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## Generic reassignment of species in the tribe Cephaloleiini Chapuis, 1875 (Coleoptera: Cassidinae)

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Cephaloleiini Chapuis, 1875 (Coleoptera: Cassidinae)

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**Abstract.** Thirty-one species of Cephaloleiini are assigned to new genera, creating **new combinations**: 19 to *Parimatidium* Spaeth, 10 to *Stilpnaspis* Weise, and two to *Demotispa* Baly. *Demotispa peruana membrata* Uhmann, 1957 is raised to full species status. As the transfer of *Cephaloleia limbatum* Pic to *Demotispa* creates a homonymy, the species is renamed *Demotispa pici* **nomen novum**.

**Introduction**

The tribe Cephaloleiini Chapuis, 1875 contains 17 genera and over 370 extant species (Staines 2002). The taxonomy of the tribe is confused since genera currently in the tribe were originally placed in two separate subfamilies (Hispininae and Cassidinae) which were studied by different taxonomists. Weise (1910), based on life history studies, suggested that the tribe belonged in the subfamily Cassidinae. However, subsequent workers left the tribe in the Hispininae. Monrós and Viana (1947) transferred the genus *Imatidium* Fabricius, 1801 from the Cassidinae to Cephaloleiini and included therein Imatidiini Chapuis, 1875 as a synonym. Again, subsequent workers did not accept the transfer and disregarded the synonymy. Spaeth (1938) divided *Imatidium* into the subgenus *Parimatidium* and four species groups. Aslam (1965) elevated *Parimatidium* to full generic status and made the species groups into the new genera *Himatidiella*, *Rhodimatidium*, and *Pseudimatidium* in addition to *Imatidium*. Unfortunately, Aslam misapplied the name *Imatidium* to a genus later described as *Aslamidium* Borowiec, and placed the true *Imatidium* species in *Himatidiella* (Borowiec 1984). Another nomenclatural problem caused by Aslam (1965) was the designation of *Demotispa pallida* Baly (the type species of *Demotispa* Baly, 1858, designated by Monrós and Viana 1947) as the type species of *Pseudimatidium* making the later an objective synonym of *Demotispa* (Borowiec 2000). Borowiec (1995) considered the Imatidiini again as a synonym of the Cephaloleiini but did not follow this in Borowiec (2000) where he placed *Demotispa* in the Imatidiini. Staines (2002) placed all of these genera in the Cephaloleiini. Chaboo (2007) based on a small sample size had poor phylogenetic support to separate the Imatidiini and the Cephaloleiini.

One of the most problematic genera is *Demotispa*. Baly (1858) erected the genus for the new species *D. pallida*, *D. tibialis*, *D. grayella*, *D. pulchella*, and *D. bimaculata*. Monrós and Viana (1947) designated *D. pallida* Baly as the type species. Currently the genus contains 48 species and has never been revised. Spaeth (1938) mentioned similarity between *Demotispa* and *Imatidium*, especially with species group 1 (currently the genus *Stilpnaspis* Weise) and the subgenus *Parimatidium* (currently a full genus). Uhmann (1948) also mentioned this similarity and recommended an extensive examination of all species.

*Demotispa* Baly (s. str.) (type species: *Demotispa pallida* Baly, designated by Monrós and Viana 1947) is characterized by the following combination of characters: antenna with 11 antennomeres; antenna filiform; antennomeres 1 and 2 subequal in length; vertex of head with distinct carina between antennae; mouthparts not projecting forward and not visible from above; pronotum transverse, with emargination on anterior margin; elytra rounded, broadly oval, or expanded to apex; elytra as wide at base as base of pronotum; elytra with posterior portion of elytral margin smooth; tibiae not excavated subapically and not pointed externally.

*Parimatidium* Spaeth (type species: *Imatidium rubrum* Boheman, by original designation) is characterized by the following combination of characters: antenna with 11 antennomeres; antenna filiform; antennomeres 1 and 2 not subequal in length; vertex of head without distinct carina between antennae; mouthparts not projecting forward and not visible from above; pronotum transverse, with emargination on anterior margin; elytra rounded, broadly oval, or expanded to apex; elytra as wide at base as base of

pronotum; elytra with posterior portion of margins serrate; tibiae excavated subapically and not pointed externally.

*Stilpnaspis* Weise (type species: *Stilpnaspis marginata* Weise, by monotypy) is characterized by the following combination of characters: antenna with 11 antennomeres; antenna filiform; antennomere 1 half as long as 2; vertex of head without distinct carina between antennae; mouthparts not projecting forward and not visible from above; pronotum transverse, with emargination on anterior margin; elytra rounded, broadly oval, or expanded to apex; elytra as wide at base as base of pronotum; elytra with posterior portion of elytral margin smooth; tibiae excavated subapically and not pointed externally.

*Cephaloleia* Chevrolat (type species: *Hispa nigricornis* Fabricius, designated by Staines 1991(1992)) is characterized by the following combination of characters: antenna with 11 antennomeres; mouthparts not projecting forward and not visible from above; pronotum quadrangular with emargination on anterior margin; elytra more or less parallel-sided, much wider at base than base of pronotum; elytra with posterior portion of elytral margin smooth; pygidium more or less exposed; tibiae are not excavated apically and not pointed externally.

Examination of type specimens of various Cephaloleini has revealed generic assignments that stand in conflict with the diagnosis given above. This necessitates the following transfers.

Transferred to *Parimatidium*: *Demotispa atra* Pic, 1926: 13; *Demotispa bicolorata* Uhmann, 1948: 214; *Demotispa bicoloricornis* Pic, 1926: 14; *Demotispa clermonti* Pic, 1934: 2; *Demotispa columbica* Weise 1910: 80; *Cephaloleia costaricensis* Uhmann, 1930b: 229; *Demotispa curvipes* Uhmann, 1951: 66; *Cephaloleia exigua* Uhmann, 1930a: 230; *Demotispa garleppi* Uhmann, 1937a: 200; *Demotispa grayella* Baly, 1858: 66; *Demotispa jataiensis* Pic, 1923: 8; *Demotispa latifrons* Weise, 1910: 78; *Demotispa magna* Weise, 1910: 77; *Demotispa ovatula* Uhmann, 1948: 214; *Demotispa plaumanni* Uhmann, 1937b: 153; *Demotispa pygidialis* Uhmann, 1940: 114; *Demotispa romani* Weise, 1921: 174; *Demotispa tibialis* Baly, 1858: 66; *Demotispa uhmanni* Pic, 1934: 2.

Transferred to *Stilpnaspis*: *Demotispa angusticollis* Weise, 1893: 16; *Demotispa argentina* Monrós and Viana, 1947: 158; *Demotispa bimaculata* Baly, 1858: 68; *Cephaloleia bondari* Monrós, 1945: 414 [replacement name for *Imatidium mauliki* Bondar, 1941: 273]; *Demotispa fulvimana* Pic, 1923: 8; *Demotispa melancholea* Weise, 1910: 79; *Demotispa nevermanni* Uhmann, 1930a: 214; *Demotispa peruana membrata* Uhmann, 1957: 3, **here raised to full species**; *Demotispa peruana* Weise, 1910: 78; *Demotispa pulchella* Baly, 1858: 65.

Transferred to *Demotispa*: *Cephaloleia lata* Baly, 1885: 13; *Cephaloleia limbatum* Pic, 1928: 40.

The transfer of *Cephaloleia limbatum* Pic, 1928 to *Demotispa* creates a homonymy with *Demotispa limbata* Baly, 1885; it is here renamed *Demotispa pici* **nomen novum**.

Nomenclatural changes proposed above are summarized below in alphabetical order:

*Demotispa lata* (Baly, 1885), **new combination**

*Demotispa pici* Staines, **nomen novum** [replacement name for *Demotispa limbatum* Pic, 1928]

*Parimatidium atra* (Pic, 1926), **new combination**

*Parimatidium bicolorata* (Uhmann, 1948), **new combination**

*Parimatidium bicoloricornis* (Pic, 1926), **new combination**

*Parimatidium clermonti* (Pic, 1934), **new combination**

*Parimatidium columbica* (Weise, 1910), **new combination**

*Parimatidium costaricensis* (Uhmann, 1930b), **new combination**

*Parimatidium curvipes* (Uhmann, 1951), **new combination**

*Parimatidium exigua* (Uhmann, 1930a), **new combination**

*Parimatidium garleppi* (Uhmann, 1937a), **new combination**

*Parimatidium grayella* (Baly, 1858), **new combination**

*Parimatidium jataiensis* (Pic, 1923), **new combination**

*Parimatidium latifrons* (Weise, 1910), **new combination**

*Parimatidium magna* (Weise, 1910), **new combination**

*Parimatidium ovatula* (Uhmann, 1948), **new combination**

*Parimatidium plaumanni* (Uhmann, 1937b), **new combination**

*Parimatidium pygidialis* (Uhmann, 1940), **new combination**

*Parimatidium romani* (Weise, 1921), **new combination**

*Parimatidium tibialis* (Baly, 1858), **new combination**  
*Parimatidium uhmanni* (Pic, 1934), **new combination**  
*Stilpnaspis angusticollis* (Weise, 1893), **new combination**  
*Stilpnaspis argentina* (Monrós and Viana, 1947), **new combination**  
*Stilpnaspis bimaculata* (Baly, 1858), **new combination**  
*Stilpnaspis bondari* (Monrós, 1945), **new combination**  
*Stilpnaspis fulvimana* (Pic, 1923), **new combination**  
*Stilpnaspis melancholea* (Weise, 1910), **new combination**  
*Stilpnaspis membrata* (Uhmann, 1957), **new combination** and **new status**  
*Stilpnaspis nevermanni* (Uhmann, 1930a), **new combination**  
*Stilpnaspis peruana* (Weise, 1910), **new combination**  
*Stilpnaspis pulchella* (Baly, 1858), **new combination**

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