig. 21).

Anterior margin of pronotum strongly protruding anterad: *Euxema* (Fig. 11).

Body thin, ca. 4.6 times longer than wide: Lechispa gen. nov. (Fig. 24).

¹ Here belong *C. orchideivora* Sekerka, Windsor & Staines, 2013 and possibly also *C. irregularis* Uhmann, 1930.

- Body cuneiform, strongly tapering posteriorly and with serrate lateroapical margins of elytra: *Stenispa* (Fig. 23).
- Apical margin of elytra truncate: *Melanispa* (pronotum trapezoidal with smooth lateral sides narrowing apically, Fig. 21) and *Parentispa* (pronotum subparallel-sided with serrate sides widening apically, Fig. 22)
- Tarsal claws with large basal tooth: *Parimatidium* (semicircular pronotum, Fig. 16) and *Spaethaspis* (transverse and parallel-sided pronotum, Fig. 8)

Pygidium nearly as long as wide and parabolic: Parentispa gen. nov. (Fig. 26).

Overview of Imatidiini genera

Aslamidium Borowiec, 1984

(Figs 5-6)

Imatidium sensu Aslam, 1966: 689 (based on erroneous type designation).

Aslamidium Borowiec, 1984: 412. Type species: Cassida capense Herbst, 1799 by original designation.

Neoaslamidium Borowiec, 1998: 371 (valid subgenus). Type species: Himatidium formosum Spaeth, 1907 by original designation.

Distinguishing characters. *Aslamidium* species can be readily distinguished by the presence of large latero-basal impressions on the pronotum in combination with hypognathous mouthparts and the presence of an interantennal carina. Other Imatidiini species have the surface of the pronotum even, without prominent impressions. The two subgenera can be distinguished by the shape of the pronotum, which is semicircular in *Aslamidium* s. str. (Fig. 5) and subquadratic in *Neoaslamidium* (Fig. 6).

Remarks. FABRICIUS (1801) proposed the genus *Imatidium* and included five species: *I. fasciatum* Fabricius, 1801, *I. lineola* Fabricius, 1801, *I. sanguineum* Fabricius, 1801, *I. thoracicum* Fabricius, 1801, and *I. trimaculatum* Fabricius, 1801. LATREILLE (1810) designated *I. thoracicum* Fabricius, 1801 as the type species. Subsequently, DUPONCHEL & CHEVROLAT (1843) designated *I. fasciatum* as the type species and following authors mostly accepted this designation as valid (i.e. CHENU 1884, SPAETH 1938, MONRÓS & VIANA 1947).

ASLAM (1966) revised the generic concept of *Imatidium* and considered *Cassida capense* Herbst, 1799 (= *I. fasciatum*) as the type species, proposing a new genus, *Himatidiella* Aslam, 1966 for species related to *Imatidium thoracicum* Fabricius, 1801, with the latter designated as the type species. Most likely, Aslam overlooked LATREILLE's (1810) designation, despite it being considered as valid by HINCKS (1952), and followed the concept of DUPONCHEL & CHEVROLAT (1843) instead. However, LATREILLE's (1810) designation is the oldest available correct designation, thus remaining valid under the ICZN (1999), because of this BOROWIEC (1984) proposed a new genus *Aslamidium* for *Imatidium* sensu Aslam (1966).

Most recently, BOROWIEC (1998) divided *Aslamidium* into two subgenera on the basis of the body shape.

Number of species. *Aslamidium* – 7, *Neoaslamidium* – 8 (BOROWIEC 1998; BOROWIEC & SASSI 2001; STAINES 2006a, 2013).

Key to species. BOROWIEC & SASSI (2001) and STAINES (2006a, 2013) cover all known species.

Biology. Only four species have published host plant associations. These mainly include two plant families, Marantaceae (mainly *Calathea* spp.) and Heliconiaceae (*Heliconia* spp.),

of the Zingiberales (i.e. SPAETH 1938, MESKINS et al. 2008). According to our observations (Windsor & Sekerka, unpubl. data) most species prefers various *Calathea* species, particularly the subgenus *Neoaslamidium*, which seems to be exclusively associated with this plant genus. Two species of the nominotypical subgenus were recorded from both plant families and we observed two other species feeding exclusively on *Heliconia* species (Sekerka & Windsor, unpubl. data). The record of *Aslamidium* (*Neoaslamidium*) strandi (Uhmann, 1930) on Rubiaceae by FLOWERS & JANZEN (1997) is probably based on an occasional sitting record, which was almost surely not its true host plant.

Larvae of most species feed on open leaf surfaces, mainly on the upper side of the leaf. **Distribution.** Mexico to Bolivia and south Brazil.

Calliaspis Dejean, 1836

(Fig. 7)

Calliaspis Dejean, 1836: 367. Type species: Cassida rubra Olivier, 1808 by monotypy.

Cyanaspis Weise, 1904: 433; SPAETH (1905): 84 (synonymy). Type species: Cyanaspis testaceicornis Weise, 1904 by monotypy.

Distinguishing characters. The genus can be unambiguously distinguished by its ten-segmented antennae which is a unique character within the tribe. Unfortunately, pinned museum specimens frequently have broken antennae, but the genus is also characterized by its general habitus. All species have a short and very stout body, with broadly explanate margins and a semicircular pronotum (Fig. 7). It also possesses prograthous, but not projecting mouthparts, an interantennal carina, and smooth apico-lateral margins of the elytra.

Remarks. DEJEAN'S (1836) proposed the genus and included five species, however, only one species, *Cassida rubra* Olivier, 1808, was a valid taxon, which became the type species by monotypy.

WEISE (1904) described the genus *Cyanaspis* on the basis of ten-segmented antennae comparing it to *Himatidium* auct. thus he evidently did not know about the existence of *Calliaspis*. A year later *Cyanaspis* was synonymized with *Calliaspis* by SPAETH (1905).

Number of species. 20 (BOROWIEC 2003).

Key to species. BOROWIEC (2003) covers all the known species.

Biology. So far nothing was published on the biology of this genus as the association given by BURGESS et al. (2003) for *C. rubra* is based on a misidentification¹. Based on our field

¹ BURGESS et al. (2003) published an ecological paper on chrysomelid herbivory on *Aechmea nallyi* L. B. Smith (Bromeliaceae). Two voucher specimens were sent to C. L. Staines (USNM) who identified the species as *Calliaspis rubra* (Olivier, 1808) and that name was used in the paper. I have studied a single specimen preserved in USNM (Peru: Amazon Center for Education & Environmental Research, 28.iii.1999, M. Lowman & D. Krabill lgt.) and found that it was misidentified and in fact belongs to *Spaethiella erhardti* (Boheman, 1862). However, it bears Staines identification label (from 2000) as the latter species. Therefore, feeding association with *A. nallyi* must be transferred to *S. erhardti*. The specimen was also published as *S. erhardti* and treated as a new country record for Peru by CHABOO (2002) but without plant association. Moreover, BURGESS et al. (2003) mentioned also finding mines on leaves of *A. nallyi* and associated them also with *C. rubra*. Based on photographs published in the paper and description of the damage found on the plants, there is most likely a second cassidine species on *A. nallyi*, most probably some *Acenthroptera* Guérin-Méneville, 1844 species as this genus is known to have mining larvae in bromeliad leaves. The adult beetles may cause very extensive damage, however, they live mostly hidden among bases of leaves making them very difficult to find.

research, the genus seems to be associated with two plant families: Bromeliaceae and Poaceae (Windsor & Sekerka, unpubl. data).

Distribution. Colombia to Bolivia and SW Brazil.

Caloclada Guérin-Méneville, 1844, stat. restit.

(Fig. 25)

Cladophora Dejean, 1836: 366 (nomen nudum).

Caloclada Guérin-Méneville, 1844: 284. Type species: Caloclada fasciata Guérin-Méneville, 1844, designated here.

Octocladiscus Thomson, 1856: 480, **syn. nov.** Type species: *Octocladiscus flabellatus* Thomson, 1856 = *Caloclada fasciata* Guérin-Méneville, 1844, by monotypy.

Distinguishing characters. *Caloclada* is a very characteristic genus in the form of its antennae. The antennae show strong sexual dimorphism in the shape of antennomeres IV–X, being pectinate in males (Fig. 25) and triangular in females. Several *Cephaloleia* species also have sexually dimorphic antennae, however, these have only some of the five basal antennomeres (usually III–V) triangular in males and elongate in females.

Remarks. Guérin-Méneville (1844) proposed the name Caloclada as a replacement for Cladophora Dejean 1836, which was preoccupied. Moreover, Dejean's Cladophora is invalid because the original publication contained neither a description nor any valid species name associated with the genus. GUÉRIN-MÉNEVILLE (1844) clearly stated that he is giving the name Caloclada for Cladophora sensu Dejean and included two valid species, Caloclada fasciata Guérin-Méneville, 1844 and C. flabellata Guérin-Méneville, 1844, noting that both species are possibly forms of a single species. THOMSON (1856) also pointed the homonymy of *Cladophora* Dejean and provided a new name, *Octocladiscus*, however, he did not mention Caloclada. BALY (1858) synonymized Caloclada with Octocladiscus, retaining the latter as the valid name and synonymizing all the included species under O. fasciatus (Guérin-Méneville, 1844). Subsequent authors (i.e. UHMANN 1957a, STAINES 2002) omitted Caloclada, and considered Cladophora as being validated by Guérin-Méneville (1844) through his species, and thus considered it as synonym of Octocladiscus because of homonymy of Cladophora. However, Guérin-Méneville (1844) validly described Caloclada. As *Caloclada* has no senior homonym, it must be considered as valid and having priority over Octocladiscus. I was not able to find any type species designation for Caloclada thus I designate here C. fasciata as the type species.

Number of species. Monotypic (UHMANN 1957a).

Biology. So far, nothing is known about the biology of *Caloclada*. **Distribution.** French Guyana.

Cephaloleia Chevrolat, 1836

(Fig. 20)

Cephalolia Gemminger & Harold, 1876: 3601 (unjustified emendation).

Uhmannispa Monrós & Viana, 1947: 172; UHMANN (1957a): 14 (synonymy). Type species: Uhmannispa maculata Monrós & Viana, 1947 by original designation.

Cephaloleia Chevrolat, 1836 in DEJEAN (1836): 366. Type species: *Hispa nigricornis* Fabricius, 1792 designated by STAINES (1992).

Distinguishing characters. *Cephaloleia* is the largest genus of the tribe and it is a bit difficult to propose a combination of characters unique to the genus. Generally, *Cephaloleia* species are elongate and parallel-sided with narrow and smooth explanate margins of the elytra, subquadratic or anteriorly widening pronotum, rounded apex of the elytra and the pygidium usually being visible from above (Fig. 20). All species have mouthparts that are not visible from above but being directed forward or diagonally.

Remarks. The genus was proposed by Chevrolat in DEJEAN'S (1836) second catalogue and included 31 species, however, only two, *Hispa nigricornis* Fabricius, 1792 and *H. metallica* Fabricius, 1801, were validly described. BALY (1858) designated *Cephaloleia gratiosa* Baly, 1858 as the type species and this designation was generally accepted (i.e. UHMANN 1957a). However, BALY'S (1858) designation is invalid because the species was not originally included (article 69.1 of ICZN (1999)), thus STAINES (1992) designated *Hispa nigricornis* Fabricius, 1792, one of the two valid species originally included in the genus, as the type species.

The correct spelling used in the original publication is *Cephaloleia* Chevrolat in DEJEAN (1836). GEMMINGER & HAROLD (1876) considered BLANCHARD (1845) as the author of the genus and unjustly emended the name to *Cephalolia* Gemminger & Harold, 1876.

Having studied the type specimens of many *Cephaloleia* species, I found that some actually belong to different genera, while some described in *Demotispa* actually belong to *Cephaloleia*. *Cephaloleia barroi* Uhmann, 1959, *C. saundersi* Staines, 1996, and *Demotispa sallei* Baly, 1858 form a group of related species, most likely not congeneric with *Cephaloleia*, as they have a semicircular pronotum and convex body-shape, which in some respects is reminiscent of *Pseudostilpnaspis* species. However, having not examined their types I am leaving them in *Cephaloleia*. Some other *Cephaloleia* species like *C. cyanea* Staines, 1996, *C. facetus* Staines, 1996, and *C. gilvipes* Uhmann, 1930 might also belong to different genera.

BONDAR (1942) described *Himatidium mauliki* based on a long series of specimens. Subsequently it was transferred to Cephaloleia and a replacement name, Cephaloleia bondari, was proposed because of homonymy with C. mauliki Uhmann, 1930 (Monrós 1945). STAINES (2009) subsequently transferred the species to *Stilpnaspis*. I examined large part of the type series preserved in MNRJ and found it contains three different species, two belonging to *Cephaloleia* and one to *Pseudimatidium*. Therefore, a lectotype is designated for the Cephaloleia with bicolorous antennae as this character was mentioned in the original description (BONDAR 1942). The Lectotype, here designated, glued (top specimen on the pin): ²2682 [white and handwritten label] || Cotipo [red and handwritten label] || Himatidium 2682 | mauliki Bond. [white and handwritten label] || 398 [white and handwritten label]' (MNRJ); 5 paralectotypes pinned on the same pin as lectotype (lower two belong to C. cf. cognata Baly, 1869, remaining three are the same as the lectotype): same data as lectotype (MNRJ); 6 paralectotypes glued in pairs on three cards and pinned on one pin (all belonging to C. cf. cognata): 'Cotipo [red and handwritten label] || Heliconia | E. E Santo [white and handwritten label] || 398 [white and handwritten label]' (MNRJ); 10 paralectotypes, glued in pairs on cards and pinned on one pin (all except left specimen on the second card (= Pseudimatidium neivai (Bondar, 1940)) agrees with the lectotype): 'Cotipo [red and handwritten label] || 398 [white and handwritten label]' (MNRJ); 9 paralectotypes, glued on five cards and pinned on one pin (left one on the first card, one on third card and the three on bottom card agrees with the lectotype, remaining belong to *C*. cf. *cognata*): 'Cotipo [red and handwritten label]' (MNRJ).

Species transferred to *Cephaloleia. Cephaloleia basalis* (Weise, 1910) comb. nov. (from *Demotispa*), *C. nigronotata* (Pic, 1936) comb. nov. (from *Demotispa*), and *C. bondari* (Monrós, 1945) comb. nov. (from *Stilpnaspis*). Because of the new transfer *Cephaloleia basalis* Pic, 1926 has become a secondary junior homonym of *C. basalis* (Weise, 1910), thus a new substitute name, *C. pici* nom. nov, is proposed for *C. basalis* Pic, 1926.

Species transferred from *Cephaloleia* to other genera. *Cephaloleia minasensis* Pic, 1931 and *C. viridis* Pic, 1931 to *Stenispa*; *Cephaloleia formosus* Staines, 1996, *C. gracilis* Baly, 1878, and *C. vagelineata* Pic, 1926 to *Parentispa* gen. nov.

Number of species. 201 (UHMANN 1957a, STAINES 1996, present paper).

Key to species. Costa Rica (UHMANN 1930), Central America including Caribbean (STAINES 1996); 31 species known from the whole Neotropics (UHMANN 1936).

Biology. *Cephaloleia* species are associated with various monocots and only 54 of them have known host plants. Of these, 39 are associated with Zingiberales (Heliconiaceae, Maranthaceae, Costaceae, Zingiberaceae). Other species live on Arecaceae (8 species), Poaceae (4 species), Cyperaceae, Orchideaceae, and Bromeliaceae (each with one associated species). Larvae as well as adults of most species live in young rolled-up leaves or in inflorescences when rolled leaves are not available or are too young (e.g., MESKINS et al. 2008, GARCIA-ROBLEDO et al. 2010). Species associated with Arecaceae and Orchideaceae live in young not fully open leaves of their host plants and adults feed on 2–3 youngest leaves, usually only on the youngest, partly open leaf (SEKERKA et al. 2013).

Distribution. Mexico to northern Argentina.

Cyclantispa gen. nov.

(Figs 2, 29)

Type species. Homalispa gracilis Baly, 1885, here designated.

Other species included. Homalispa subelongata Pic, 1936.

Description. Body elongate oval, 2.0–2.2 times longer than wide. Length 4.5–6.0 mm. Body yellow to red with metallic blue elytra (Fig. 2).

Mouthparts prognathous, projecting forwards and visible from above (Figs 2, 29). Labrum enlarged, its apex rounded and covering mandibulae. Mandibula with three teeth. Maxillary palps as long as two basal antennomeres. Clypeus very short, triangular with low, narrow and obtuse carina projecting between antennal insertions, its lower margin densely pubescent. Antennal insertions deeply impressed. Antennae 11-segmented, strangulate, approximately as long as pronotal base, two basal antennomeres shiny, first globose, second subglobose. Length ratio of antennomeres: 100 : 131 : 277 : 167 : 163 : 132 : 157 : 139 : 171 : 165 : 279, first antennomere very short, second 1.3 times and third 2.8 times longer than first. Eyes large, outer margin with row of setose punctures. Vertex smooth, flat, and finely punctate. Head slightly longer than wide and moderately constricted behind eyes.

Pronotum circa 1.4 times wider than long, sub-rectangular, widest at base and slightly narrowing anteriorly. Anterior margin smooth, convex, moderately projecting forwards and with small tubercle possessing seta on each side at inner eye margin. Anterior corners rounded and not projecting forwards. Basal corners sharp forming almost right angle. Lateral margins weakly explanate, strongly swollen, and separated by impressed row of irregular punctures from disc with apical half slightly crenulate. Basal margin strongly projecting towards scutellum. Disc regularly convex, smooth, strongly shiny, and with several punctures baso-laterally.

Scutellum subpentagonal, smooth, and impunctate.

Elytra about 1.5 times longer than wide, elongate oval, slightly widened around midlength, weakly and regularly convex with ten rows of punctures plus scutellar row. Base of elytra smooth, distinctly wider than base of pronotum. Humeral angles rounded, not protruding. Humeral calli slightly convex, impunctate and micro-sculptured. Punctation completely regular. Punctures moderately large, foveolate. Intervals broad, circa 2–3 times wider than puncture diameter, with several additional setose micro-punctures. Otherwise intervals smooth and micro-sculptured. Punctures disposed regularly and densely in rows with interspaces narrower than puncture diameter. Marginal row distinct in whole length, regular. Explanate margin narrow, as wide as 0.15 elytron width, gradually narrowing towards apex, smooth, micro-sculptured and sparsely micro-punctate. Outer margin swollen, minutely serrate in whole length, serration gradually coarser towards apex of elytra. Each denticle possessing small seta on tip. Apex of elytra conjointly rounded. Epipleura flat, micro-sculptured and sparsely pubescent, gradually narrowing towards apex.

Prosternal process moderately broad with elliptical apex. Its surface smooth and microsculptured. Whole surface of meso-, metathorax and abdomen micro-sculptured and sparsely setose. Abdominal sterna I and II fused with slightly marked suture laterally.

Legs normal, all pairs equal. Tarsal claws broadly divergent, simple.

Sexual dimorphism indistinct.

Differential diagnosis. Prognathous and projecting mouthparts place the genus near *Homalispa* Baly, 1858 and *Xanthispa* Baly, 1858. The first differs in having long antennae, about 1.5 times longer than the base of the pronotum with one basal glabrous antennomere (as long as base the of the pronotum with two glabrous basal antennomeres in *Cyclantispa* gen. nov.) and the pronotum sub-trapezoidal with broadly explanate and canaliculate margins, anterior corners angulate and projecting forward (pronotum rectangular with narrow and non-canaliculate margins, anterior corners rounded and weakly marked in *Cyclantispa*). *Xanthispa* has similar antennae but differs in having much longer maxillary palps, a drop-shaped body and the internatennal space with a large and broad carina, while *Cyclantispa* has a subparallel-sided body, palps short, and the internatennal space with a very low carina causing the area to appear impressed.

Etymology. The genus is named after its association with Cyclanthaceae and the name is derived from that plant family name plus the generic name '*Hispa*' in reference to its relationships; gender is feminine.

Remarks and biology. I propose this genus for two species which are very different from all other known *Homalispa* species. Aside from the morphological characters given in the diagnosis, both genera also differ in host plant preference. *Homalispa* is associated with Poaceae and Arecaceae, while *Cyclantispa* is associated with Cyclanthaceae. *Cyclantispa gracilis* is a quite common species in Panama, particularly on *Cyclanthus bipartitus* Poit., living in the closed youngest leaves (Windsor & Sekerka, unpubl. data).

Number of species. 2.

Distribution. Bolivia and Panama.

Demotispa Baly, 1858

(Figs 14–15)

Demotispa Baly, 1858: 65. Type species: Demotispa pulchella Baly, 1858 by original designation.

Demothispa Gemminger & Harold, 1876: 3599 (unjustified emendation).

Stilpnaspis Weise, 1905b: 298, syn. nov. Type species: Stilpnaspis marginata Weise, 1905 by monotypy.

Rhodimatidium Aslam, 1966: 690, **syn. nov.** Type species: *Himatidium coccinatum* Boheman, 1862 by original designation.

Distinguishing characters. *Demotispa* species can be easily recognized by the prognathous and slightly projecting mouthparts, the semicircular pronotum, having the interantennal area broad, convex and without a carina, having a stout body with broadly explanated margins, and having filiform antennae (Figs 14–15). Some *Demotispa* might be misidentified as members of *Pseudostilpnaspis*, but the latter differs in having shorter, thicker antennae, with the first two antennomeres globose, and the body with narrow explanate margins. *Demotispa* has long, filiform antennae with first two antennomeres elongate, and the body with broadly explanate margins. Most of the *Demotispa* species have smooth lateroapical margins of the elytra, but a few have minute but distinct serrulation like *Windsorispa* gen. nov. but the latter differs in having a very narrow pronotum which is about 1.5 times wider than long while *Demotispa* has the pronotum at least two times wider than long. *Windsorispa* also has weakly convex elytra with a flat disc, while *Demotispa* is weakly to moderately convex. Moreover, *Windsorispa* has the mouthparts not visible from above.

Remarks. BALY (1858) clearly designated *D. pulchella* as the type species at the end of the genus description. Despite this fact MONRÓS & VIANA (1947) designated *D. pallida* Baly, 1858 as the type species. UHMANN (1957a) considered *D. pulchella* as the type species thus was in accordance with the original description. However, STAINES (1992) listed the species originally included in *Demotispa* and stated that 'There was no type species designation. [in BALY (1858)]'. He considered the designation by MONRÓS & VIANA (1947) as valid because it was older than Uhmann's, despite the fact that UHMANN (1957a) did not provided any designation as all such new acts made in his catalogue had 'Uhmann, hoc loco' instead of a reference. MONRÓS & VIANA (1947) designation is invalid as Baly himself designated the type species thus the type species is here corrected to *D. pulchella*.

This change renders quite a few taxonomic modifications because the whole generic concept has to be changed as the type species, *D. pulchella* (Fig. 14), is not congeneric with *D. pallida*. Moreover, *Demotispa* was always used as collective genus for species which did not fit to other Imatidiini genera.

Demotispa, sensu the type species, agrees with the first group of SPAETH's (1938) system of *Himatidium*. ASLAM (1966) erected the genus *Rhodimatidium* for these species, unaware of the existence of *Stilpnaspis*, which has the same generic characters. BOROWIEC (2000) studied the type species of *Stilpnaspis* and synonymized *Rhodimatidium* with it. However, as *D. pulchella* agrees also with this generic concept, thus both genera are synonymized here with *Demotispa*.

Of all species previously included in *Demotispa* only the type, *D. pulchella*, and two other species remain in that genus, while others are here transferred to various other genera (see Table 1 summarizing the history of *Demotispa-Stilpnaspis-Himatidium* complex). On the other hand all species previously included in *Stilpnaspis* (see BOROWIEC 2000) are transferred here to *Demotispa*.

placement based on primary description only.	ion only.				
Name	Original combination	UHMANN (1957)	BOROWIEC (2000)	STAINES (2009)	Present paper
angusticollis Weise, 1893	Demothispa	Demotispa	n/a	Stilpnaspis	Weiseispa
argentina Monrós & Viana, 1947	Demothispa	Demotispa	n/a	Stilpnaspis	Xenispa [TP]
atra Pic, 1926	Demothispa	Demotispa	n/a	Parimatidium	Xenispa [TP]
baeri Pic, 1926	Demothispa	Demotispa	n/a	Demotispa	Xenispa
bahianum Spaeth, 1938	Himatidium (Parimatidium)	n/a	Parimatidium	Parimatidium	Xenispa
basalis Weise, 1910	Demothispa	Demotispa	n/a	Demotispa	Cephaloleia
bicolorata Uhmann, 1948	Demotispa	Demotispa	n/a	Parimatidium	Xenispa
bicolorata Borowiec, 2000	Stilpnaspis	n/a	Stilpnaspis	n/a	Demotispa
bicoloricornis Pic, 1926	Demothispa	Demotispa	n/a	Parimatidium	Windsorispa [TP]
bimaculata Baly, 1858	Demotispa	Demotispa	n/a	Stilpnaspis	Weiseispa
biplagiata Pic, 1923	Demothispa	Demotispa	n/a	Demotispa	Weiseispa
boliviana Weise, 1910	Demothispa	Demotispa	n/a	Demotispa	Xenispa
bondari Spaeth, 1938	Himatidium	n/a	Demotispa	Demotispa	Pseudimatidium
brunneofasciata Borowiec, 2000	Demotispa		Demotispa	Demotispa	Pseudimatidium
carinata Pic, 1934	Demothispa	Demotispa	n/a	Demotispa	Xenispa
cayenensis Pic, 1923	Demothis pa	Demotispa	n/a	Demotispa	Weiseispa
clermonti Pic, 1934	Demothispa	Demotispa	n/a	Parimatidium	Xenispa
coccinatum Boheman, 1862	Himatidium	n/a	Stilpnaspis	n/a	Demotispa
columbica Weise, 1910	Stilpnaspis	n/a	Pseudostilpnaspis	n/a	Pseudostilpnaspis
columbica Weise, 1910	Demothis pa	Demotispa	n/a	Parimatidium	Xenispa
consobrina Weise, 1910	Demothis pa	Demotispa	n/a	Demotispa	Xenispa
costaricensis Uhmann, 1930	Cephalolia	Demotispa	n/a	Parimatidium	Xenispa
curvipes Uhmann, 1951	Demotispa	Demotispa	n/a	Parimatidium	Pseudostilpnaspis
cyanipenne Boheman, 1850	Himatidium	n/a	Parimatidium	Parimatidium	Xenispa
discoideum Boheman, 1850	Himatidium	n/a	Demotispa	Demotispa	Pseudimatidium
elaeicola Aslam, 1965	Pseudimatidium	n/a	Demotispa	Demotispa	Pseudimatidium
elegans Baly, 1875	Demotispa	n/a	Parimatidium	n/a	Xenispa
exigua Uhmann, 1930	Cephalolia	Cephaloleia	n/a	Parimatidium	Xenispa
					(continued below)

Table 1. Summary of placements of species included in genera Demotispa Baly, 1858, Parimatidium Spaeth, 1938, Stilpnaspis Weise, 1905. TP states for tentative

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Name	Original combination	UHMANN (1957)	BOROWIEC (2000)	STAINES (2009)	Present paper
fallaciosa Pic, 1923	Demothispa	Demotispa	n/a	Demotispa	Xenispa
filicornis Borowiec, 2000	Stilpnaspis	n/a	Stilpnaspis	n/a	Demotispa
flavipennis Pic, 1923	Demothispa	Demotispa	n/a	Demotispa	Demotispa [TP]
<i>florianoi</i> Bondar, 1942	Himatidium	n/a	Demotispa	Demotispa	Pseudimatidium
fulvimana Pic, 1923	Demothispa	Demotispa	n/a	Stilpnaspis	Xenispa
fulvum Boheman, 1850	Himatidium	n/a	Stilpnaspis	n/a	Demotispa
fuscocinctum Spaeth, 1929	Himatidium	n/a	Stilpnaspis	n/a	Demotispa
garleppi Uhmann, 1937	Demothispa	Demotispa	n/a	Parimatidium	Xenispa
germaini Weise, 1905	Demothispa	Demotispa	n/a	Demotispa	Xenispa
gomescostai Bondar, 1943	Himatidium	n/a	Demotispa	Demotispa	Pseudimatidium
grayella Baly, 1858	Demotispa	Demotispa	n/a	Parimatidium	Xenispa
impunctata Borowiec, 2000	Stilpnaspis	n/a	Stilpnaspis	n/a	Demotispa
jataiensis Pic, 1923	Demothispa	Demotispa	n/a	Parimatidium	Cephaloleia
lata Baly, 1858	Cephaloleia	Cephaloleia	n/a	Demotispa	Pseudostilpnaspis
latifrons Weise, 1910	Demothispa	Demotispa	n/a	Parimatidium	Windsorispa
limbata Baly, 1885	Demotispa	Demotispa	n/a	Demotispa	Pseudimatidium
<i>limbata</i> Pic, 1928 = <i>pici</i> Staines 2009 <i>Cephalolia</i>	Cephalolia	Cephaloleia	n/a	Demotispa	Pseudimatidium
(replacement name)					
limbatella Boheman, 1862	Himatidium	Demotispa	n/a	Demotispa	Pseudimatidium
madoni Pic, 1936	Demothispa	Demotispa	n/a	Demotispa	Pseudimatidium
marginata Weise, 1905	Stilpnaspis	n/a	Stilpnaspis	n/a	Demotispa
marginicolle Boheman, 1850	Himatidium	n/a	Parimatidium	Parimatidium	Parimatidium
<i>mauliki</i> Bondar, 1941 = <i>bondari</i> Himatidium Monrós, 1945 (replacement name)	Himatidium	Cephaloleia	n/a	Stilpnaspis	Cephaloleia
melancholica Weise, 1910	Demothispa	Demotispa	n/a	Stilpnaspis	Weiseispa
miniaceum Spaeth, 1923	Himatidium	n/a	Stilpnaspis	n/a	Demotispa
monteverdensis Borowiec, 2000	Stilpnaspis	n/a	Stilpnaspis	n/a	Demotispa
<i>neivai</i> Bondar, 1940	Himatidium	n/a	Demotispa	Demotispa	Pseudimatidium
nevermanni Uhmann, 1930	Demothispa	Demotispa	n/a	Stilpnaspis	Demotispa [TP]
					(continued below)

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Table	

Name	Original combination	[[HMANN (1957)	BOBOWEC (2000)	STAINES (2000)	Present naner
nigronotata Pic, 1936	Demothispa	Demotispa	n/a	Demotispa	Cephaloleia
ovatula Uhmann, 1948	Demotispa	Demotispa	n/a	Parimatidium	Xenispa
pallida Baly, 1858	Demotispa		Demotispa	Demotispa	Pseudimatidium
panamensis Borowiec, 2000	Stilpnaspis	n/a	Stilpnaspis	n/a	Demotispa
peruana Weise, 1910	Demothispa	Demotispa	n/a	Stilpnaspis	Weiseispa
plaumanni Uhmann, 1937	Demothispa	Demotispa	n/a	Parimatidium	Xenispa
<i>pulchella</i> Baly, 1858 = <i>magna</i> Weise, <i>Xenispa</i> 1910 (replacement name)	Xenispa	Demotispa	n/a	Parimatidium	Xenispa
pulchella Baly, 1858	Demotispa	Demotispa	n/a	Stilpnaspis	Demotispa
pygidialis Uhmann, 1940	Demotispa	Demotispa	n/a	Parimatidium	Xenispa
romani Weise, 1921	Demothispa	Demotispa	n/a	Parimatidium	Xenispa
rubiginosum Boheman, 1862	Himatidium	n/a	Stilpnaspis	n/a	Demotispa
rubricatum Guérin-Méneville, 1844 Imatidium	Imatidium	n/a	Stilpnaspis	n/a	Demotispa
rubrum Boheman, 1850	Himatidium	n/a	Parimatidium	Parimatidium	Parimatidium
<i>rufa</i> Pic, 1926 = <i>pallida</i> Baly, 1858 <i>Demothispa</i>	Demothispa	Demotispa	Demotispa	Demotispa	Pseudimatidium
sallei Baly, 1858	Demotispa	Demotispa	n/a	Demotispa	incertae sedis
sanguineum Champion, 1893	Himatidium	n/a	Stilpnaspis	n/a	Demotispa
scarlatinum Spaeth, 1938	Himatidium	n/a	Stilpnaspis	n/a	Demotispa
scutelaris Pic, 1926	Demothispa	Demotispa	n/a	Demotispa	Xenispa
spaethi Bondar, 1940	Himatidium	n/a	n/a	n/a	Oediopalpa
strandi Uhmann, 1930	Demothispa	Demotispa	Transferred by STAINES (2006a) to Aslamidium	(2006a) to Aslamidiun	n
submarginata Pic, 1934	Demothispa	Demotispa	n/a	Demotispa	Windsorispa
testaceicornis Pic, 1926	Demothispa	Demotispa	n/a	n/a	Xenispa
tambitoensis Borowiec, 2000	Stilpnaspis	n/a	Stilpnaspis	n/a	Demotispa
tibialis Baly, 1858	Demotispa	Demotispa	n/a	Parimatidium	Xenispa
tricolor Weise, 1905	Demothispa	Demotispa	n/a	Demotispa	Xenispa
tricolor Spaeth, 1938	Himatidium	n/a	Stilpnaspis	n/a	Demotispa
uhmanni Pic, 1934	Demothispa	Demotispa	n/a	Parimatidium	Xenispa
zikani Spaeth, 1938	Himatidium (Parimatidium) n/a	n/a	Parimatidium	Parimatidium	Xenispa

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Species transferred from/to Demotispa. See Table 1.

Number of species. 18 (present paper).

Key to species. SPAETH (1938) covering eight presently valid species.

Biology. Biology of all species is unknown except for *D. panamensis* (Borowiec, 2000) which was observed feeding on two Arecaceae species (MESKINS et al. 2008). Based on our observations, it seems that most species are associated with various palms, preferably understorey or subcanopy species (Windsor & Sekerka, unpubl. data).

Distribution. Costa Rica to Brazil.

Euxema Baly, 1885

(Fig. 11)

Euxema Baly, 1885: 3. Type species: Euxema insignis Baly, 1885 by monotypy.

Distinguishing characters. *Euxema* can be separated from other Imatidiini genera by the pronotum having the anterior margin convex and strongly projecting beyond, small and obtuse anterior corners (Fig. 11) and this character is so far unique for *Euxema*. The genus also possesses prognathous, but not projecting mouthparts, a parallel-sided pronotum, and the serrate lateroapical margins of the elytra. Externally it is most close to *Xenispa*, and perhaps some species included currently in the latter genus may actually belong to *Euxema*. However, this requires further study.

Remarks. BALY (1885) proposed this genus for a single species differing from all other Imatidiini in the anterior margin of the pronotum being strongly protruding anteriad. PIC (1934a), based on this character, placed his new species, *elongata*, in *Euxema*. However, it is not congeneric with *E. insignis*, and is here transferred to a new genus, *Katkispa* gen. nov. (see description on p. 282).

Number of species. Monotypic (present paper).

Biology. Nothing is known about the biology of this genus. According to Champion (BALY 1885), specimens were collected in high montane cloud forest (ca. 1830–2130 m a.s.l.). *Euxema insignis* resembles several species, here included in *Xenispa*, living in Panama in the similar habitats situated at lower altitude (ca. 1000–1400 m). All of them are associated with native bamboo of the genus *Chusquea* (Poaceae). Based on its body shape, *E. insignis* may also live on *Chusquea*, however, I was not able to rediscover it in Panama so far.

Distribution. Colombia: Magdalena (STAINES 2007) and Panama: Chiriquí (BALY 1885).

Homalispa Baly, 1858

(Fig. 1)

Homalispa Baly, 1858: 33. Type species: Homalispa batesii Baly, 1858 by original designation.

Distinguishing characters. *Homalispa* can be easily distinguished from other genera by the prognathous and projecting mouthparts, and the long antennae which are about 1.5 times longer than the base of the pronotum (Fig. 1). The other two genera, *Cyclantispa* gen. nov. and *Xanthispa*, with strongly projecting mouthparts differ in having much shorter antennae, approximately as long as the pronotal base and the pronotum without an emargination above the head and with obtuse and non-projecting anterior corners, while *Homalispa* has the antennae at least 1.5 times longer than the pronotal base and the pronotum deeply emarginate above the head and with angulate and projecting anterior corners.

Remarks. MONRÓS & VIANA (1947) designated *Homalispa marginata* Baly, 1858 as the type species, however, this designation is invalid as the type species was fixed in the original description (BALY 1858).

In the past, *Homalispa* was divided in two subgenera: the nominotypical subgenus and *Xanthispa* (i.e. UHMANN 1957a, STAINES 2002). However, in my opinion, *Xanthispa* is a distinct genus and its status is restored here. In addition, two species previously classified as *Homalispa* are transferred to *Cyclantispa* gen. nov. (see description on page 274).

Homalispa signata Pic, 1926 is considered as a species of *incertae sedis* because the holotype deposited in MNHN was damaged by pests and is missing the head and part of the pronotum, thus its assignment to a genus is impossible. Pic (1926b) unfortunately did not mention anything about mouthparts. On the other hand the specimen has a quite broadly explanate and horizontal elytral margin like some small *Homalispa* species. However, until new material is available its position cannot be verified.

Species transferred to other genera. *Homalispa collaris* Waterhouse, 1881 and *H. sulcicollis* Champion, 1920 to *Xenispa*; *H. gracilis* Baly, 1885 and *H. subelongata* Pic, 1936 to *Cyclantispa* gen. nov.; and *H. limbifera* Baly, 1885 to *Pseudimatidium*.

Number of species. 22 (UHMANN 1957a, present paper).

Key to species. A key to species has yet to be provided.

Biology. So far, only two *Homalispa* species have published associations with host plants. *Homalispa deyrollei* Baly, 1858 was recorded from Poaceae (BONDAR 1938) and *H. never-manni* Uhmann, 1930 from Arecaceae (MESKINS et al. 2008). Our field observations indicate that both associations are correct as we found a number of species on these two plant families (Windsor & Sekerka, unpunbl. data).

Distribution. Nicaragua to Bolivia and Brazil.

Imatidium Fabricius, 1801

(Fig. 4)

Imatidium Fabricius, 1801: 345. Type species: Imatidium thoracicum Fabricius, 1801 designated by LATREILLE (1810).

Himatidium Latreille, 1804: 131 (unjustified emendation).

Himatidiella Aslam, 1966: 690; BOROWIEC (1984): 412 (synonymy). Type species: *Imatidium thoracicum* Fabricius, 1801 by original designation; objective junior synonym.

Distinguishing characters. *Imatidium* species can be readily recognized by having a broadly explanate margin of the elytra and the pronotum, the latter semicircular and as wide as the base of the elytra (Fig. 4), smooth lateroapical margin of the elytra, interantennal area narrow with deep fovea and without a carina, and by the short and filiform antennae.

Remarks. Two type species were designated for *Imatidium*, by different authors, causing a misapplication of the genus, which was solved by BOROWIEC (1984); for more comments see remarks under *Aslamidium*.

Imatidium was in the past considered a broadly defined genus containing various groups defined by SPAETH (1938), who also proposed the subgenus *Parimatidium*. Subsequently, ASLAM (1966) described Spaeth's groups as independent genera: 1st group – *Rhodimatidium* (= *Demotispa*), 2nd group – *Himatidiella* (= *Imatidium* sensu type species), 3rd group – *Imatidium* sensu Aslam (= *Aslamidium*), and 4th group = *Pseudimatidium*.

Number of species. 14 (SPAETH 1938, BOROWIEC 2000).

Key to species. SPAETH (1938) covered all presently included species.

Biology. Currently, only two species of *Imatidium* are associated with host plants: *I. rufiventre* Boheman, 1850 with Fabaceae (GILBERT et al. 2001) and *I. thoracicum* with Heliconiaceae and Marantaceae (SPAETH 1938, MESKINS et al. 2008). Based on our field work, it seems that most species are associated with various *Heliconia* species rather than with *Calathea* (Marantaceae). The feeding record of *I. rufiventre* on *Inga* (Fabaceae) is a unique dicot association within Imatidiini, but is correct as we repeatedly collected larvae and adults on this host plant (Windsor & Sekerka, unpubl. data).

Distribution. Costa Rica to Bolivia and Brazil.

Katkispa gen. nov.

(Figs 12, 30)

Type species. Euxema elongata Pic, 1934, here designated.

Description. Body elongate oval, parallel-sided, 2.5 times longer than wide. Length 4 mm. Body reddish brown with amber pronotum and metallic blue-grey elytra (Fig. 12).

Mouthparts prognathous, with labrum and maxillary palps slightly projecting forwards and slightly visible from above (Fig. 30). Labrum large, as broad as mouth cavity, slightly convex and semicircular, mostly covering mandibulae. Maxillary palps as long as two basal antennomeres. Labial palp half length of maxillary. Clypeus very short, transverse, without carina. Antennal area impressed without interantennal carina. Antennae 11-segmented, strangulate, twice longer than pronotal base, two basal antennomeres shiny, first globular, second transverse. Length ratio of antennomeres: 100 : 363 : 418 : 357 : 392 : 297 : 327 : 329 : 301 : 506, first antennomere extremely short, second 3.6 times and third 4.2 times longer than first. Eyes moderately large, gena well visible. Vertex sparsely but coarsely punctate. Head as wide as long and not constricted behind eyes but gradually narrowing.

Pronotum approximately as wide as long, subrectangular, subparallel-sided, widest in basal third, and narrower than base of elytra. Anterior margin smooth, convex and moderately projecting forwards and with small tubercle possessing seta on each side at inner eye margin. Anterior corners rounded, serrate and not projecting forwards. Basal corners sharp and projecting in small denticle. Lateral margins serrate, only slightly explanate, moderately swollen, and distinctly separated from disc. Basal margin strongly projecting towards scutellum. Disc regularly convex, micro-reticulate, sparsely but coarsely punctate, punctures gradually denser towards basal corners, shiny but not polished.

Scutellum long, subpentagonal, smooth, micro-reticulate, and impunctate.

Elytra about 1.8 times longer than wide, elongate, parallel-sided, weakly and regularly convex, disc flat, with ten rows of punctures plus scutellar row. Base of elytra smooth, sinuate, distinctly wider than base of pronotum. Humeral angles rounded and not protruding. Humeral calli slightly convex, impunctate and micro-reticulate. Punctation completely regular. Punctures moderately large, foveolate. Intervals broad, about 2–3 times wider than puncture diameter, smooth and micro-reticulate. Punctures disposed regularly and densely in rows with interspaces approximately as wide as puncture diameter. Marginal row distinct in whole length, regular. Elytral margin only slightly explanate, almost perpendicular. Its outer margin

subhorizontal, swollen, and minutely serrate in whole length. Each denticle possessing small seta on tip. Apex of elytra conjointly rounded. Epipleura flat, micro-sculptured and sparsely pubescent, gradually narrowing towards apex.

Prosternal process moderately broad with truncate and not projecting apex. Its surface smooth and micro-sculptured. Whole surface of thorax and abdomen micro-sculptured and densely setose, abdomen also densely punctate. Abdominal sterna I and II fused with slightly marked suture laterally. Pygidium elliptical, coarsely punctate and its apical margin densely pubescent.

Legs normal, all pairs equal. Tarsal claws broadly divergent, simple.

Differential diagnosis. *Katkispa* gen. nov. is placed in a group of genera characterized by having prognathous and slightly projecting mouthparts, a subquadratic pronotum, and serrate lateroapical margins of the elytra. It also has the pronotum without protruding corners and an extremely short first antennomere like *Xanthispa* and *Cyclantispa* gen. nov., but the two latter differ in having strongly projecting mouthparts and a transverse pronotum, while *Katkispa* has the pronotum almost as wide as long. The other similar genera, with serrate lateroapical margins of the elytra and parallel-sided pronota, are *Xenispa* and *Euxema*. Both differ from *Katkispa* in having much longer antennae, a transverse pronotum, which is strongly expanded anteriorly in *Euxema* and deeply emarginate in *Xenispa*.

Etymology. This genus is dedicated to my girlfriend Katka Štajerová for her support and patience with my beetle studies, and the name is derived from her first name and generic name '*Hispa*'; gender is feminine.

Remarks. The genus is proposed for *Euxema elongata* which was assigned to the genus *Euxema* by Pic (1934a) on the basis of the convex and protruding anterior margin of the pronotum. However, the species has a very different shape of the pronotum and body from *E. insignis* (i.e. type species of *Euxema*) as well as from all other Imatidiini and thus requires a separate genus.

Biology. Nothing is known about biology of this species.

Number of species. Monotypic.

Distribution. Venezuela: Aragua (PIC 1934a).

Lechispa gen. nov.

(Figs 24, 28, 34)

Type species. Stenispa parallela Pic, 1930, here designated.

Other species transferred. Stenispa rosariana Maulik, 1933.

Description. Body filiform, elongate and parallel-sided, 4.5–4.7 times longer than wide. Length 5.8–6.2 mm. Body black (Fig. 24).

Mouthparts large, occupying almost whole head between eyes, hypognathous but labrum directed anteriorly (Fig. 34). Labrum, transverse, elliptical, and almost as wide as mouth cavity. Maxillary palps as long as two basal antennomeres. Labial palps as long as three basal segments of maxillary palps. Clypeus very short, present as narrow carina above labrum and projecting between antennal insertions. Antennal insertions deeply impressed. Interantennal carina reaching to frontal margin of vertex. Antennae, 11-segmented, strangulate, 1/5 longer than pronotal length, two basal antennomeres shiny, first globular, second transverse. Length

ratio of antennomeres: 100 : 110 : 126 : 114 : 105 : 93 : 110 : 93 : 101 : 103 : 191, second antennomere 1.1 times and third 1.3 times longer than first. Eyes smaller, covering approximately half of lateral length of head thus gena well visible and sparsely punctate. Vertex micro-punctate and micro-reticulate with shallow basal sulcus. Head almost as long as wide, not constricted behind eyes.

Pronotum 1.3 times longer than wide, reversely trapezoidal, distinctly widened anteriad, and widest slightly behind anterior corners. Anterior margin smooth, convex and moderately projecting forwards and with small tubercle possessing seta situated next to anterior corners. Anterior corners rounded and slightly projecting due to explanate margin. Basal corners sharp and with small, projecting denticle due to weak basal constriction. Lateral margins smooth, not explanate but gradually swollen from base to anterior corners, and distinctly separated from disc. Basal margin convex, strongly projecting towards scutellum. Disc regularly convex, micro-reticulate, sparsely but distinctly punctate, punctures gradually coarser and denser towards lateral sides. Its surface appears rather dull due to micro-reticulation.

Scutellum short, subpentagonal, smooth, micro-reticulate, and impunctate.

Elytra about 3.3 times longer than wide, elongate, parallel-sided, weakly and regularly convex, disc flat, with ten rows of punctures plus scutellar row. Base smooth, bisinuate, constricted behind humeral calli and as wide as base of pronotum. Humeral angles rounded, not projecting. Humeral calli distinctly convex, impunctate and micro-reticulate. Punctation completely regular. Punctures moderately large, foveolate. Intervals ca. 1–2 times wider than puncture diameter, smooth and micro-reticulate. Punctures disposed regularly and densely in rows with interspaces ca. 1–2 times wider than puncture diameter. Punctures gradually slightly coarser from disc towards lateral slopes. Marginal row distinct in whole length, regular. Elytral margin not explanate only apical part slightly widened. Outer margin, swollen and smooth. Apex of elytra emarginate. Epipleura flat, micro-sculptured but shiny and very sparsely pubescent.

Prosternal process broad with truncate, apically widening and projecting apex. Its surface with several coarse punctures and micro-sculptured. Apex coarsely punctate and rugose. Whole surface of thorax densely setose. Abdomen micro-sculptured, punctate, and densely setose, setae gradually sparser towards middle. All abdominal sterna well separated. Pygidium strongly transverse with convex apex and strongly elevated and sharp transverse carina along midwidth, its surface rugose and sparsely pubescent (Fig. 28).

Legs normal, all pairs equal. Tarsal claws broadly divergent, simple.

Sexual dimorphism not evaluated because only the two type specimens (one of each species) were studied and dissections were not permitted.

Differential diagnosis. *Lechispa* gen. nov. can be easily recognized by the narrow and long body, which is at least 4.5 times longer than wide. Other genera with elongate bodies (*Stenispa* and some *Cephaloleia* species), are at most 2.7 times longer than wide. *Lechispa* also differs from both in having a transverse sharp carina on the pygidium, which is absent in all other Imatidiini. *Stenispa* also differs in the cuneiform body-shape (completely parallel-sided in *Lechispa*), the serrate lateroapical margins of the elytra (smooth in *Lechispa*), the pronotum

being subquadratic and almost parallel-sided (widening anteriorly in *Lechispa*) with a straight apical margin (convex and protruding in *Lechispa*). Some *Cephaloleia* species, particularly those feeding on Poaceae and Cyperaceae, are somewhat similar but all have stouter bodies, not more than two times longer than wide, and with a parallel-sided pronotum.

Etymology. The genus is dedicated to Lech Borowiec, world leading specialist in Cassidinae, for his friendship, support and knowledge shared with me. The name is derived from his first name and generic name '*Hispa*'; gender is feminine.

Number of species. 2.

Key to species. Both species were keyed in the key to Argentinean *Stenispa* by MONRÓS & VIANA (1947).

Biology. Both species were reported feeding on *Paspalum* species, Poaceae (Bosq 1943, MONRÓS & VIANA 1947).

Distribution. Argentina (Buenos Aires, Chaco).

Melanispa Baly, 1858

(Fig. 21)

Melanispa Baly, 1858: 30. Type species: Melanispa truncata Baly, 1858 by monotypy.

Distinguishing characters. *Melanispa* can be easily distinguished from all other Imatidiini genera by the strongly trapezoidal and anteriorly narrowing pronotum with straight lateral sides (Fig. 21) and a tubercle with a seta situated in the anterior corners, while other genera have the pronotum semicircular, subquadratic, or widening anteriorly and the tubercle with the seta situated internally of the anterior corners. It also has strongly depressed elytra with truncate apices and the pygidium not visible from above. *Parentispa* gen. nov. and some *Cephaloleia* species also have truncate apices of the elytra but differ in the pygidium being visible from above and in the shape of the pronotum.

Remarks. ZAYAS (1960) described *M. bicolor* Zayas, 1960 from Cuba which remained enigmatic to all subsequent authors. Mike Ivie (Montana, USA) kindly provided me with photographs of the holotype, preserved in the private collection of the Zayas family in Cuba, which is currently inaccessible. The specimen is rather strange and does not remind me any of the described genera, however, the quality of the photo is not sufficient to make accurate observations thus examination of specimen would be necessary for correct placement of this taxon. It has a broadly trapezoidal and densely punctate pronotum, metallic blue-violet and convex elytra with rounded apices, and thus I am convinced that the species belong to a different genus. Therefore I consider *M. bicolor* as Imatidiini genus *incertae sedis*, until I have opportunity to study the type specimen or new material is available.

Number of species. Monotypic (UHMANN 1957a, present paper).

Biology. Nothing is known about the biology of *Melanispa*, however, based on its flattened body it might feed on palms.

Distribution. Guadeloupe.

Parentispa gen. nov.

(Figs 22, 26–27, 33)

Type species. Cephaloleia gracilis Baly, 1878, here designated.

Other species transferred. *Cephaloleia formosus* [sic!] Staines, 1996, *C. vagelineata* Pic, 1926.

Description. Body elongate, subparallel-sided, slightly tapering apically, about 3.8 times longer than wide. Length 4.7–6.2 mm. Body black, each elytron with shortened yellow vitta along midlength of each elytron (Fig. 22).

Mouthparts large, occupying almost whole ventral surface of head, hypognathous with all parts facing ventrally (Fig. 33). Labrum small, semicircular, narrower than mouth cavity, micro-granulose. Maxillary palps as long as pedicel. Labial palps as long as 0.75 of first antennomere. Clypeus very narrow, present as narrow carina above labrum and projecting between antennal insertions. Antennal insertions deeply impressed. Interantennal carina reaching to frontal margin of vertex and then continuing as more or less visible sulcus to base of vertex. Antennae, 11-segmented, strangulate, twice longer than pronotal length, two basal antennomeres shiny and elongate. Length ratio of antennomeres: 100: 45: 58: 62: 43: 49: 46: 47: 51: 41: 83, first antennomere 2.2 times longer than second and 1.7 times longer than third. Eyes large, covering approximately 0.75 of lateral length of head, gena well visible, coarsely punctate and microreticulate. Whole vertex coarsely punctate and micro-reticulate. Head transverse and strongly constricted behind eyes.

Pronotum 1.4 times wider than long, subquadratic, basally parallel-sided and in anterior third slightly widening, and widest slightly behind anterior corners. Lateral margins serrate. Anterior margin smooth and almost straight, tubercle possessing seta small and situated at internal eye margin. Anterior corners angulate and moderately projecting. Basal corners sharp and slightly projecting. Lateral margins slightly but distinctly explanate and distinctly separated from disc, outer margin serrate, each denticle possessing small seta. Basal margin convex, moderately projecting towards scutellum. Disc weakly and regularly convex, microreticulate, sparsely but coarsely punctate, punctures gradually coarser and denser towards lateral sides, central area with several small micropunctures thus appears impunctate. Pronotal surface appears rather dull due to micro-reticulation.

Scutellum triangular, smooth, micro-reticulate, and impunctate.

Elytra about 2.6 times longer than wide, elongate, subparallel-sided and distinctly tapering in apical third, depressed, and with ten rows of punctures plus scutellar row. Base smooth, bisinuate, and slightly wider than base of pronotum. Humeral angles slightly projecting, subangulate. Humeral calli distinctly convex, impunctate and micro-reticulate. Punctation completely regular. Punctures moderately large, shallow. Intervals approximately as wide as puncture diameter, smooth and micro-reticulate. Punctures arranged regularly and densely in rows with interspaces much narrower than puncture diameter. Punctures gradually coarser from disc to lateral slopes. Marginal row distinct in whole length, regular. Elytral margin not explanate. Outer margin, swollen and irregular, minutely crenulate. Apex of elytra truncate with small projecting denticle at sutura. Surface of elytra smooth and semiopaque, apical third sparsely pubescent with very short and adherent setae. Epipleura narrow, flat, shiny and very sparsely pubescent. Prosternal process broad with truncate, apically widening and projecting apex. Its surface micro-reticulate and shiny. Apex with several irregular sulci and thus appears subrugose. Whole surface of thorax and sparsely setose. Abdomen micro-reticulate, sparsely punctate and pubescent, setae gradually sparser towards middle. Ventrites I and II partly fused but with visible suture; remaining ventrites well separated.

Legs normal, all pairs equal. Tarsal claws broadly divergent, simple.

Sexual dimorphism distinct in formation of pygidium. Males have greatly enlarged pygidium forming ventral parabolic cavity (Fig. 26) while females have pygidium normal, regularly convex and only with apical margin visible from underside (Fig. 27).

Differential diagnosis. *Parentispa* gen. nov. at first glance is reminiscent of some *Cephaloleia* species but is very distinct in the formation of the mouthparts and the pygidium. It has hypognathous mouthparts with all parts facing down, while *Cephaloleia* species have the mouthparts prognathous with the labrum always facing anteriad. *Parentispa* also has truncate and slightly emarginate apices of the elytra and the pygidium in males strongly enlarged, subquadratic, and with a large parabolic concavity. *Cephaloleia* species have the pygidium transverse and elliptical without any concavity. The structure of the pygidium is unique to *Parentispa* within the whole tribe.

Etymology. The genus is dedicated to my parents, Vlasta and Jiří Sekerka for their constant support, without which I would not be able to conduct my beetle studies; the name is derived from Latin '*parentes*' = parents and generic name '*Hispa*'; gender is feminine.

Number of species. 3.

Biology. Two of the three species have published associations with various palms (Arecaceae), mainly the oil palm (*Elaeis guineensis* Jacq.) (URUETA SANDINO 1972, STAINES 1996). **Distribution.** Belize, Brazil, Colombia, Panama.

Parimatidium Spaeth, 1938

(Fig. 16)

Parimatidium Spaeth, 1938: 307 (as subgenus of Himatidium); ASLAM (1966): 691 (as genus). Type species: Himatidium rubrum Boheman, 1850 by original designation.

Distinguishing characters. Readily characterized by the tarsal claws with a large basal tooth, a rare character present only in *Parimatidium* and *Spaethaspis*, while all other Imatidiini have the claws simple. *Spaethaspis* differs in the transverse and subquadratic pronotum and the smooth lateroapical margins of the elytra, while *Parimatidium* has a semicircular pronotum and serrate lateroapical margins of the elytra (Fig. 16). Many *Demotispa* have similar body forms but differ in the simple tarsal claws.

Species transferred to other genera. SPAETH (1938) proposed *Parimatidium* as a subgenus of *Himatidium* and included in it five species having serrate apical margins of the elytra. Recently, STAINES (2009) transferred numerous *Demotispa* species to *Parimatidium* on the basis of the serrate lateroapical margins of the elytra. However, both, Spaeth and Staines, overlooked that *Himatidium rubrum* Boheman, 1850, the type species, has tarsal claws with a large basal tooth, while other species included have the tarsal claws simple, thus not being congeneric with the type species. Therefore all species with simple tarsal claws (and also metallic elytra) are transferred here to *Xenispa. Himatidium spaethi* Bondar, 1940, also included in *Parimatidium*

(STAINES 2009), is here transferred to *Oediopalpa* Baly, 1858 because it has each pronotal corner with a seta. As a result only two species remain in *Parimatidium*. **Number of species.** 2 (present paper). **Biology.** Nothing is known about the biology of *Parimatidium*.

Distribution. Brazil and French Guyana.

Pseudimatidium Aslam, 1966, stat. restit.

(Fig. 18)

Pseudimatidium Aslam, 1966: 691. Type species: Demotispa pallida Baly, 1858 by original designation. Demotispa sensu Morós & VIANA (1947), BOROWIEC (2000), STAINES (2002, 2009).

Distinguishing characters. *Pseudimatidium* can be distinguished by the mouthparts not projecting but prognathous, semicircular pronotum, the presence of a sharp interantennal carina, the disc of the pronotum being regularly convex, body with a moderately broad explanate margin, and the pygidium being not visible from above (Fig. 18). Some *Cephaloleia* and *Pseudostilpnaspis* species are externally similar to *Pseudimatidium* because of the general shape of body with a narrow explanate margin. *Cephaloleia* differs in the subquadratic pronotum and having the pygidium mostly visible from above. *Pseudostilpnaspis* species differ in the convex body and the mouthparts slightly projecting forwards.

Remarks. ASLAM (1966) proposed the genus *Pseudimatidium* for SPAETH's (1938) fourth group of *Himatidium* and designated *Demotispa pallida* Baly, 1858 as the type species. BOROWIEC (2000) considered *Pseudimatidium* as a junior objective synonym of *Demotispa* because both genera had the same type species. I restore here the validity of *Pseudimatidium* as the action of BOROWIEC (2000) was based on an invalid type species designation for *Demotispa* (for further comments see remarks under *Demotispa*).

Number of species. 12 (present paper).

Key to species. SPAETH (1938) covered three species.

Biology. *Pseudimatidium* species are associated with various palms and their biology has been much more studied than in other Imatidiini, being pests of economically important palms such as the coconut (*Cocos nucifera* L.) or African oil palm (*Elaeis guineensis* Jacq.) (i.e. BONDAR 1940a, b, 1942, 1943; BOSQ 1943; MONRÓS & VIANA 1947; ASLAM 1966). **Distribution.** Mexico to northern Argentina.

Pseudostilpnaspis Borowiec, 2000

(Fig. 17)

Pseudostilpnaspis Borowiec, 2000: 162. Type species: Stilpnaspis columbica Weise, 1910 by original designation.

Distinguishing characters. *Pseudostilpnaspis* species can be recognized by the semicircular pronotum, interantennal area broad and convex, and without a carina, the regularly convex pronotum, and the thick antennae (Fig. 17). General body shape is reminiscent of *Demotispa*, *Windsorispa* gen. nov., and *Pseudimatidium*. The last one differs in having a sharp interantennal carina. *Windsorispa* differs in the narrow pronotum, depressed elytra, and serrate lateroapical margins of the elytra, while *Pseudostilpnaspis* has a broad pronotum and smooth elytral margins (with the exception of the tentatively included species *P. curvipes* (Uhmann, 1951)).

Demotispa differs in the long and filiform antennae with the basal two antennomeres elongate (moderately long, thick, and with two globular basal antennomeres in *Pseudostilpnaspis*) and the broadly oval body with broad explanate margins, while *Pseudostilpnaspis* has an elongate body with narrow explanate margins.

Species transferred to *Pseudostilpnaspis.* STAINES (2009) transferred *Cephaloleia lata* Baly, 1885 to *Demotispa* without further comments. I have examined the type series of *C. lata* and found that it actually belongs to *Pseudostilpnaspis* because it has the two basal antennomeres globular, the interantennal area without a carina but convex, and the pronotum with slightly canaliculate explanate margins.

Number of species. 5 (present paper).

Key to species. A key to species has yet to be provided.

Biology. One species, *P. lata*, was recorded feeding on two *Chamaedorea* species (Arecaceae) (MCKENNA & FARRELL 2005, MESKINS et al. 2008). Although, both records are quite likely misidentified and belong to different *Pseudostilpnaspis* species, the association with palms is correct as we collected several species on Arecaceae, mainly *Chamaedorea* species (Windsor & Sekerka, unpubl. data).

Distribution. Belize to Colombia.

Stenispa Baly, 1858

(Fig. 23)

Stenispa Baly, 1858: 13. Type species: Hispa metallica Fabricius, 1801 by original designation.

Diagnosis. *Stenispa* species can be easily recognized by the narrow, parallel-sided, and cuneiform body, with serrate lateroapical margins of the elytra. Some *Cephaloleia* species, particularly those associated with various Poaceae, have more or less similar body-forms but differ in having smooth lateroapical margins of the elytra and the pygidium visible from above. *Lechispa* gen. nov. differs in the much more elongate body, smooth lateroapical margins of the elytra, and the pygidium visible from above and possessing a prominent transverse carina.

Species transferred to *Stenispa*. *Stenispa minasensis* (Pic, 1931) comb. nov. and *S. viridis* (Pic, 1931), both from *Cephaloleia*.

Remarks. *Cephaloleia minasensis* Pic, 1931 and *C. viridis* Pic, 1931 are transferred to *Stenispa* because of the cuneiform body and the serrate lateroapical margins of the elytra. On the other hand, *Stenispa parallela* Pic, 1930 and *S. rosarina* Maulik, 1933 are transferred to *Lechispa* gen. nov. because they have smooth lateroapical margins of the elytra, the body-form being strongly elongate and parallel-sided, and the pronotum widening anteriorly.

Number of species. 21 (UHMANN 1957a, present paper).

Key to species. MONRÓS & VIANA (1947) covered three Argentinean species, STAINES (2006b) covered two USA species.

Biology. The genus was reported from two plant families Cyperaceae (i.e. MONRÓS & VIANA 1947) and Poaceae (i.e. FORD & CAVEY 1985). We have repeatedly collected other species on these two plant families (Windsor & Sekerka, unpubl. data).

Distribution. United States to northern Argentina.

Weiseispa gen. nov.

(Figs 13, 32)

Type species. Demotispa bimaculata Baly, 1858, here designated.

Other species transferred. *Demotispa angusticollis* Weise, 1893, *D. cayenensis* Pic, 1923, *D. melancholica* Weise, 1910, and *D. peruana* Weise, 1910.

Description. Body broadly oval, 1.5–1.8 times longer than wide (Fig. 13). Length 3.5–4.0 mm. Ventral parts amber-yellow to yellowish-brown, legs partly pitchy. Pronotum and head black. Elytra uniformly pitchy to black or with large central red macula. Apical margin sometimes pale coloured.

Mouthparts large, occupying almost whole ventral surface of head, hypognathous with all parts facing ventrally (Fig. 32). Labrum small, semicircular, narrower than mouth cavity, micro-granulose. Maxillary palps as long as scapus. Labial palps as long as pedicel. Clypeus shortly triangular, present as narrow carina above labrum and projecting between antennal insertions. Antennal insertions deeply impressed. Interantennal carina sharp, reaching to frontal margin of vertex and then gradually disappearing towards base of vertex. Vertex micro-reticulate and eventually sparsely micro-punctate. Antennae 11-segmented, first two antennomeres strangulate, remaining tubular, twice longer than pronotal length, two basal antennomeres shiny and elongate. Length ratio of antennomeres: 100 : 89 : 81 : 63 : 70 : 52 : 65 : 59 : 57 : 65 : 105, second antennomere 1.1 times longer than third and first 1.1 times longer than second. Eyes large, covering approximately 0.75 of lateral length of head, gena well visible, micro-reticulate and sparsely pubescent. Head approximately as long as wide, not constricted.

Pronotum approximately 1.4 times wider than longer, subquadratic, subparallel-sided but distinctly narrowing anteriad, widest at base. Lateral margins serrate. Anterior margin smooth and weakly convex, tubercles possessing small seta situated internally next to anterior corner. Anterior corners angulate and moderately projecting. Basal corners angulate, not projecting. Lateral margins not explanate, distinctly separated from disc, gradually swollen from apex to base, and smooth. Basal margin convex, moderately projecting towards scutellum. Disc regularly convex, shiny, micro-punctate, sparsely but distinctly punctate, punctures gradually coarser and denser towards base. Anterior and central parts sparsely punctate to almost impunctate.

Scutellum subpentagonal, smooth, shiny, micro-punctate.

Elytra 1.2–1.4 times longer than wide, broadly oval, regularly convex, widest in basal third, apically weakly tapering, and with ten rows of punctures plus scutellar row. Base smooth, bisinuate, and distinctly wider than base of pronotum. Humeral angles broadly rounded, not projecting. Humeral calli distinctly convex, only micro-punctate. Punctation completely regular, fine. Punctures small, shallow. Intervals 1.0–2.5 times wider than puncture diameter, smooth. Punctures arranged regularly in rows with interspaces approximately as wide as puncture diameter. Punctures finer on dark coloured parts of elytra than of pale coloured. Marginal row distinct in whole length, regular. Elytral margin moderately explanate, broadest behind humeri and then narrowing apically. Its surface smooth and micro-reticulate. Outer edge slightly swollen, smooth, more or less distinctly minutely crenulate in widest part of

explanate margin. Apex of elytra conjointly rounded. Surface of elytra smooth and shiny. Epipleura moderately broad, flat, micro-reticulate shiny and sparsely pubescent.

Prosternal process broad with truncate, apically widening and projecting apex. Its surface shiny, apex and intercoxal part rugose and irregularly coarsely punctate. Meso- and metathorax densely pubescent, shagreened, metathorax laterally punctate. Abdomen micro-reticulate and densely pubescent. Ventrites I and II fused, suture visible but gradually weaker towards middle; remaining ventrites well separated.

Legs normal, all pairs equal. Tarsal claws broadly divergent, simple.

Sexual dimorphism indistinct, females slightly stouter and bigger.

Differential diagnosis. *Weiseispa* gen. nov. species can be easily recognized by the general body shape, as they have a subquadratic pronotum and the elytra broadly oval with broadly explanate and smooth margins. The only other genus with similar characters is *Spaethaspis* but it differs in being of larger size of 7–8 mm (3–4 mm in *Weiseispa*) and having the tarsal claws with a large basal tooth (simple in *Weiseispa*). Some *Demotispa* species might be misidentified with *Weiseispa* because of the elytral shape, particularly *D. pulchella*, because of the similar colour pattern, but it differs in having a semicircular pronotum with broad explanate margins. *Weiseispa* is also one of the few Imatidiini genera with hypognathous mouthparts with all parts, including labrum, facing ventrally.

Etymology. This genus is dedicated to German leaf beetle specialist Julius Weise (1844–1925), who had a particular interest in Hispinae. The name is derived from his surname and generic name '*Hispa*'; gender is feminine.

Remarks. All species included in *Weiseispa* gen. nov. were originally described in *Demotispa*. STAINES (2009) transferred all of them to *Stilpnaspis*, probably because of the elytral shape. *Weiseispa* species have very different morphology from *Stilpnaspis* (= *Demotispa*) as well as biology, as they are associated with *Heliconia* species, while *Demotispa* is associated only with Arecaceae.

Based on the species distribution, the genus seems to be restricted to the eastern foothills of the Andes. The type species, *D. bimaculata*, was described from Mexico, however, the specimen must have been mislabelled as the same population lives only in Colombia and no new specimens exist from Mexico.

Number of species. 5.

Key to species. UHMANN (1937b) covered four species in a key to Demotispa.

Biology. So far nothing has been published on the biology of these species. The genus is associated with various *Heliconia* species and the adults as well as larvae feed on open leaf surfaces (Windsor & Sekerka, unpubl. data).

Distribution. Colombia to Bolivia.

Windsorispa gen. nov.

(Figs 19, 31)

Type species. *Demotispa latifrons* Weise, 1910, here designated. **Other species transferred.** *Demotispa bicoloricornis* Pic, 1926 and *D. submarginata* Pic, 1934. **Description.** Body broadly oval, moderately widening apically, about 1.7 times longer than wide. Length 5.2–5.4 mm. Body uniformly red (Fig. 19).

Mouthparts moderately large, occupying apical third of head, prognathous (Fig. 31). Labrum small, semicircular, narrower than mouth cavity, micro-reticulate. Maxillary palps as long as scapus. Labial palps nearly as long as pedicel and scapus combined. Clypeus very narrow, present as thin carina above labrum not projecting between antennal insertions. Antennal insertions deeply impressed. Interantennal area flat on the same level as vertex. Vertex micro-reticulate and impunctate. Antennae 11-segmented, strangulate, twice longer than pronotal length, two basal antennomeres shiny, pedicel elongate and scapus subglobose. Length ratio of antennomeres: 100 : 107 : 93 : 82 : 86 : 70 : 71 : 72 : 72 : 66 : 135, second antennomere 1.06 times longer than first and 1.14 times longer than third. Eyes normal, covering lateral anterior third of head, gena well visible, smooth and shiny. Head approximately as long as wide, not constricted.

Pronotum 1.5 times wider than long, semicircular, but strongly converging anteriad. Lateral margins smooth. Anterior margin smooth and weakly convex, tubercles possessing small seta situated internally next to anterior corner. Anterior corners subangulate small, but distinctly projecting. Basal corners obtuse and slightly projecting posteriorly. Lateral margins moderately explanate, distinctly separated from disc, gradually narrowing from base to apex, smooth, and slightly canaliculate. Basal margin convex, moderately projecting towards scutellum. Disc regularly convex, shiny, micro-reticulate and micro-punctate, laterobasally sparsely but coarsely punctate, punctures gradually coarser and denser towards base. Anterior and central parts impunctate.

Scutellum subpentagonal, smooth, shiny, micro-reticulate.

Elytra about 1.2 times longer than wide, broadly oval and widening apically, regularly convex, widest in apical 0.25, and with ten rows of punctures plus scutellar row. Base smooth, bisinuate, and slightly narrower than pronotum. Humeral angles broadly rounded, only indistinctly projecting. Humeral calli distinctly convex, smooth and shiny. Punctation completely regular, moderate. Punctures small, shallow. Intervals 1–2 times wider than puncture diameter, smooth. Punctures arranged regularly in rows with interspaces 0.5–1.0 times as wide as puncture diameter. Marginal row distinct in whole length, regular. Elytral margin moderately explanate, broadest around midlength and then moderately tapering apically. Its surface smooth, shiny, and micro-reticulate. Outer margin, slightly swollen, distinctly serrate, each denticle possessing small seta. Apex of elytra conjointly rounded, smooth. Surface of elytra smooth and shiny. Epipleura moderately broad, flat, micro-reticulate shiny and sparsely pubescent.

Prosternal process broad with convex, widening and projecting apex. Its surface shiny, apex and intercoxal part irregularly rugose and micro-reticulate. Mesothorax moderately sculptured. Metathorax smooth and shiny, laterally finely shagreened. Abdomen micro-reticulate, sparsely punctate and densely pubescent. Ventrites I and II fused, suture visible but gradually weaker towards middle; remaining ventrites well separated.

Legs normal, all pairs equal. Tarsal claws broadly divergent, simple.

Sexual dimorphism indistinct, females slightly stouter and bigger.

Differential diagnosis. The genus is characterized by prognathous mouthparts, but not projecting, thus not visible from above, having a semicircular pronotum and the head without
an interantennal carina. The genera most similar are *Demotispa* and *Pseudostilpnaspis* which differ in having a broad, at least two times wider than long, pronotum, the mouthparts slightly projecting anteriad, and the convex interantennal area.

Etymology. This genus is dedicated to my friend, and specialist in Cassidinae, Don Windsor (Panamá), who introduced me to the fascinating biology of Neotropical Cassidinae and has always been great a fellow on our expeditions. The name is derived from his surname and generic name '*Hispa*'; gender is feminine.

Remarks. I include three species in *Windsorispa*, however, placement of *W. bicoloricornis* is tentative as I did not examine its type, thus the transfer is based only on the short description and comparative note by Pic (1926a).

Number of species. 3.

Key to species. A key to species has yet to be provided.

Biology. WEISE (1910b) stated that *W. latifrons* was abundantly collected on 'Stechpalmen' = genus *Ilex* (Aquifoliaceae). This record was never interpreted after Weise till now. **Distribution.** Colombia, French Guyana, and Venezuela.

Xanthispa Baly, 1858, stat. nov.

(Fig. 3)

Xanthispa Baly, 1858: 31. Type species: Cephaloleia cimicoides Guérin-Méneville, 1844 by monotypy.

Distinguishing characters. *Xanthispa* can be easily distinguished from other genera by the prognathous and projecting mouthparts. *Homalispa* differs in the long antennae and the pronotum being deeply emarginate above the head with large and sharp anterior corners. *Cyclantispa* gen. nov. similarly has short antennae and weakly pointed anterior corners of the pronotum, but differs in the elongate body-form, metallic blue elytra, convex labrum, and the interantennal area impressed with an obtuse, low, and narrow carina, while *Xantispa* has a wedge-shaped and uniformly red body (Fig. 3), emarginate labrum, and the interantennal area with a broad and convex carina.

Remarks. *Xanthispa* has been considered a subgenus of *Homalispa* (UHMANN 1957a, STAINES 2002). STAINES (2002) stated that the only differences are in the proportions of antennomere III and the structure of the lateroapical margins of the elytra. Nevertheless, he is not particularly clear which character belongs to which genus, as in the key he stated that *Homalispa* s. str. has the antennomere III the longest, and serrate margins of the elytra, while in the redescription these characters are given for *Xanthispa*. Actually, neither formulation is correct as all *Homalispa* as well as *Xanthispa* have serrate lateroapical margins and the third antennomere the longest. *Xanthispa* has serrate elytral margins similar to smaller *Homalispa* species without metallic colours, while metallic-coloured species have strong serration. I have seen the types of most the species described in *Homalispa*, as well as extensive material of *Xanthispa*, and in my opinion both should be treated as independent genera.

Xanthispa differs from *Homalispa* (its characters given in brackets) in having a sub-trapezoidal pronotum with rounded, almost not protruding anterior corners, and lateral sides less explanate and only weakly bent upwards (pronotum sub-circular to sub-trapezoidal, with angulate and protruding anterior corners, and lateral margins broadly explanate and canaliculate); antennae short, as long as the base of the pronotum (antennae about 1.5 times longer than the pronotum); apex of the labrum emarginate (apex of labrum convex); maxillary palps prominent, as long as the first three antennomeres combined (maxillary palps shorter, as long as two basal antennomeres); and interantennal space with a strongly elevated carina (interantennal space deeply impressed). Because of the above-mentioned differences I have decided to elevate the rank of *Xanthispa* to genus.

Number of species. Monotypic (UHMANN 1957a).

Biology. The genus is associated with Arecaceae (Windsor & Sekerka, unpubl. data). **Distribution.** French Guyana.

Xenispa Baly, 1858, stat. restit.

(Figs 9–10)

Xenispa Baly, 1858: 63. Type species: Xenispa pulchella Baly, 1858 by monotypy.

Distinguishing characters. *Xenispa* is characterized by having a subquadratic (Fig. 10) or semicircular (Fig. 9) pronotum with an emarginate apical margin above the head, prognathous but not projecting mouthparts, and the serrate lateroapical margins of elytra. *Euxema* and *Katkispa* gen. nov. are the only similar genera, but both differ in the apical margin of the pronotum being convex, not emarginate.

Remarks. BALY (1858) proposed the genus for a single species, *X. pulchella*. WEISE (1910b) synonymized *Xenispa* with *Demotispa* and proposed a replacement name, *D. magna*, for *Xenispa pulchella* Baly, 1858, not *Demotispa pulchella* Baly, 1858 but never examined the type. This was followed until STAINES (2009) transferred *D. magna* to *Parimatidium* Spaeth, 1938, however did not proposed synonymy of *Xenispa* with *Parimatidium* nor mentioned existence of that genus, although *Xenispa* had a priority because of being the older name. STAINES (2009) also transferred all *Demotispa* species with serrate lateroapical margins of elytra to *Parimatidium*, however, not a single one of these species is actually congeneric with *Parimatidium rubrum*, the type species, as it has tarsal claws with basal tooth while all transferred species have simple tarsal claws. Hence, I restore the status of *Xenispa* which has serrate lateroapical margins of the elytra, simple tarsal claws, and metallic elytra. Some species transferred here to *Xenispa* have to be considered as tentative placements, as I did not examine their types (see Table 1).

Xensipa species can be divided into two groups on the basis of pronotal shape, thus is placed doubly in the key. About eight species have semicircular pronota (Fig. 9) while the rest, including the type species, have subquadratic and parallel-sided pronota (Fig. 10). Species with subquadratic pronota can be further split in to two groups, one with broadly explanate margins of the pronotum and the other with narrow margins of the pronotum. However, other morphological features as well as their biology are similar, thus I retain all the species in the same genus.

Species transferred to Xenispa. See Table 1.

Number of species. 33 (present paper).

Biology. So far, only three species have published host plant associations, two with bambusoid Poaceae (UHMANN 1959, MESKINS et al. 2008) and one with Arecaceae (BONDAR 1940b). Based on our field observations it seems that most species are associated with various bambusoid Poaceae, mainly *Chusquea* and *Guadua* species (Windsor & Sekerka, unpubl. data).

Key to species. UHMANN (1937b) covered eight species in a key to *Demotispa*. **Distribution.** Costa Rica to southern Brazil.

Catalogue of species included in Imatidiini genera described in this paper or previously placed in the *Demotispa-Stilpnaspis* complex

Cyclantispa gen. nov.

Cyclantispa gracilis (Baly, 1885) comb. nov.

Homalispa gracilis Baly, 1885: 8 (type locality: 'Panama, Bugaba'; HT! in BMNH!).

Distribution. Costa Rica (STAINES 1996) and Panama (BALY 1885).

Cyclantispa subelongata (Pic, 1936) comb. nov.

Homalispa subelongata Pic, 1936: 13 (type locality: 'Bolivia'; ST! in MNHN!).

Distribution. Bolivia (PIC 1936).

Demotispa Baly, 1858

Demotispa coccinata (Boheman, 1862) comb. nov.

Himatidium coccinatum Boheman, 1862: 33 (type locality: 'Ega prope fluvium Amazonum'; ST! in BMNH!).

Distribution. Brazil: Amazonas (BOHEMAN 1862) and Peru: San Martín (SPAETH 1942).

Demotispa flavipennis (Pic, 1923) comb. nov.

Demothispa flavipennis Pic, 1923: 8 (type locality: 'Bolivie'; HT! in MNHN!).

Remarks. Although I have examined holotype of this species, I am not fully convinced it belongs to *Demotispa*, as it has quite a convex body, narrow pronotum and the mouthparts seem somewhat protruding anteriad. Further study of the specimen, including full examination of the verntral parts (specimen is currently glued to a card), will be necessary to clarify its classification.

Distribution. Bolivia: Cochabamba (DESCARPENTRIES & VILLIERS 1959).

Demotispa filicornis (Borowiec, 2000) comb. nov.

Stilpnaspis filicornis Borowiec, 2000: 152 (type locality: 'Ecuador, Santa Inez'; HT! in DBET!).

Distribution. Ecuador: Pichincha (BOROWIEC 2000).

Demotispa fulva (Boheman, 1850) comb. nov.

Himatidium fulvum Boheman, 1850: 79 (type locality: 'Columbia'; ST! in NHRM!). *Calliaspis nigricornis* Kirsch, 1865: 95 (type locality: 'Bogotà'; ST in MTD); SPAETH (1919): 23 (synonymy).

Distribution. Colombia (BOHEMAN 1850, KIRSCH 1865).

Demotispa fuscocincta (Spaeth, 1928) comb. nov.

Himatidium fuscocinctum Spaeth, 1928: 32 (type locality: 'Rio Magdalena in Columbien'; ST! in BMNH!, MMUE!).

Distribution. Colombia (SPAETH 1928).

Demotispa impunctata (Borowiec, 2000) comb. nov.

Stilpnaspis impunctata Borowiec, 2000: 153 (type locality: 'Costa Rica, Monteverde Res'; HT! in DBET!).

Distribution. Costa Rica: Puntarenas (BOROWIEC 2000).

Demotispa marginata (Weise, 1905) comb. nov.

Stilpnaspis marginata Weise, 1905b: 298 (type locality: 'Songo: Bolivia'; HT! in ZMHB!).

Distribution. Bolivia: La Paz (WEISE 1905).

Demotispa miniacea (Spaeth, 1923) comb. nov.

Himatidium miniaceum Spaeth, 1923: 171 (type locality: specimens without locality labels; ST! in MMUE!).

Remarks. This species was previously considered to be described in 1922. The description was published in the fourth issue of the 1922 volume of *Norsk Entomologisk Tidsskrif* which appeared on 24th June 1923, thus the year of publication is here changed to 1923. **Distribution.** Neotropics (SPAETH 1923).

Demotispa monteverdensis (Borowiec, 2000) comb. nov.

Stilpnaspis monteverdensis Borowiec, 2000: 155 (type locality: 'Costa Rica: Puntarenas, Monteverde'; PT! in DBET!).

Distribution. Costa Rica: Puntarenas (BOROWIEC 2000).

Demotispa nevermanni (Uhmann, 1930) comb. nov.

Demothispa nevermanni Uhmann, 1930: 214 (type locality: 'Hamburg-Farm, Reventazon, Ebene Limon, Costa Rica' after introduction chapter; ST in SDEI, USNM).

Remarks. This species was transfered to *Stilpnaspis* by STAINES (2009). I did not examine its type, but based on the original description, I think it is congeneric with *Demotispa*. **Distibution.** Costa Rica: Limón (UHMANN 1930).

Demotispa panamensis (Borowiec, 2000) comb. nov.

Stilpnaspis panamensis Borowiec, 2000: 157 (type locality: 'PANAMA: Panama Prov., Cerro Campana'; HT! in DBET!).

Distribution. Panama: Panamá (BOROWIEC 2000).

Demotispa pulchella Baly, 1858

Demotispa pulchella Baly, 1858: 67 (type locality: 'Amazons; Peru'; LT! in BMNH!).

Stilpnaspis bicolorata Borowiec, 2000: 151, syn. nov. (type locality: 'PERU, Loreto, Iquitos, Barillal'; HT! in DBET!, PT! in DBET!, ZMHB!)

Type material examined. *D. pulchella***:** LECTOTYPE (present designation), pinned: 'Type | H.T. [w, p, cb, circular label with red frame] || Baly Coll. [w, p, cb] || Demotispa | pulchella | Baly | Amazons, Peru [green, hw, cb, Baly's hw]' (BMNH).

Remarks. BALY (1858) did not state how many specimens he had at his disposal, but he must have had at least two, as he mentioned the typical form with large red spot covering nearly whole elytra (coll. Baly) and the variety with completely black elytra (coll. Saunders). I have found one specimen of the typical form (ex coll. Baly), designated here as the lectotype (Fig. 14) to conserve its identity and avoid further misapplications if additional specimen(s) is discovered. This is particularly important as it is the type species of the genus. I was not able to find the specimen representing the variety, which should also be located in BMNH, as the William Saunder's collection came to the museum via Alexander Fry. However, it is quite unlikely that both specimens belong to a single species, as I have not so far observed such variability in any *Demotispa* species, having seen extensive material of all species. BOROWIEC (2000) described *Stilpnaspis bicolorata* from Peru, which perfectly agrees with the lectotype of *D. pulchella*, thus it is synonymized here. STAINES (2009) transferred *D. pulchella* to *Stilpnaspis* not knowing that it was actually the type species of *Demotispa*.

Distribution. Brazil: Amazonas (BALY 1858), Peru: Huánuco, Loreto (BALY 1858; BOROWIEC 2000, 2009).

Demotispa rubiginosa (Boheman, 1862) comb. nov.

Himatidium rubiginosum Boheman, 1862: 32 (type locality: 'Bolivia'; ST! in ZMHB!).

Demotispa gebieni Uhmann, 1930: 136 (type locality: 'Costa Rica'; HT in USNM), UHMANN (1937b): 204 (synonymy).

Remarks. Types of *H. rubiginosum* were labelled as originating from Bolivia, but in fact they came from Veragua in Panamá (SPAETH 1917). BOROWIEC (1996) provided new faunistic records for *D. sanguinea* (Champion, 1894), however, these specimens actually belong to *D. rubiginosa*.

Distribution. Costa Rica: Puntarenas (UHMANN 1930, BOROWIEC 1996) and Panama: Chiriquí (SPAETH 1917).

Demotispa rubricata (Guérin-Méneville, 1844) comb. nov.

Imatidium rubricatum Guérin-Méneville, 1844: 285 (type locality: 'Cayenne'; ST! in MMUE!). Himatidium latum Spaeth, 1923: 170 (type locality: 'Cayenne'; HT! in MMUE!); SPAETH (1938): 308 (synonymy).

Distribution. French Guyana (Guérin-Méneville 1844, Spaeth 1923).

Demotispa sanguinea (Champion, 1894) stat. restit. & comb. nov.

Himatidium sanguineum Champion, 1894: 233 (type locality: 'Costa Rica, Volcan de Irazu'; HT! in BMNH!).

Remarks. This species was synonymized with *D. rubiginosa* by SPAETH (1917), however, the synonymy was made upon primary description only. I have studied the holotype of *D. sanguinea* and found that the species is very different, having an oval body with broadly explanated margins (circular with narrow margins in *D. rubiginosa*) thus it is removed from synonymy of the latter, and its species status is restored here. BOROWIEC (1996) provided new

faunistic records for *D. sanguinea* (Champion, 1894), however, these specimens actually belong to *D. rubiginosa*.

Distribution. Costa Rica: Cartago (CHAMPION 1894).

Demotispa scarlatina (Spaeth, 1938) comb. nov.

Himatidium scarlatinum Spaeth, 1938: 309, 315 (type locality: 'Ecuador: Cachabé'; HT! in BMNH!, PT! in MMUE!).

Distribution. Ecuador: Esmeraldas (SPAETH 1938).

Demotispa tambitoensis (Borowiec, 2000) comb. nov.

Stilpnaspis tambitoensis Borowiec, 2000: 160 (type locality: 'Colombia, distr. Cauca, Nat. Re. Tambito near El Tambo'; HT! in DBET!).

Distribution. Colombia: Cauca (BOROWIEC 2000).

Demotispa tricolor (Spaeth, 1938) comb. nov.

Himatidium tricolor Spaeth, 1938: 309, 315 (type locality: 'Costa Rica: Turrialba'; HT!, PT! in MMUE!).

Distribution. Costa Rica: Cartago (SPAETH, 1938), Panama: Panamá (STAINES 2007).

Katkispa gen. nov.

Katkispa elongata (Pic, 1934) comb. nov.

Euxema elongata Pic, 1934a: 154 (type locality: 'Colonie Tovar'; ST! in MNHN!).

Distribution. Venezuela: Aragua (PIC 1934a).

Lechispa gen. nov.

Lechispa parallela (Pic, 1930) comb. nov.

Stenispa parallela Pic, 1930: 45 (type locality: 'Rosas, F. C. S. Prov. Buenos Aires'; ST! in MNHN!).

Distribution. Argentina: Buenos Aires and Chaco (PIC 1930, MONRÓS & VIANA 1947).

Lechispa rosariana (Maulik, 1933) comb. nov.

Stenispa rosariana Maulik, 1933: 608 (type locality: 'Argenita: Rosario'; HT! in BMNH!).

Distribution. Argentina: Buenos Aires and Chaco (MAULIK 1933, MONRÓS & VIANA 1947).

Parentispa gen. nov.

Parentispa formosa (Staines, 1996) comb. nov.

Cephaloleia formosus [sic!] Staines, 1996: 34 (type locality: 'Porto Bello, Pan[ama]'; HT, PT in USNM).

Distribution. Belize: Belize, Colombia: Antioquia, and Panama: Colón (STAINES 1996).

Parentispa gracilis (Baly, 1878) comb. nov.

Cephaloleia gracilis Baly, 1878: 41 (type locality: 'Amazons'; ST! in BMNH!).

Remarks. Described generally from the 'Amazons', collected during the travels of H. W. Bates to South America, thus the specimen could originate either from Brazil or Peru. **Distribution.** Brazil or Peru (BALY 1878).

Parentispa vagelineata (Pic, 1926) comb. nov.

Cephalolia vagelineata Pic, 1926b: 10 (type locality: 'Brésil'; HT! in MNHN!).

Remarks. The record published by URUETA SANDINO (1972) most likely belongs to *P. formosa*, as *P. vagelineata* does not occur in Colombia. The record from Peru (COUTURIER & KAHN 1992) might actually belong to *P. gracilis*, but this needs further verification. **Distribution** Brazil: Goiás (DESCARDENTRIES & VILLERS 1959) and Peru: San Martín (COU-

Distribution. Brazil: Goiás (DESCARPENTRIES & VILLIERS 1959) and Peru: San Martín (COU-TURIER & KAHN 1992).

Parimatidium Spaeth, 1938

Parimatidium marginicolle (Boheman, 1850)

Himatidium marginicolle Boheman, 1850: 80 (type locality: 'Brasilia'; HT! in ZMHB!).

Distribution. Brazil (BOHEMAN 1850).

Parimatidium rubrum (Boheman, 1850)

Himatidium rubrum Boheman, 1850: 78 (type locality: 'Brasilia'; ST! in ZMHB!).

Distribution. Brazil: Pará, São Paulo (BOHEMAN 1850, 1862; SPAETH 1938), French Guayana (SPAETH 1914, BOROWIEC 2009), and Surinam (BOROWIEC 1996).

Pseudimatidium Aslam, 1966

Pseudimatidium bondari (Spaeth, 1938) comb. nov.

Himatidium bondari Spaeth, 1938: 313, 316 (type locality: 'Bahia'; HT! in MMUE!, PT! in BMNH!).

Distribution. Brazil: Bahia (SPAETH 1938).

Pseudimatidium discoideum (Boheman, 1850) comb. nov.

Himatidium discoideum Boheman, 1850: 77 (type locality: 'Bahia'; type unknown). Calliaspis rufula Boheman, 1850: 87 (type locality: 'Cayenna'; ST in ?MNHN); SPAETH (1922): 172 (synonymy). Calliaspis punctata Wagener, 1881: 25 (type locality: 'Bahia'; HT in MM); SPAETH (1922): 172 (synonymy).

Distribution. Brazil: Bahia (BOHEMAN 1850, WAGENER 1881), Rio Grande do Sul (BOROWIEC 1996) and French Guyana (BOHEMAN 1850).

Pseudimatidium elaeicola Aslam, 1966

Pseudimatidium elaeicola Aslam, 1966: 692 (type locality: 'Columbia, Calima area'; HT!, PT! in BMNH!).

Distribution. Colombia: Cauca (ASLAM 1966) and Ecuador: Napo (BOROWIEC 1996).

Pseudimatidium florianoi (Bondar, 1942) comb. nov.

Himatidium florianoi Bondar, 1942: 38 (type locality: 'Bahía: Bomfim, Feira de S. Ana'; ST! in MNRJ!).

Distribution. Brazil: Bahia (BONDAR 1942).

Pseudimatidium gomescostai (Bondar, 1943) comb. nov.

Himatidium gomes-costai Bondar, 1943: 385 (type locality: 'Taquari, Rio Grande do Sul'; ST! in MNRJ!).

Distribution. Argentina: Misiones (MONRÓS & VIANA 1947) and Brazil: Rio Grande do Sul (BONDAR 1943).

Pseudimatidium limbatum (Baly, 1885) comb. nov.

Demotispa limbata Baly, 1885: 27 (type locality: 'Guatemala, Cubilguitz in Vera Paz'; ST! in BMNH!). *Homalispa limbifera* Baly, 1885: 7, **syn. nov.** (type locality: 'Guatemala, Cubilguitz, San Juan in Vera Paz'; ST! in BMNH!).

Remarks. BALY (1885) described *H. limbifera* and *D. limbata* from the same locality without any additional note. It is quite unusual because *H. limbifera* does not have prognathous and projecting mouthparts, like the other *Homalispa* species, and Baly was mostly quite careful about details, particularly in hispines. I have examined types of both species and found that they are conspecific, *H. limbifera* representing just a teneral specimen of *D. limbata*. Therefore I synonymize them here and retain the name *D. limbata* as the valid one because its type specimen is fully sclerotized and perfectly preserved (following the First Reviser Principle, Article 24.2.1 of the Code (ICZN 1999)).

Distribution. Guatemala: Alta Vera Paz (BALY 1885).

Pseudimatidium limbatellum (Boheman, 1862) comb. nov.

Himatidium limbatellum Boheman, 1862: 29 (type locality: 'Mexico'; ST! in BMNH!).

Distribution. Mexico (BOHEMAN 1862).

Pseudimatidium madoni (Pic, 1936) comb. nov.

Demothispa madoni Pic, 1936: 12 (type locality: 'Cayenne'; HT! in MNHN!).

Distribution. French Guyana (PIC 1936).

Pseudimatidium neivai (Bondar, 1940) comb. nov.

Himatidium neivai Bondar, 1940a: 205 (type locality: 'Bahia, Agua Preta'; ST! in MNRJ!).

Remarks. The species is reported from numerous countries (GENTY et al. 1978), however, quite likely records from countries other than Brazil belong to different *Pseudimatidium* species.

Distribution. Brazil: Bahia (BONDAR 1940) and Colombia, Ecuador, Panama, Peru, Surinam and Venezuela (GENTY et al. 1978).

Pseudimatidium pallidum (Baly, 1885) comb. nov.

Demotispa pallida Baly, 1858: 65 (type locality: 'Bogota; Columbia'; HT! in BMNH!). *Demothispa rufa* Pic, 1926a: 14 (type locality: 'Guyane Fr.'; HT! in MNHN!); SPAETH (1938): 313 (synonymy).

Distribution. Brazil: Pará (WEISE 1910b), Colombia (BALY 1858), French Guyana (WEISE 1910b, PIC 1926a).

Pseudimatidium pici (Staines, 2009) comb. nov.

Cephalolia limbata Pic, 1928: 4 (type locality: 'R. Argentine'; ST! in MNHN!). *Demotispa pici* Staines, 2009: 2 (new substitute name for *D. limbata* Pic, 1928 not Baly, 1885).

Distribution. Argentina: Buenos Aires, Entre Ríos, Misiones (Monrós & VIANA 1947) and Uruguay (Monrós & VIANA 1947).

Pseudimatidium procerulum (Boheman, 1862) comb. nov.

Calyptocephala procerula Boheman, 1862: 45 (type locality: 'Peruvia'; HT! in BMNH!).

Demotispa brunneofasciata Borowiec, 2000: 170, syn. nov. (type locality: 'Peru: Dept. Loreto, 1.5 km N Teniente Lopez'; HT in SEM).

Remarks. *Calyptocephala procerula* has remained unknown to nearly all authors since its description. I have examined its holotype in BMNH and found it is not a member of the Spilophorini, but of the Imatidiini, as it has a seta only in anterior corners of pronotum. The holotype is conspecific with the recently described *Demotispa brunneofasciata*, which is here synonymized.

Distribution. Peru (BOHEMAN 1862): Loreto (BOROWIEC 2000).

Pseudostilpnaspis Borowiec, 2000

Pseudostilpnaspis belizensis Borowiec, 2008

Pseudostilpnaspis belizensis Borowiec, 2008: 90 (type locality: 'Belize, Cayo, Ciquibul Forest Res., Las Cuevas Field Station'; HT! in BMNH!).

Distribution. Belize: Cayo (BOROWIEC 2008).

Pseudostilpnaspis columbica (Weise, 1910)

Stilpnaspis columbica Weise, 1910a: 43 (type locality: 'Columbia: Cordill. occ., Vitacoberge'; HT! in ZMHB!).

Distribution. Colombia: Cauca (WEISE 1910a).

Pseudostilpnaspis curvipes (Uhmann, 1951) comb. nov.

Demotispa curvipes Uhmann, 1951: 66 (type locality: 'Venezuela: Rancho Grande, Aragua'; HT! in BMNH!).

Remarks. This species was recently transferred to *Parimatidium* on the basis of the serrate lateroapical margins of the elytra (STAINES 2009), however, it has simple tarsal claws, thus it

is not congeneric with *Parimatidium*. I place it tentatively in *Pseudostilpnaspis* because of the convex body with narrow explanate margins, however, the species may prove to belong to a different genus.

Distribution. Venezuela: Aragua (UHMANN 1951).

Pseudostilpnaspis costaricana Borowiec, 2000

Pseudostilpnaspis costaricana Borowiec, 2000: 166 (type locality: 'Costa Rica, La Sulza de Turrialba'; HT! in DBET!).

Distribution. Costa Rica: Cartago (BOROWIEC 2000).

Pseudostilpnaspis lata (Baly, 1885) comb. nov.

Cephaloleia lata Baly, 1885: 13 (type locality: 'Panama, Bugaba, Volcan de Chiriqui 4000 to 6000 feet'; ST! in BMNH!).

Remarks. The species was also recorded from Costa Rica, Mexico, and Nicaragua (STAINES 1996, 2007). However, I do not include these records in the distribution of *P. lata* because they are very likely based on misidentifications. *Pseudostilpnaspis lata* seems to be restricted in Panama to a relatively small area in western Chiriquí, and all other populations I have examined belong to different species (Sekerka & Windsor, unpubl. data). Moreover, the record from Mexico was based on specimens labelled only 'Mexico', thus must be considered as doubtful until more accurately labeled material is found.

Distribution. Panama: Chiriquí (BALY 1885).

Pseudostilpnaspis muzoensis Borowiec, 2000

Pseudostilpnaspis muzoensis Borowiec, 2000: 167 (type locality: 'Nouv. Grenade, Muzo'; HT! in DBET!).

Distribution. Colombia: Boyacá and Panama: Panamá (BOROWIEC 2000).

Weiseispa gen. nov.

Weiseispa angusticollis (Weise, 1893) comb. nov.

Demothispa angusticollis Weise, 1893: 16 (type locality: 'Ecuador'; HT! in ZMHB!).

Distribution. Ecuador (WEISE 1893).

Weiseispa bimaculata (Baly, 1858) comb. nov.

Demotispa bimaculata Baly, 1858: 68 (type locality: 'Mexico'; ST! in BMNH!). Demothispa biplagiata Pic, 1923: 8 (type locality: 'Bogota'; HT! in MNHN!), syn. nov.

Remarks. Most likely, the type locality of *D. bimaculata* is erroneous, as I have never seen a specimen of *Weiseispa* collected north of Panama. Moreover, there are no more specimens from Mexico besides the type. I have examined types of both, *D. bimaculata* and *D. biplagiata*, and in my opinion both belong to the same species.

Distribution. Colombia: Cundinamarca (PIC 1923) and ? Mexico (BALY 1858).

Weiseispa cayenensis (Pic, 1923) comb. nov.

Demothispa cayenensis Pic, 1923: 8 (type locality: 'Cayenne'; HT! in MNHN!).

Distribution. French Guyana (PIC 1923).

Weiseispa melancholica (Weise, 1910) comb. nov.

Demothispa peruana var. melancholica Weise, 1910b: 79 (type locality: 'Peru: Pachitea'; ST! in ZMHB!); UHMANN (1937b): 199 (raised to species).

Distribution. Peru: Huánuco (WEISE 1910b).

Weiseispa peruana (Weise, 1910) comb. nov.

Demothispa peruana Weise, 1910b: 78 (type locality: 'Peru: Pachitea'; ST! in ZMHB!).
Demothispa peruana chr. membrata Uhmann, 1957b: 3 (type locality: 'Yungas de Arepucho, Sihuencas'; ST in ZSM), unavailable infrasubspecific name (chromation).

Remarks. STAINES (2009) raised the rank of *D. membrata* to species, however, he did not provided any description. The name was proposed as an infrasubspecific entity, thus is not valid according to ICZN (1999) and therefore Staines' act is invalid. **Distribution.** Peru: Huánuco (WEISE 1910b).

Windsorispa gen. nov.

Windsorispa bicoloricornis (Pic, 1926) comb. nov.

Demothispa bicoloricornis Pic, 1926a: 14 (type locality: 'Guyane Fr.'; HT in MNHN).

Remarks. This species is placed in *Windsorispa* based on the primary description and comparative note by Pic (1926a), however, I had no oportunity to study its type, so the transfer is rather tentative and requires confirmation in the future. **Distribution.** French Guyana (Pic 1926a).

Windsorispa latifrons (Weise, 1910) comb. nov.

Demotispa latifrons Weise, 1910b: 78 (type locality: 'Columbien, Cordill. occ., St. Antonio, Alto de las cruces, Rio Vitaco'; ST! in NHRM!, ZMHB!).

Distribution. Colombia: Cundinamarca (WEISE 1910b).

Windsorispa submarginata (Pic, 1934) comb. nov.

Demothispa submarginata Pic, 1934c: 8 (type locality: 'Vénézuela'; HT! in MNHN!).

Distribution. Venezuela (PIC 1934c).

Xenispa Baly, 1858, stat. restit.

Xenispa argentina (Monrós & Viana, 1947) comb. nov.

Demothispa argentina Monrós & Viana, 1947: 158 (type locality: 'Argentina: Formosa, dtº Capital: Isla de Oro'; HT, PT in USNM).

Remarks. MONRÓS & VIANA (1947) compared the species with *D. latifrons* and *D. bicoloricornis*, both placed here in *Windsorispa* gen. nov., but the depicted beetle has a completely different shape of the pronotum and body. Judging from the description and the given figure, it seems most similar to some *Xenispa* species, however, this transfer has to be understood as tentative until it is verified by examination of the type specimens.

Distribution. Argentina: Formosa and Paraguay: Itapúa (MONRÓS & VIANA 1947).

Xenispa atra (Pic, 1926) comb. nov.

Demothispa atra Pic, 1926a: 13 (type locality: 'Vénézuela'; HT in MNHN).

Remarks. This species is placed in *Xenispa* based on the primary description only and according to Pic (1926a), it is most similar to *X. jataiensis*. However, I did not examine the type and thus the placement is tentative.

Distribution. Venezuela (DESCARPENTRIES & VILLIERS 1959).

Xenispa baeri (Pic, 1926) comb. nov.

Demothispa baeri Pic, 1926b: 9 (type locality: 'Pérou'; HT! in MNHN!).

Distribution. Peru: Huallaga (PIC 1926b).

Xenispa bahiana (Spaeth, 1938) comb. nov.

Himatidium (Parimatidium) bahianum Spaeth, 1938: 307, 314 (type locality: 'Bahia'; HT! in MM, PT! in BMNH!).

Distribution. Brazil: Bahia (SPAETH 1938).

Xenispa bicolorata (Uhmann, 1948) comb. nov.

Demotispa bicolorata Uhmann, 1948: 214 (type locality: 'Brasilien: Sta. Catharina, Nova Teutonia'; HT in SDEI).

Remarks. This species is placed in *Xenispa* based on the primary description only, however, UHMANN (1948) compared it to species which clearly belong to *Xenispa*. **Distribution.** Brazil: Santa Catarina (UHMANN 1948).

Xenispa boliviana (Weise, 1910) comb. nov.

Demothispa boliviana Weise, 1910b: 80 (type locality: 'Bolivia: Cochabamba'; ST! in ZMHB!).

Distribution. Bolivia: Cochabamba (WEISE 1910b).

Xenispa carinata (Pic, 1934) comb. nov.

Demothispa carinata Pic, 1934a: 154 (type locality: 'Venézuela: Colonie Tovar'; ST! in MNHN!).

Distribution. Venezuela: Aragua (PIC 1934a).

Xenispa clermonti (Pic, 1934) comb. nov.

Demothispa clermonti Pic, 1934b: 2 (type locality: 'Brésil: Hansa'; HT! in MNHN!).

Distribution. Brazil: Santa Catarina (PIC 1934b).

Xenispa collaris (Waterhouse, 1881) comb. nov.

Homalispa collaris Waterhouse, 1881: 264 (type locality: 'Ecuador, Sarayacu' after introduction; ST! in BMNH!).

Remarks. WATERHOUSE (1881) described this species in *Homalispa* and subsequent authors accepted his opinion (i.e. UHMANN 1957a), however, the specimen does not have protruding mouthparts like other *Homalispa* species. Therefore, it is transfered here to *Xenispa* based on general shape and the serrate apicolateral margins of the elytra. **Distribution.** Ecuador: Pastaza (WATERHOUSE 1881).

Xenispa columbica (Weise, 1910) comb. nov.

Demothispa columbica Weise, 1910b: 80 (type locality: 'Columbien, Cordill. occ., St. Antonio, Alto de las cruces'; ST! in ZMHB!).

Distribution. Colombia: Tolima (WEISE 1910b).

Xenispa consobrina (Weise, 1910) comb. nov.

Demothispa consobrina Weise, 1910b: 80 (type locality: 'Columbien, Cordill. occ., Alto de las cruces'; ST! in ZMHB!).

Distribution. Colombia: Tolima (WEISE 1910b).

Xenispa costaricensis (Uhmann, 1930) comb. nov.

Cephalolia costaricensis Uhmann, 1930: 229 (type locality: 'Hamburg-Farm, Reventazon, Ebene Limon, Costa Rica' after introduction; ST in SDEI, USNM).

Distribution. Costa Rica: Cartago, Heredia, Limón (UHMANN 1930, STAINES 1996) and Panama: Bocas del Toro (STAINES 1996).

Xenispa cyanipennis (Boheman, 1850) comb. nov.

Himatidium cyanipenne Boheman, 1850: 72 (type locality: 'Brasilia'; ST! in ZMHB!).

Distribution. Bolivia (SPAETH 1914), Brazil (BOHEMAN 1850), Peru (SPAETH 1938, 1942).

Xenispa elegans (Baly, 1875) stat. restit. & comb. nov.

Demotispa elegans Baly, 1875: 75 (type locality: 'Ecuador'; ST in BMNH).

Remarks. This species was synonymized with *X. cyanipennis* by SPAETH (1938), however, the latter has uniformly yellow antennae and much coarser punctation of the elytra. I was not able to locate the type specimen(s) in BMNH, however, I have seen several specimens

collected recently in Ecuador, and they perfectly agree with the primary description, having bicolorous antennae, coarser punctation and being somewhat narrower. Therefore I restore species status of *X. elegans* and Ecuador is removed from the range of *X. cyanipennis*. **Distribution.** Ecuador (BALY 1875).

Xenispa exigua (Uhmann, 1930) comb. nov.

Cephalolia exigua Uhmann, 1930: 230 (type locality: 'Hamburg-Farm, Reventazon, Ebene Limon, Costa Rica' after introduction; HT in USNM).

Distribution. Costa Rica: Heredia, Limón (UHMANN 1930, STAINES 1996), and Panama: Panamá (STAINES 1996).

Xenispa fallaciosa (Pic, 1923) comb. nov.

Demothispa fallaciosa Pic, 1923: 8 (type locality: 'Pérou'; HT! in MNHN!).

Distribution. Peru: Huallaga (DESCARPENTRIES & VILLIERS 1959).

Xenispa fulvimana (Pic, 1923) comb. nov.

Demothispa fulvimana Pic, 1923: 8 (type locality: 'Brésil'; HT! in MNHN!).

Distribution. Brazil: Goiás (Descarpentries & Villiers 1959).

Xenispa garleppi (Uhmann, 1937) comb. nov.

Demothispa garleppi Uhmann, 1937b: 200 (type locality: 'Peru, Dep. Cuzko, Bergland Cajon'; HT! in ZMHB!).

Distribution. Bolvia: La Paz (UHMANN 1948) and Peru: Cuzco (UHMANN 1937b).

Xenispa germaini (Weise, 1905) comb. nov.

Demothispa germaini Weise, 1905a: 54 (type locality: 'Bolivia: Cochabamba'; ST! in ZMHB!).

Distribution. Bolivia: Cochabamba (WEISE 1905a).

Xenispa grayella (Baly, 1858) comb. nov.

Demotispa grayella Baly, 1858: 66 (type locality: 'Petropolis, Brazil'; ST! in BMNH!).

Distribution. Brazil: Paraná, Rio de Janeiro, São Paulo (BALY 1858, STAINES 2014).

Xenispa jataiensis (Pic, 1923) comb. nov.

Demothispa jataiensis Pic, 1923: 8 (type locality: 'Brésil'; ST! in MNHN!).

Remarks. This species perhaps belongs to *Cephaloleia*. **Distribution.** Brazil: Goiás (DESCARPENTRIES & VILLIERS 1959).

Xenispa ovatula (Uhmann, 1948) comb. nov.

Demotispa ovatula Uhmann, 1948: 214 (type locality: 'Brasilien: E. do Rio, Itatiaya'; HT in SDEI).

Remarks. This species is placed to *Xenispa* based on primary description only. **Distribution.** Brazil: Rio de Janeiro (UHMANN 1948).

Xenispa plaumanni (Uhmann, 1937) comb. nov.

Demothispa plaumanni Uhmann, 1937a: 153 (type locality: 'Brasilien: S. Catharina, Nova Teutonia'; HT, PT in SDEI, NHRM!).

Distribution. Brazil: Rio Grande do Sul, Santa Catarina, São Paulo and Paraguay (UHMANN 1948).

Xenispa pulchella Baly, 1858 stat. restit.

Xenispa pulchella Baly, 1858: 64 (type locality: 'Columbia'; HT! in BMNH!). Demothispa magna Weise, 1910b: 77 (replacement name for Xenispa pulchella Baly, 1858 not Demotispa pulchella Baly, 1858).

Remarks. WEISE (1910b) synonymized *Xenispa* with *Demotispa* and proposed a replacement name, *D. magna*, for *X. pulchella* Baly, 1858, not *D. pulchella* Baly, 1858. Here *Xenispa* is removed from synonymy of *Demotispa* thus the replacement name is no longer necessary. Since WEISE (1910b) the species has only been cited in catalogues (i.e. UHMANN 1957a). Therefore, I restore the name *X. pulchella* according to article 59.3 (ICZN 1999). **Distribution.** Colombia (BALY 1858)

Xenispa pygidialis (Uhmann, 1940) comb. nov.

Demotispa pygidialis Uhmann, 1940: 114 (type locality: 'Brasilien: S. Catharina, Nova Teutonia'; HT, PT in SDEI, PT! in ZMHB!).

Distribution. Brazil: Rio Grande do Sul and São Paulo (UHMANN 1940).

Xenispa romani (Weise, 1921) comb. nov.

Demothispa romani Weise, 1921: 174 (type locality: 'Rio Purus'; HT! in NHRM!).

Distribution. Brazil: Amazonas (WEISE 1921).

Xenispa scutellaris (Pic, 1926) comb. nov.

Demothispa scutellaris Pic, 1926b: 9 (type locality: 'Brésil'; HT! in MNHN!).

Distribution. Brazil: Goiás (Descarpentries & Villiers 1959).

Xenispa sulcicollis (Champion, 1920) comb. nov.

Homalispa sulcicollis Champion, 1920: 222 (type locality: 'Costa Rica, Alajuela and Juan Viñas near Rio Reventazon'; ST! in BMNH!). **Remarks.** CHAMPION (1920) placed this species in *Homalispa* particularly because of the serrate lateroapical margins of the elytra and the metallic colour. However, the syntypes in BMNH do not have the mouthparts projecting forwards. The species seems to be most similar to *X. costaricensis* and *X. exigua*, and quite likely one of them represents its synonym. However, this require further comparison of type specimens.

Distribution. Costa Rica: Alajuela and Limón (CHAMPION 1920).

Xenispa testaceicornis (Pic, 1926) comb. nov.

Demothispa testaceicornis Pic, 1926a: 14 (type locality: 'Pérou'; HT! in MNHN!).

Distribution. Peru: Cuzco (DESCARPENTRIES & VILLIERS 1959).

Xenispa tibialis (Baly, 1858) comb. nov.

Demotispa tibialis Baly, 1858: 66 (type locality: 'Amazons'; HT in BMNH not found).

Remarks. The transfer is made upon the primary description, as I was unable to find the holotype, which should be located in the BMNH. The species was listed only in catalogues without any new specimens having been reported, and therefore, it is questionable whether it was collected in Brazil or Peru.

Distribution. Brazil or Peru (BALY 1858).

Xenispa tricolor (Weise, 1905) comb. nov.

Demothispa tricolor Weise, 1905a: 54 (type locality: 'Bolivia: Cochabamba'; ST! in MNHN!).

Distribution. Bolivia: Cochabamba (WEISE 1905a).

Xenispa uhmanni (Pic, 1934) comb. nov.

Demothispa uhmanni Pic, 1934b: 2 (type locality: 'Colombie: S. Antonio'; HT in SDEI).

Distribution. Colombia: Tolima (PIC 1934b).

Xenispa zikani (Spaeth, 1938) comb. nov.

Himatidium (Parimatidium) zikani Spaeth, 1938: 307, 313 (type locality: 'Minas Geraes'; HT! in MMUE!).

Distribution. Brazil: Minas Gerais (SPAETH 1938).

Imatidiini, genus incertae sedis

bicolor Zayas, 1960

Melanispa bicolor Zayas, 1960: 131 (type locality: 'Cuba, Pico de Potrerillos, Las Villas'; HT in coll. Zayas, Cuba).

Remarks. The species is not congeneric with *Melanispa*, nor does it fit into any other described genus. However, I had no oportunity to examine its type to make any final conclusions, thus it is considered as an unclassified to genus. See additional comments under *Melanispa*.

sallei Baly, 1858

Demotispa Salléi Baly, 1858: 167 (type locality: 'St. Domingo'; HT in BMNH).

Remarks. The species seems to be most similar to *Cephaloleia barroi* Uhmann, 1959 and *C. saundersi* Staines, 1996. In my opinon, these three species are not congeneric with *Cephaloleia* as they have broadly semicircular pronota with projecting anterior corners of the pronotum and convex body. However, I did not examine the respective types, thus leave *D. sallei* as unclassified to genus, for the time being.

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