**Zeitschrift:** Entomologica Basiliensia et Collectionis Frey

Herausgeber: Naturhistorisches Museum Basel, Entomologische Sammlungen

**Band:** 27 (2005)

**Artikel:** New species and records of Leiochrini (Coleoptera, Tenebrionidae)

from continental south-eastern Asia

Autor: Schawaller, Wolfgang

**DOI:** https://doi.org/10.5169/seals-980947

#### Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Mehr erfahren

#### **Conditions d'utilisation**

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. En savoir plus

#### Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. Find out more

**Download PDF: 24.12.2025** 

ETH-Bibliothek Zürich, E-Periodica, https://www.e-periodica.ch

# New species and records of Leiochrini (Coleoptera, Tenebrionidae) from continental south-eastern Asia

by Wolfgang Schawaller 1

Abstract. New records and new species of the tenebrionid tribe Leiochrini from continental south-eastern Asia are treated. New species: *Derispia batuica* sp.nov. (W Malaysia), *Derispia cooteri* sp.nov. (China), *Derispia dembickyi* sp.nov. (NE Thailand, S Vietnam), *Derispia jizushanica* sp.nov. (China), *Derispia kallarica* sp.nov. (S India), *Derispia kolibaci* sp.nov. (S India), *Derispia munnarica* sp.nov. (S India), *Leiochrodes grimmi* sp.nov. (N Thailand), *Leiochrodes inthanonensis* sp.nov. (N India) and *Crypsis wrasei* sp.nov. (China). New synonym: *Derispia maculipennis* (Marseul, 1874) (*Derispia klapperichiana* Kaszab, 1956 syn.nov.)

**Key words.** Coleoptera – Tenebrionidae – Leiochrini – new records – new species – Oriental – continental Asia

#### Introduction

In the course of identification work in recent years I have received specimens of the tenebrionid tribe Leiochrini from different collections, some of them interesting new faunistic records, others even new species to science. This material from continental south-eastern Asia presented here originates from China, Vietnam, Laos, Thailand, West Malaysia and India.

Since the basic monographs on the systematics of the Oriental Leiochrini (KASZAB 1946, 1961a, 1961b, 1961c), only a few publications have appeared, largely dealing with restricted geographical regions: China (KASZAB 1954), South India (KASZAB 1979), North Vietnam (KASZAB 1980), Nepal Himalayas (SCHAWALLER 1992), continental south-eastern Asia (SCHAWALLER 1993) and Borneo (SCHAWALLER 1998).

The Leiochrini make up a relatively uniform tribe within the Tenebrionidae, with body shape and often colour patterns seemingly similar to the coccinellids. Although the monophyly of the tribe Leiochrini is incontestable (in the subfamily Nilioninae together with the American tribe Nilionini as sister-group), all 11 genera of the Leiochrini are characterized only typologically, not by apomorphic characters. The genera discussed below are arranged in the same order as in the revisions of Kaszab, cited above.

#### **Abbreviations**

CRGT	Dr. Roland Grimm collection, Tübingen
CRSW	Rudi Schuh collection, Vienna
MHNG	Muséum d'Histoire Naturelle Genève (Dr. Ivan Löbl)
NHMB	Naturhistorisches Museum Basel (Dr. Michel Brancucci)
NME	Naturkundemuseum Erfurt (Matthias Hartmann)
SMNS	Staatliches Museum für Naturkunde Stuttgart (author)
SMTD	Staatliches Museum für Tierkunde Dresden (Olaf Jäger)

<sup>&</sup>lt;sup>1</sup> Contributions to Tenebrionidae no. 51. – For no. 50 see: Stuttgarter Beiträge zur Naturkunde (A) 687, 2005.

#### New records

## Stethotrypes korschefskyana (Kaszab, 1942)

**Material examined.** China, Fujian Prov., Wuyi Shan, 3 km NE Tomgmu, 780 m, 7.VI.2001, leg. J. Cooter & P. Hlavač, 1 ♀ SMNS.

**Remarks.** Described on the basis of 2 females as *Derispia korschefskyana* Kaszab, 1942, and transferred to *Stethotrypes* by Kaszab (1954). Although males were available, the aedeagus was not illustrated. Unfortunately, the above-listed specimen is also a female so, once again, the aedeagus cannot be figured.

Distribution. Fujian (type locality).

## Derispia acutipenis Kaszab, 1946 (Figs 10, 20–21)

**Material examined.** N Thailand, N Chiang Mai, Mae Ngad Dam, 23.XI.2001, leg. R. Grimm, 1 ex. CRGT. – N Thailand, Mae Hong Son Distr., Soppong (Pangmapa), 4.V.2004, leg. R. Grimm, 1 ex. CRGT. – N Thailand, Mae Hong Son Distr., Thapai Hot Springs, 28.IV.2003, leg. R. Grimm, 1 ex. CRGT, 1 ex. SMNS.

**Remarks.** The original description, based on a single male from the adjacent Mandaley region, is largely in accord with these new findings from Thailand (aedeagus Figs 20–21, elytral colour pattern Fig. 10) what minor discrepancies do appear do not seem to be specific.

**Distribution.** Burma (type locality), N Thailand (new record).

# Derispia ardoini Kaszab, 1980

**Material examined.** N Thailand, Chiang Mai, Doi Suthep, 1200 m, 7.–10.V.2004, leg. R. Grimm, 2 ex. SMNS. – N Thailand, Chiang Mai, Doi Pui, 1600–1685 m, 7.–9.V.2004, leg. R. Grimm, 1 ex. CRGT. – N Thailand, Huai Nam Dam NP, near headquarters, 29.IV.2003, leg. R. Grimm, 11 ex. CRGT.

**Remarks.** The dorsal colour pattern is somewhat variable, all specimens from the Huai Nam Dam NP have a larger joint discal spot on each elytron, rather than the smaller, isolated spots of the other specimens and types (SCHAWALLER 1993). The male labrum bears a distinct tubercle, as in *Derispia atkinsoni* Kaszab, 1961 and *Derispia gibbosa* (Pic, 1921), below.

**Distribution.** Vietnam (type locality), Thailand.

## *Derispia atkinsoni* Kaszab, 1961 (Figs 11, 26–27)

**Material examined.** N Thailand, NE Nan, Doi Phuka NP, Headquarters, 4.V.2003, leg. R. Grimm, 6 ex. CRGT, 1 ex. SMNS. – N Thailand, NWW Chiang Mai, Doi Suthep, 1200 m, 24.IV.–13.V.2003, leg. R. Grimm, 1 ex. CRGT.

**Remarks.** I assume it is not presumptuous to ascribe the listed material to this species, described from the adjacent Mandalay region. The elytral colour pattern (Fig. 11), the distinct elytral rows as well as the shape of the aedeagus (Figs 26–27) of the specimens

from Thailand have a certain similarity to the corresponding characters given and figured in the original description of *Derispia atkinsoni* (Kaszab 1961a); at least the differences do not to appear distinct enough to consider it a different species. Male labrum with a small turbercle.

**Distribution.** Burma (type locality), N Thailand (**new record**).

#### Derispia bisexnotata Kaszab, 1961 (Figs 13, 30–31)

Material examined. China, N Guangxi, Miaoershan, S slope, 1300–2000 m, 25.–26.VI.1997, leg. L. Bolm, 2 ex. NHMB, 1 ex. SMNS.

Remarks. This species was described by Kaszab (1961a) from a single female from Hong Kong, and subsequently Schawaller (1993) recorded this species from Vietnam. The new series from China coincides with the original description in the small body size, the highly convex elytra and the extent of the dorsal punctation. Not identical is the elytral colour pattern (elytron of the holotype ferrugineous with 6 darker spots, elytron of the new material with only 2 spots, Fig. 13). This is considered at present only infraspecific variability. The aedeagus (Figs 30–31) is slightly asymmetrical and relatively large in comparison to the small body size, see also Schawaller (1993: Figs 12–13).

Distribution. Hong Kong (type locality), Vietnam, Guangxi (new record).

#### Derispia gibbosa (Pic, 1921)

**Material examined.** W Malaysia, Pahang, Pulau Tioman, 2 km S Kampung Juara, 15.III.1995, leg. O. Merkl, 3 ex. HNHM, 1 ex. SMNS. – W Malaysia, Pahang, Tioman Isl., Kampung Tekek, 15.–26.VII.1992, leg. R. Schuh, 4 ex. CRSW. – W Malaysia, Pahang, Tioman Isl., Kampung Tekek, 16.–24.VII.1993, leg. R. Schuh, 2 ex. SMNS. – W Malaysia, Tioman, Kampong Tekek, 400 m, 9.III.1998, leg. L. Dembický & P. Pacholátko, 8 ex. NHMB, 3 ex. SMNS.

**Remarks.** All these specimens from W Malaysia are not uniform light brown, as is the material from Borneo (SCHAWALLER 1998), but the elytra are red-brown with a cross-like dark spot. However, all other characters coincide, including the shape of the aedeagus and the male labrum with a small tubercle.

Distribution. Borneo (type locality), Sumatra, W Malaysia (new record).

#### Derispia grossa Kaszab, 1946

Material examined. N Thailand, Chiang Mai, Doi Pui, 1000–1600 m, 26.IV.–9.V.1996, leg. S. Bečvář, 1 ex. SMNS. – N Thailand, Chiang Mai, Doi Pui, 1600–1685 m, 23.IV.–12.V.2003, leg. R. Grimm, 18 ex. CRGT. – N Thailand, Chiang Mai, Doi Suthep, 1200 m, 6.–8.XII.2001, leg. R. Grimm, 1 ex. CRGT. – N Thailand, Chiang Mai, Huai Nam Dam NP, Headquarters, 29.IV.2003, leg. R. Grimm, 1 ex. CRGT. – N Thailand, Nan, 22.–24.V.1999, leg. R. Grimm, 1 ex. CRGT.

**Distribution.** Vietnam (type locality), Thailand (**new record**).

## Derispia jacobsoni Kaszab, 1961

**Material examined.** N Vietnam, Prov. Ha Son Binh, Huong Son, 26.–29.IV.1991, leg. J. Strnad, 5 ex. SMNS. **Distribution.** Sumatra (type locality), Vietnam (KASZAB 1980).

#### Derispia kraatzi Kaszab, 1946

Material examined. N Thailand, N Chiang Mai, Mae Ngad Dam, 23.XI.2001, leg. R. Grimm, 1 ex. CRGT.

**Remarks.** Obviously the first new finding of this species after its description, not far from the type locality of Maymyo (near Mandalay, Burma). The species is characterized by the small, flat and parallel body shape with dense irregular punctation and dark elytra with 2 red spots on each elytron, as noted in the species key by Kaszab (1961a). In the former monograph (Kaszab 1946), the species is erroneously attributed an oval and highly convex ("stark gewölbt") shape.

Distribution. Burma (type locality), Thailand (new record).

#### Derispia lineolata (Pic, 1922)

**Material examined.** China, Fujian, Wuyi Shan, 780–1000 m, 31.V. & 6.–7.VI.2001, leg. J. Cooter & P. Hlavač, 3 ex. SMNS. – China, NW Hunan, Wulingshan, Tianzishan NR, 800 m, 16.–18.VI.1997, leg. L. Bolm, 2 ex. NHMB. – China, Sichuan, Mt. Emei, 600–1050 m, 5.–19.V.1989, leg. L. Bocák, 2 ex. NHMB, 1 ex. SMNS.

**Remarks.** The specimens from Sichuan have a somewhat different elytral colour pattern (see Schawaller 1993) and the elytra are somewhat more convex; the aedeagus is identical.

**Distribution.** Vietnam, Fujian (type localities), Sichuan, Hunan (new record).

#### Derispia maculipennis (Marseul, 1874)

Derispia klapperichiana Kaszab, 1956 syn.nov.

Material examined. China, Fujian, Wuyi Shan, Qiliqiao-Guadun road, 1150 m, 1.VI.2001, leg. J. Cooter & P. Hlavač, 1 ♂ SMNS. – China, Sichuan, Emei Shan, Wannian, 1050 m, 19.–30.III.1999, leg. W. Schawaller, 7 ex. SMNS. – China, NW Hunan, Wulingshan, Tianzishan NR, 800 m, 16.–18.VI.1997, leg. L. Bolm, 13 ex. NHMB, 3 ex. SMNS. – China, N Guangxi, Miaoershan, S slope, 1300–2000 m, 25.–26.VI.1997, leg. L. Bolm, 1 ex. NHMB. – China, Shaanxi, Qinling Mts., 6 km E Xunyangba, 1000–1300 m, 20.–21.VI.1998, leg. I. H. Marshal, 3 ex. NHMB, 2 ex. SMNS.

Remarks on synonymy. The newly collected male from Fujian fully coincides with non-type material of *Derispia maculipennis* from Japan (SMNS), also in the shape of the aedeagus. I therefore have no hesitation in considering *Derispia klapperichiana* Kaszab, 1956 described from Fujian, as a junior synonym of *Derispia maculipennis* (Marseul, 1874). The aedeagus of *Derispia maculipennis* was figured by KASZAB (1946: Fig. 150), the aedeagus of a specimen from Sichuan by SCHAWALLER (1993: Fig. 15) under *Derispia klapperichiana*.

**Distribution.** Japan (type locality of *maculipennis*), Fujian (type locality of *klapperichiana*), Sichuan (SCHAWALLER 1993), Shaanxi, Guangxi, Hunan (**new records**).

### Derispia notata Kaszab, 1946

**Material examined.** N Thailand, Chiang Mai, Doi Pui, 1000–1600 m, 26.IV.–9.V.1996, leg. S. Bečvář, 1 ex. SMNS. – N Thailand, Chiang Mai, Doi Pui, 1600–1685 m, 23.IV.–12.V.2003, leg. R. Grimm, 1 ex. CRGT.

**Distribution.** India (type locality "Vorderindien"), Nepal (SCHAWALLER 1992), Thailand (new record).

#### Derispia titschaki Kaszab, 1946

**Material examined.** W Malaysia, Perak, Ipoh, 11.–12.II.1994, leg. R. Grimm & A. Rachinsky, 14 ex. CRGT, 1 ex. SMNS. – W Malaysia, Perak, Taiping, 11.I.1995, leg. S. Bečvář, 1 ex. SMNS. – China, Hong Kong, 28.VII.1985, leg. K. Masumoto, 3 ex. SMNS.

**Distribution.** S China (type localities Canton and Shanghai), Hong Kong, W Malaysia (new records).

## Derispia tricolor Kaszab, 1942

Material examined. China, N Guangxi, Miaoershan, S slope, 1300–2000 m, 25.–26.VI.1997, leg. L. Bolm, 1 ex. SMNS.

**Distribution.** Fujian (type locality), Guangxi (new record).

#### Derispiola blairi Kaszab, 1946

**Material examined.** China, Yunnan, Gaoligong Mts., 1500–2500 m, 17.–24.V.1995, leg. O. Semela, 10 ex. SMNS.

**Distribution.** Sikkim (type locality), Indochina, Nepal, Yunnan (new record).

#### Derispiola fruhstorferi Kaszab, 1946

Material examined. N Thailand, Chiang Mai, Doi Pui, 1000–1600 m, 26.IV.–9.V.1996, leg. S. Bečvář, 1 ex. SMNS. – N Thailand, Chiang Mai, Doi Suthep, 1200 m, 24.IV.–13.V.2003, leg. R. Grimm, 1 ex. CRGT. – NE Laos, Hua Phan Prov., Ban Saluei, Phu Phan Mts., 1500–2000 m, leg. J. Bezděk, 11 ex. SMNS. – N Vietnam, Sa Pa, 6.–25.V.1990, leg. O. Šauša, 10 ex. NHMB. – China, Sichuan, Moxi, 1600 m, 2.VII.1998, leg. D. Král et al., 5 ex. NHMB, 2 ex. SMNS. – China, W Sichuan, Moxi–Hailougou, 1200–1900 m, 1.–7.VII.1994, leg. D. Král & J. Farkač, 3 ex. NHMB.

**Distribution.** Indochina (type locality Tonkin), Thailand (**new record**), Sichuan (**new record**).

#### Derispiola unicornis Kaszab, 1946

Material examined. China, W Hubei, Daba Shan, 8 km NW Muyuping, 1540 m, 18.VII.2001, leg. D. Wrase, 1 ex. SMNS. – China, NW Hunan, Wulingshan, Tianzishan NR, 800 m, 16.–18.VI.1997, leg. L. Bolm, 2 ex. NHMB, 2 ex. SMNS. – China, NW Guizhou, Fanjingshan, 35 km N Jiangkou, 1200 m, 3.–4.VI.1996, leg. L. Bolm, 1 ex. NHMB. – China, E Guizhou, Fodingshan, Ganshi, 25 km S Shiquian, 1300 m, 5.–9.VI.1997, leg. L. Bolm, 10 ex. NHMB, 3 ex. SMNS. – China, N Guangxi, Miaoershan, S slope, 1300–2000 m, 25.–26.VI.1997, leg. L. Bolm, 2 ex. NHMB.

**Distribution.** Fujian (type locality), Sichuan, Guizhou, Guangxi, Hunan, Hubei (new records), Laos.

#### Leiochrodes formosanus Kaszab, 1946

Material examined. China, W Guizhou, Leigongshan, Xijiang, 1200–1900 m, 29.V.–2.VI.1997, leg. L. Bolm, 1 ex. NHMB.

**Distribution.** Taiwan (type locality), Sichuan (SCHAWALLER 1993), Guizhou (new record).

#### Leiochrodes glabratus (Walker, 1859)

Material examined. China, N Guangxi, Miaoershan, S slope, 1300–2000 m, 25.–26.VI.1997, leg. L. Bolm, 1 ex. NHMB.

**Distribution.** Widely distributed in the Oriental region, also in Taiwan, Sikkim, Fujian (KASZAB 1946), Guangxi (**new record**).

#### Leiochrodes subaeneus Pic, 1918

**Material examined.** Thailand, Chanthaburi, Khao Sabap NP, 150–300 m, 23.–24.XI.1985, leg. D. Burckhardt & I. Löbl, 24 ex. MHNG, 2 ex. SMNS. – N Thailand, Chiang Mai, Doi Suthep, 1050 m, 5.XI.1985, leg. D. Burckhardt & I. Löbl, 7 ex. MHNG, 2 ex. SMNS.

**Distribution.** Banguey (type locality), Borneo, Java, Sikkim, Thailand (new record).

# Leiochrodes testaceicollis Kaszab, 1946 (Figs 8–9)

Material examined. China, NW Hunan, Li Shui River Valley, 15 km E Dayong, 500 m, 15.VI.1997, leg. L. Bolm, 3 ex. NHMB, 1 ex. SMNS.

**Remarks.** Aedeagus Figs 8–9.

**Distribution.** Taiwan (type locality), Hunan (new record).

#### Leiochrinus sauteri Kaszab, 1946

**Material examined.** China, NW Guizhou, Fanjingshan, 35 km N Jiangkou, 1200 m, 3.–4.VI.1996, leg. L. Bolm, 1 ex. NHMB.

Distribution. Himalayas, Indochina, Taiwan, Guizhou (new record).

#### Crypsis borneensis Kaszab, 1961

**Material examined.** W Malaysia, 90 km NE Ipoh, Banjaran Titi Wangsa, Mt. Gerah, 1900 m, 1.–17.IV.2000, leg. P. Čechovský, 1 ex. SMNS.

Distribution. Borneo (type locality), W Malaysia (new record).

#### Crypsis chinensis Kaszab, 1946

**Material examined.** China, N Guangxi, Miaoershan, S slope, 1300–2000 m, 25.–26.VI.1997, leg. L. Bolm, 4 ex. NHMB, 2 ex. SMNS.

**Distribution.** Fujian (type locality), Guangxi (new record).

### Crypsis speciosissimus Kaszab, 1946

Material examined. N Thailand, Chiang Mai, Doi Suthep, 19.–23.IV.1991, leg. J. Farkač, 1 ex. SMNS.

**Distribution.** Burma (type locality), Laos, Thailand (**new record**).

# Crypsis yunnanus Kaszab, 1961 (Fig. 1)

**Material examined.** China, Yunnan, W slope of Weibaoshan, 2000–2800 m, 25.–28.VI.1992, leg. V. Kubáň, 4 ex. NHMB, 2 ex. SMNS. – China, Yunnan, Jizu Shan, 2500–2700 m, 6.–10.VII.1994, leg. V. Kubáň, 1 ex. NHMB. – Burma, N Shan S., Namhsan, 1500–1900 m, 18.–28.II.1996, leg. S. Kasantsev, 2 ex. SMNS.

**Remarks.** This species was described by Kaszab (1961c), however without either information about the aedeagus or figure of it. The new series from Weibaoshan consists of specimens with a bichromous pronotum (as described by Kaszab) and of specimens with uniformly dark pronotum. The aedeagus (Fig. 1) is of identical shape, and further no other external characters show distinct differences. The specimens from Burma have a bichromous pronotum, too.

**Distribution.** Yunnan (type locality), Burma (new record).

## Crypsis sp.

**Material examined.** China, S Sichuan, S Xichan, Lushan Mt., 1600–1800 m, 25.–28.VII.1996, leg. S. Kasantsev, 1  $\stackrel{\frown}{\sim}$  SMNS.

**Remarks.** This female probably represents a new species from the group around *Crypsis blairi* Kaszab, 1946, from Darjeeling and Nepal but will not be described without corresponding males. Dorsal side uniform blue-metallic, lateral sides of the pronotum rounded, elytra with distinct rows of punctures.

## New species

Derispia batuica sp.nov.

(Figs 12, 22–23)

**Material examined.** Holotype (♂): W Malaysia, Batu Caves near Kuala Lumpur, 31.III.1993, leg. I. Löbl & F. Calame, MHNG. Paratypes: Same data as holotype, 6 ex. MHNG, 3 ex. SMNS.

**Description.** Dorsal side with colour pattern: head, pronotum and elytra dark-brown, each elytron with a larger yellow spot on the anterior part and a smaller spot on the posterior part, no metallic gloss, terminal antennomeres not darkened (Fig. 12). Head almost without punctation, clypeus not swollen. Antennomere 3 short. Pronotum convex, without punctation, widest at the base, lateral margins curved, anterior margin only slightly excavated and anterior corners not protruding; basal margin completely unbordered, distal and lateral margins finely and completely bordered. Elytra round and highly convex, lacking punctation; lateral margin visible in dorsal view only near the shoulders. Abdominal sternites with irregular punctures, without setation. Legs without peculiarities. Aedeagus as Figs 22–23.

Body length 2.0-2.2 mm.

Distribution. Western Malaysia.

**Etymology.** Named after the Batu Caves, where the types were collected.

**Differential diagnosis.** *Derispia batuica* sp.nov. shares with *Derispia jacobsoni* Kaszab, 1961 (Sumatra, Vietnam) the small body size and rounded shape as well as the dorsal colour pattern, and also the general shape of the aedeagus, but can be recognized by its highly convex body with the lateral elytral margin visible in dorsal view only near the shoulders (in *D. jacobsoni* body flatter and elytral margin visible in dorsal view for nearly the whole length), by a completely impunctate dorsal side (in *D. jacobsoni* elytra with fine but visible punctation), and by a somewhat different shape of the aedeagus (in *D. batuica* sp.nov. parameres not protruding the basal piece in dorsal view, in *D. jacobsoni* parameres distinctly protruding beyond the basal piece).

## Derispia cooteri sp.nov.

(Figs 14, 28–29)

**Material examined.** Holotype (♂): China, Jiangxi Prov., Haungganshan, Wuyi Shan NR, 27°83'N 117°76'E, 2000 m, 5.VI.2001, leg. J. Cooter & P. Hlavač, SMNS. Paratypes: Same data as holotype, 16 ex. SMNS.

**Description.** Dorsal side with colour pattern: dorsal side yellow-brown, elytra with a larger longitudinal black spot on the disc and smaller, rounder black spot before the tip, lacking metallic gloss, terminal antennomeres somewhat darkened (Fig. 14). Head with visible punctation, clypeus not swollen. Antennomere 3 short. Pronotum slightly convex, without punctation, widest at the base, lateral margins curved, anterior margin only slightly excavated and anterior corners not protruding; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered. Elytra round and highly convex, with irregularly distributed fine punctures occasionally arranged in rows; lateral margin visible in dorsal view only near the shoulders. Abdominal sternites with irregular punctures, without setation. Legs without peculiarities. Aedeagus as Figs 28–29.

Body length 2.5–3.0 mm.

Distribution. China (Jiangxi prov.).

**Etymology.** Named after Jon Cooter (Hereford, England), one of the collectors of the type series, who generously deposited some of his Chinese tenebrionids in the Stuttgart Museum.

**Differential diagnosis.** *Derispia cooteri* sp.nov. shares with *D. lineata* Kaszab, 1946, from Sri Lanka and *D. similis* Kaszab, 1961, from Yunnan, a round and highly convex body shape, feeble punctation on the elytra and the general but not identical shape of the aedeagus. In *D. lineata*, the tips of the basal plate of the aedeagus are bent outwards, in *D. similis* and *D. cooteri* sp.nov. bent inwards; the tip of the parameres is round in *D. similis* and slightly triangular in *D. lineata* and *D. cooteri* sp.nov. Additionally, *D. cooteri* sp.nov. can be differentiated by a completely different, non-variable (n=17) colour pattern on the elytra and by a smaller body size, under 3.0 mm.

## Derispia dembickyi sp.nov. (

(Figs 15, 32–33)

**Material examined.** Holotype (♂): NE Thailand, Loei, 30.XI.–2.XII.2001, leg. R. Grimm, CRGT. Paratypes: Same data as holotype, 16 ex. CRGT, 4 ex. SMNS. – S Vietnam, 40 km NW An Khe, Buon Luoi, 28.–30.V.1996, leg. L. Dembický & P. Pacholátko, 5 ex. NHMB, 2 ex. SMNS.

**Description.** Dorsal side with colour pattern: head and pronotum reddish-brown, elytra dark-brown with 4 yellow, sometimes confluent, spots and a yellow zigzag band before the tip, without metallic gloss, terminal antennomeres somewhat darkened (Fig. 15). Head almost without punctation, clypeus not swollen. Antennomere 3 short. Pronotum slightly convex, without punctation, widest at the base, lateral margins curved, anterior margin only slightly excavated and anterior corners not protruding; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered. Elytra round and convex, with irregularly distributed, extremely fine punctures, laterally arranged in indistinct rows; lateral margin visible in dorsal view for nearly the whole length; except at the tip. Abdominal sternites with irregular punctures, without setation. Legs without peculiarities. Aedeagus as Figs 32–33.

Body length 2.8-3.1 mm.

Distribution. North-eastern Thailand.

**Etymology.** Named after Luboš Dembický (Brno, Czech Republic), one of the collectors of the type series and collector of other species treated herein.

**Differential diagnosis.** To be recognized by the round and convex body with the elytral lateral margin visible in dorsal view for the whole length except at the tip, by the colour pattern with yellow spots on dark elytra, by very weak punctation on the elytra, and by the shape of the aedeagus. A similar shape of the aedeagus occurs in *D. ardoini* (see Kaszab 1980: Fig. 36–37), *D. chinensis*, *D. klapperichiana*, *D. diversenotatoides* and *D. vietnamica* (see Schawaller 1993: Figs. 14–17), but these species have either a completely different dorsal colour pattern and/or denser punctation on the elytra and/or the lateral margin of the elytra visible in dorsal view only near the shoulders.

## *Derispia jizushanica* sp.nov. (Figs 16, 24–25)

**Material examined.** Holotype (♂): China, Yunnan, Jizu Shan, 2500–2700 m, 6.–10.VII.1994, leg. V. Kubáň, NHMB. Paratypes: Same data as holotype, 4 ex. NHMB, 3 ex. SMNS. – China, Yunnan, Jizu Shan, 2500–3100 m, 30.V.–3.VI.1993, leg. V. Kubáň, 6 ex. NHMB, 3 ex. SMNS.

**Description.** Dorsal side with colour pattern: head and pronotum yellow-brown, elytra yellow-brown with several blackish, sometimes confluent spots, no metallic gloss, terminal antennomeres somewhat darkened (Fig. 16). Head nearly without punctation, clypeus not swollen. Antennomere 3 short. Pronotum slightly convex, without punctation, widest at the base, lateral margins curved, anterior margin only slightly excavated and anterior corners not protruding; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered. Elytra rounded and only slightly convex, with irregularly distributed but distinct elytral rows and distinctly intervals of punctation, also on the disc, punctation denser on the lateral part of the elytra; lateral margin visible in dorsal view along the whole length except at the tip. Abdominal sternites with irregular punctures, without setation. Legs without peculiarities. Aedeagus as Figs 24–25.

Body length 2.5-2.8 mm.

Distribution. China (Yunnan prov.).

Etymology. Named after the Jizu Shan mountains, where the types were collected.

**Differential diagnosis.** *Derispia jizushanica* sp.nov. can be recognized by its small size and round body shape, by relatively flat elytra with the lateral margin visible in dorsal view along the whole length apart from at the tip, by the distinct punctation and characteristic non-variable (n=17) colour pattern of the elytra and by the shape of the aedeagus. *Derispia similis* Kaszab, 1961, also from Yunnan, has a similar aedeagus, but the body is somewhat larger (3.1 mm), the elytra are highly convex with only very fine punctation and the colour pattern is also different. *Derispia lineolata* (Pic, 1922) (Fujian and Indochina) and *Derispia klapperichi* Kaszab, 1942 (Fujian) also have a similar aedeagus but, as well as other characters, it has a different body size and shape, a different dorsal colour pattern and different punctation.

#### *Derispia kallarica* sp.nov. (Figs 34–35)

**Material examined.** Holotype (♂): S India, Kerala, 15 km SW Munnar, Kallar Valley, 1250 m, 1.–9.V.1997, leg. L. Dembický & P. Pacholátko, NHMB. Paratypes: same data as holotype, 7 ex. NHMB, 3 ex. SMNS.

**Description.** Dorsal side uniformly black with a feeble blue gloss, legs and antenna dark brown, basal antennomeres somewhat lighter. Head with sparse punctation, surface distinctly shagreened, distinct setation of punctures on the anterior part of the head. Antennomere 3 twice as long as antennomere 2 and about 1.5 times longer than antennomere 4. Pronotum slightly convex, with similar fine punctation as on head, widest at the base, anterior corner not protruding; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered. Elytra round and highly convex, with distinct and dense irregular punctation not forming rows, punctation of the elytra distinctly rougher than on pronotum and head; lateral margin

visible in dorsal view for the whole length except at the tip, epipleures without punctation but uneven. Abdominal sternites impunctate, without setation. Legs without peculiarities. Aedeagus as Figs 34–35.

Body length 4.5-5.0 mm.

**Distribution.** India (Kerala).

**Etymology.** Named after the Kallar Valley, where the types were collected.

**Differential diagnosis.** To be recognized by the round and convex body with the elytral lateral margin visible in dorsal view for the whole length except at the tip, by the unicolorous black dorsal surface lacking colour pattern, by the rough and dense punctation on the elytra but not on pronotum, by the long antennomere 3 and by the shape of the aedeagus (Figs 34–35). *Derispia kallarica* sp.nov. shares all external characters with *Derispia munnarica* sp.nov. from the same locality and cannot be separated by these characters except in its somewhat different body size (4.5–5.0 mm in *D. kallarica* sp.nov., 3.5–3.7 mm in *D. munnarica* sp.nov.). However, the shape of the aedeagus in each species is quite different (Figs 34–35 in *D. kallarica* sp.nov., Figs 36–37 in *D. munnarica* sp.nov.).

# *Derispia kolibaci* sp.nov. (Figs 17–19)

**Material examined.** Holotype (♂): S India, Kerala, Periyar Lk., 900 m, 13.–20.V.1991, leg. J. Kolibáč, NHMB. Paratypes: Same data as holotype, 5 ex. NHMB, 3 ex. SMNS.

**Description.** Head and pronotum uniformly reddish-brown, elytra black with a distinct blue gloss, legs and antenna reddish brown, last 2 antennomeres darker (Fig. 17). Head with sparse punctation, surface lustrous, punctures without distinct setation. Antennomere 3 nearly twice as long as antennomere 2. Pronotum slightly convex, without distinct punctation, widest at the base, anterior corner not protruding; basal margin completely and distal margin medially unbordered, lateral margins distinctly bent upwards. Elytra rounded and highly convex, with distinct punctation forming irregular rows on the internal part; lateral margin visible in dorsal view for the whole length except at the tip, epipleures without punctation but uneven. Abdominal sternites impunctate, without setation. Legs without peculiarities. Aedeagus as Figs 18–19.

Body length 3.0–3.3 mm.

Distribution. India (Kerala).

**Etymology.** Named after Dr. Jiří Kolibáč (Brno, the Czech Republic), collector of the type series.

**Differential diagnosis.** To be recognized by the round and convex body with the elytral lateral margin visible in dorsal view for the whole length except at the tip, by the uniformly black elytra with a distinct blue gloss, by the distinct punctation on the elytra but not on pronotum, by the long antennomere 3 and by the shape of the strikingly asymmetrical aedeagus (Figs 18–19). Some similarity exists with *D. madrasensis* Kaszab, 1979, also from South India, but in this species with similar body size and shape, the elytra are dark, without metallic lustre and with a few lighter spots, the elytral punctation is weaker and the symmetrical aedeagus is completely different.

# *Derispia munnarica* sp.nov. (Figs 36–37)

**Material examined.** Holotype (♂): S India, Kerala, 15 km SW Munnar, Kallar Valley, 1250 m, 1.–9.V.1997, leg. L. Dembický & P. Pacholátko, NHMB. Paratype: Same data as holotype, 1 ♀ SMNS.

**Description.** Dorsal surface uniformly black with a feeble blue gloss, legs and antenna dark brown, basal antennomeres somewhat lighter. Head with sparse punctation, surface distinctly shagreened, punctures on the anterior part of the head with distinct setation. Antennomere 3 twice as long as antennomere 2 and about 1.5 times longer than antennomere 4. Pronotum slightly convex, with similar fine punctation as on head, widest at the base, anterior corner not protruding; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered. Elytra round and highly convex, with distinct and dense irregular punctation not forming rows, punctation of the elytra distinctly rougher than on pronotum and head; lateral margin visible in dorsal view for the whole length except at the tip, epipleures without punctation but uneven. Abdominal sternites impunctate, without setation. Legs without peculiarities. Aedeagus as Figs 36–37.

Body length 3.5–3.7 mm.

Distribution. India (Kerala).

**Etymology.** Named after Munnar town, where the types were collected.

**Differential diagnosis.** To be recognized by the round and convex body with the elytral lateral margin visible in dorsal view for the whole length except at the tip, by the uniformly black dorsal surface lacking colour pattern, by the rough and dense punctation on the elytra but not on pronotum, by the long antennomere 3 and by the shape of the strikingly asymmetrical aedeagus (Figs 36–37). Nearly identical in external characters is *Derispia kallarica* sp.nov. from the same locality, but this species is somewhat larger and possesses a completely different aedeagus (Figs 34–35).

# *Leiochrodes grimmi* sp.nov. (Figs 4–5)

Material examined. Holotype (♂): N Thailand, W Pai, above Morpang Waterfall, 800 m, 19.IV.2004, leg. W. Schawaller, SMNS. Paratype: Thailand, Chiang Rai, 10 km W Wiang Pa Pao, Ban Huay Ya Sal, 780 m, 28.I.1988, leg. P. Schwendinger, 1 ♂ MHNG.

**Description.** Dorsal surface and legs uniformly light brown, lacking metallic gloss, terminal antennomeres distinctly darkened. Head without visible punctation, no angle between clypeus and genae. Antennomere 3 long and narrow, nearly 3 times longer than antennomere 2. Pronotum distinctly convex, without punctation, widest at the base, lateral margins somewhat rounded, anterior margin excavated and anterior corners not protruding; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered. Elytra round and highly convex, without punctation (occasionally rows of punctures shine through the cuticle from the underside of the elytra); lateral margin visible in dorsal view for the whole length except at the tip. Abdominal sternites without distinct punctures and without setation, laterally wrinkled. Legs without peculiarities, posterior tibiae not abruptly bent. Aedeagus as Figs 4–5.

Body length 3.2-3.5 mm.

**Distribution.** Northern Thailand.

**Etymology.** Named after Dr. Roland Grimm (Tübingen) for his cooperation during our joint fieldwork in northern Thailand in 2004.

**Differential diagnosis.** *Leiochrodes grimmi* sp.nov. can be classed among the uniformly light brown species with highly convex elytra and long antennomere 3, the group around *Leiochrodes diaphanus* (Fabricius, 1798) and *Leiochrodes coomani* Pic, 1927, both from the same zoogeographical region, but can be differentiated by the different shape of the aedeagus, with a knob-like tip on the parameres; for the other species compare Kaszab (1946: Figs 263–264).

**Remarks.** Leiochrodes grimmi sp.nov. has been collected near Pai syntopically with Leiochrinus satsumae Lewis, 1894 (Japan, Vietnam, Thailand; see Schawaller 1993) of nearly identical body shape and size; at first sight, and particularly in the field, the taxa might well be confused.

## *Leiochrodes inthanonensis* sp.nov. (Figs 6–7)

**Material examined.** Holotype (♂): N Thailand, Chiang Mai, Doi Inthanon, 1650 m, 7.XI.1985, leg. D. Burckhardt & I. Löbl, MHNG. Paratype: Same data as holotype, 1 ex. SMNS.

**Description.** Dorsal surface, antennae and legs uniformly dark brown, without any metallic gloss. Head without visible punctation, no angle between clypeus and genae. Antennae in general short and thick, antennomere 3 short. Pronotum distinctly convex, without punctation, widest at the base, lateral margins nearly straight, anterior margin excavated and anterior corners not protruding; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered. Elytra round and highly convex, without punctation; lateral margin visible in dorsal view only near the shoulders. Abdominal sternites with irregular punctures, without setation. Legs without peculiarities, posterior tibiae not abruptly bent. Aedeagus as Figs 6–7.

Body length 2.8-3.0 mm.

Distribution. Northern Thailand.

**Etymology.** Named after the Doi Inthanon mountain, where the types were collected.

**Differential diagnosis.** Leiochrodes inthanonensis sp.nov. shares with L. convexus Lewis, 1894, L. hayekae Kaszab, 1961 (Borneo) and L. ruficornis Kaszab, 1946 (Philippines) the small and highly convex, as well as uniformly coloured body without dorsal punctation, and the thick antennae with a short antennomere 3. Males of L. convexus and L. ruficornis, however, possess abruptly bent posterior tibiae, whereas these are without modification in L. hayekae and L. inthanonensis sp.nov. All four species mentioned can be recognized mainly by different and specific shapes of the aedeagus.

# Leiochrinus metallicus sp.nov. (Fig. 3)

**Material examined.** Holotype (♂): N India, W Sikkim, Pelling, 2 km SW Pemayangste, 1900 m, 17.–18.V.1998, leg. S. Fabrizi & D. Ahrens, SMTD.

**Description.** Dorsal side uniformly coloured with blue-metallic gloss, legs and antenna dark brown. Head with sparse punctation, punctures of the anterior part of the head with distinct setation. Antennomere 3 about 3 times longer than antennomere 4, antennomere 4 not broadened. Pronotum slightly convex, lustrous and without punctation, widest at the base, anterior margin distinctly excavated in the centre; all margins unbordered. Propleura impunctate. Elytra round and convex, without rows of punctures or striae, but with irregularly distributed fine punctures; lateral margin not to be seen at the tip, epipleures without punctation but uneven. Abdominal sternites impunctate, without setation. Legs without peculiarities. Aedeagus as Fig. 3.

Body length 5.0 mm.

Distribution. India (Sikkim).

Etymology. Named for its metallic surface, an unusual character within the genus.

**Differential diagnosis.** Leiochrinus metallicus sp.nov. is the first species of the genus to be recorded with a metallic surface; all the other known species are completely fulvous or fulvous with somewhat darker elytra (KASZAB 1961c). In addition to this metallic lustre and the shape of the aedeagus, the new taxon can be recognized by its finely but distinctly punctate elytra, a further uncommon character among its congeners.

# Crypsis wrasei sp.nov. (Fig. 2)

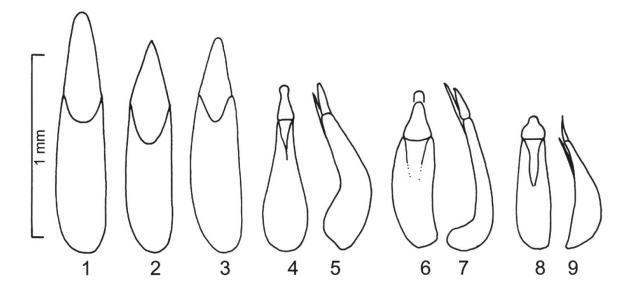
Material examined. Holotype (♂): China, Shaanxi-Sichuan border, Daba Shan, pass 20 km SE Zhenping, 1700–1800 m, 9.–12.VII.2001, leg. D. Wrase, NME. Paratypes: same data as holotype, 2 ex. NME, 2 ex. SMNS. – China, W Hubei, Daba Shan, creek valley 8 km NW Muyuping, 1540 m, 18.VII.2001, leg. D. Wrase, 2 ex. NME. – China, SE Sichuan, Jinfo Shan, 1700–1950 m, 24.–29.VI.1998, leg. D. Král et al., 5 ex. NHMB, 2 ex. SMNS.

**Description.** Dorsal side uniformly dark brown, without metallic gloss, legs and antenna of same colour. Head with dense but not confluent punctation, punctures of the anterior part of the head with distinct setation. Antennomere 3 nearly twice as long as antennomere 4. Pronotum slightly convex, with finer and sparser punctation than on head, widest at the base, lateral margins curved, anterior margin only slightly excavated and anterior corners not protruding; basal margin completely and distal margin medially unbordered, lateral margins finely and completely bordered. Propleura punctate only at the base. Elytra round and convex, lacking rows of punctures or striae, with irregular punctation, punctures somewhat denser and bigger than on pronotum; lateral margin not to be seen in the posterior third, epipleures without punctation but uneven. Abdominal sternites with very fine punctation, without setation. Legs without peculiarities. Aedeagus as Fig. 2.

Body length 5.8–6.0 mm.

Distribution. China (Shaanxi, Sichuan, Hubei).

**Etymology.** Named after David Wrase (Berlin), one of the collectors of the type series. **Differential diagnosis.** KASZAB (1961c) presented a key to the 18 known species. *Crypsis wrasei* sp.nov. is quite similar to, and probably also related to, *Crypsis gebieni* 

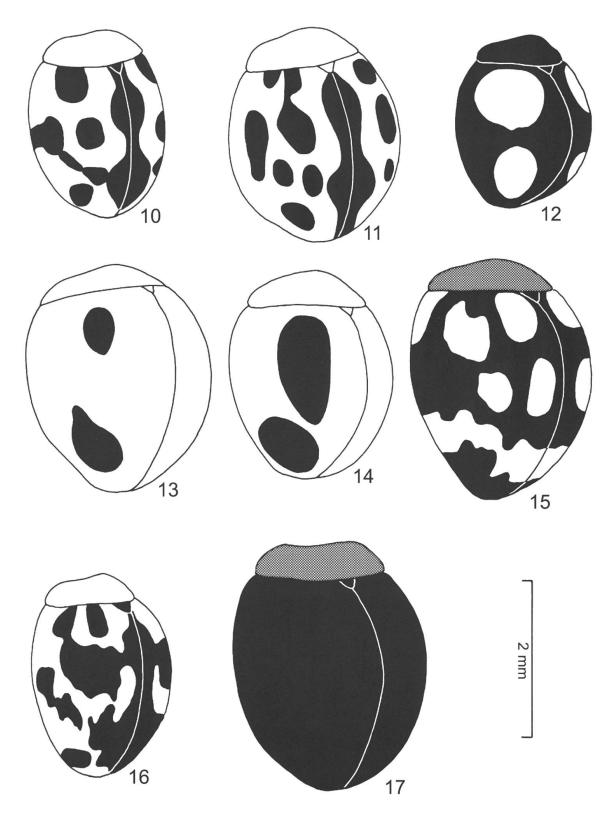


Figs 1–9. Aedeagus in dorsal and lateral view: 1, *Crypsis yunnanus*, non-type Yunnan, SMNS. 2, *Crypsis wrasei* sp.nov., holotype, NME. 3, *Leiochrinus metallicus*, holotype, SMTD. 4–5, *Leiochrodes grimmi* sp.nov., holotype, SMNS. 6–7, *Leiochrodes inthanonensis* sp.nov., holotype, MHNG. 8–9, *Leiochrodes testaceicollis*, non-type Hunan, SMNS.

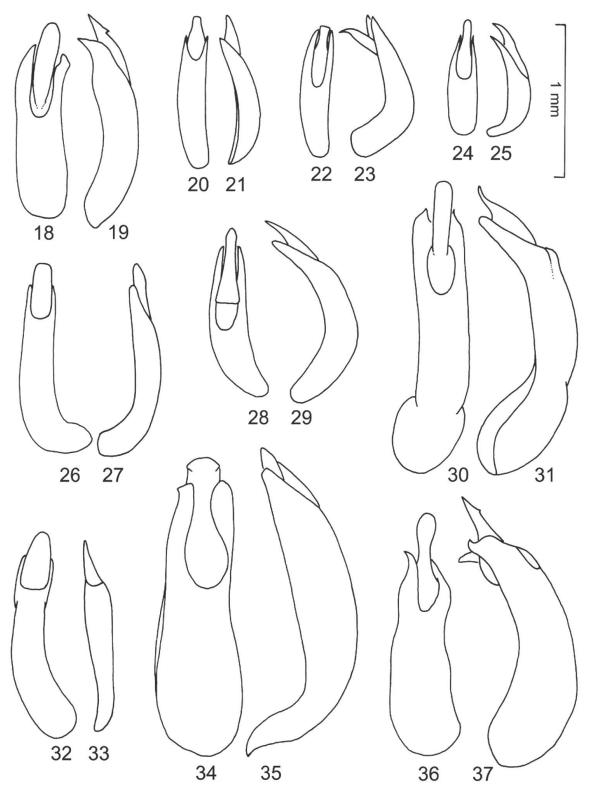
Kaszab, 1946, from Taiwan. Both share the following characters: Dorsal side without metallic gloss, elytra without rows of punctures, anterior corners of the pronotum not protruding, and lateral margin of the pronotum slightly rounded and not straight. *C. wrasei* sp.nov. can be recognized, in addition to its completely dark pronotum (in *C. gebieni* lateral parts of the pronotum light reddish) mainly by the different shape of the aedeagus, with a short basal piece and short and acute triangular joint parameres (Fig. 2) (in *C. gebieni* longer basal piece and longer joint parameres with a different shape, see KASZAB 1946: Fig. 292).

# Acknowledgements

I would like to thank all the colleagues and friends (see names in the list of depositories) for the loan of material in their care as well as for the opportunity to retain some duplicates for the SMNS, Jon Cooter (Hereford, England) for depositing some of his Chinese tenebrionids in the Stuttgart Museum, Johannes Reibnitz (SMNS) for his technical help in preparing the figures, and the unknown referees for improving comments.



Figs 10–17. Dorsal colour pattern of pronotum and elytra: 10, *Derispia acutipenis*, non-type Thailand, SMNS. 11, *Derispia atkinsoni*, non-type Thailand, SMNS. 12, *Derispia batuica* sp.nov., holotype, MHNG. 13, *Derispia bisexnotata*, non-type Guangxi, SMNS. 14, *Derispia cooteri* sp.nov., holotype, SMNS. 15, *Derispia dembickyi* sp.nov., holotype, CRGT. 16, *Derispia jizushanica* sp.nov., holotype, NHMB. 17, *Derispia kolibaci* sp.nov., holotype, NHMB.



Figs 18–37. Aedeagus in dorsal and lateral view: 18–19, *Derispia kolibaci* sp.nov., holotype, NHMB. 20–21, *Derispia acutipenis*, non-type Thailand, SMNS. 22–23, *Derispia batuica* sp.nov., holotype, MHNG. 24–25, *Derispia jizushanica* sp.nov., holotype, NHMB. 26–27, *Derispia atkinsoni*, non-type Thailand, SMNS. 28–29, *Derispia cooteri* sp.nov., holotype, SMNS. 30–31, *Derispia bisexnotata*, non-type Guangxi, SMNS. 32–33, *Derispia dembickyi* sp.nov., holotype, CRGT. 34–35, *Derispia kallarica* sp.nov., holotype, NHMB. 36–37, *Derispia munnarica* sp.nov., holotype, NHMB.

#### References

- KASZAB Z. (1946): *Monographie der Leiochrinen*. Budapest (Ungarisches Naturwissenschaftliches Museum), 221 pp, 1 pl.
- KASZAB Z. (1954): Über die von Herrn J. Klapperich in der chinesischen Provinz Fukien gesammelten Tenebrioniden (Coleoptera). Annales historico-naturales Musei nationalis Hungarici 5: 247–264.
- KASZAB Z. (1961a): Revision der Tenebrioniden-Gattung Derispia Lewis (Coleoptera). Acta zoologica Academiae Scientiarum Hungarica 7: 139–184.
- KASZAB Z. (1961b): Neue Arten der Gattung Leiochrodes Westwood (Coleoptera: Tenebrionidae). Acta zoologica Academiae Scientiarum Hungarica 7: 433–466.
- KASZAB Z. (1961c): Beiträge zur Kenntnis der Tenebrioniden-Tribus Leiochrini (Coleoptera). Annales historico-naturales Musei nationalis Hungarici 53: 357–380.
- KASZAB Z. (1979): *Tenebrioniden aus Südindien (Coleoptera)*. Acta zoologica Academiae Scientiarum Hungarica **25**: 259–310.
- KASZAB Z. (1980): Angaben zur Kenntnis der Tenebrioniden Nordvietnams (Coleoptera). Annales historiconaturales Musei nationalis Hungarici 72: 169–221.
- Schawaller W. (1992): Leiochrini (Coleoptera: Tenebrionidae) aus dem Nepal-Himalaya. Stuttgarter Beiträge zur Naturkunde (A) 482: 1–15.
- Schawaller W. (1993): Leiochrini (Coleoptera: Tenebrionidae) aus dem kontinentalen Südost-Asien. Entomologica Basiliensia 16: 349–358.
- Schawaller W. (1998): Leiochrini (Coleoptera: Tenebrionidae) from Borneo. Stuttgarter Beiträge zur Naturkunde (A) 574: 1–23.

#### Author's address:

Dr. Wolfgang Schawaller Staatliches Museum für Naturkunde Rosenstein 1 D-70191 Stuttgart GERMANY

E-mail: schawaller.smns@naturkundemuseum-bw.de