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Review of the Genus *Dendrocellus* Schmidt-Göbel (Coleoptera: Carabidae: Dryptini), with Descriptions of Seven New Species

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Abstract

Twenty-two species are recognized in the genus *Dendrocellus* Schmidt-Göbel 1846. Seven of them are described as new to science: *D. bicoloripennis*, new species (type locality: 18 km SSE of Chisenga, Jembya Reserve, Malawi); *D. inexpectus*, new species (type locality: Barway, India); *D. javanus*, new species (type locality: Java, Indonesia); *D. micropectinatus*, new species (type locality: Abercorn, Zambia); *D. nigripennis*, new species (type locality: N. Kalimantan, Malaysia); *D. queenslandicus*, new species (type locality: Queensland, Australia), and *D. sinicus*, new species (type locality: Jiangxi, China). Four species or subspecies are considered as junior synonyms: *Desera gilsoni gilsoni* Dupuis, 1912, = *Dendrocellus geniculatus* (Klug 1834), new synonymy; *Desera gilsoni continentalis* Hansen 1967, = *Dendrocellus geniculatus* (Klug 1834), new synonymy; *Dendrocellus parallelus* Chaudoir 1872, = *Dendrocellus coelestinus* (Klug 1834), new synonymy; and *Desera kulti recondita* Hanson 1967, = *Dendrocellus kulti* (Jedlicka 1960) new synonymy. *Drypta dimidiata* Putzeys 1880, which was wrongly treated as a member of *Dendrocellus*, is returned to genus *Drypta*. *Dendrocellus rugicollis* Chaudoir is recognized as a distinct species, not a synonym of *D. geniculatus* (Klug). Lectotypes are designated for five species-group names: *Dendrocellus gestroi* Bates, *Dendrocellus parallelus* Chaudoir, *Dendrocellus rugicollis* Chaudoir, *Dendrocellus ternatensis* Chaudoir, and *Desera schultzei* Heller. A key to all known *Dendrocellus* species is provided.

Dendrocellus Schmidt-Göbel, 1846, is one of the two old world genera currently recognized in tribe Dryptini of the family Carabidae. About 19 species and/or subspecies were formerly recognized under the genus name *Desera* Hope, 1831 [= *Desera* Dejean, 1825] (Lorenz 1998, 2005); but Liang *et al.* (2004) concluded that *Dendrocellus* Schmidt-Göbel is the valid generic name for this taxon. Recently, we have had the opportunity to study *Dendrocellus* type and non-type specimens from several museums. Careful morphological comparisons have convinced us that four specific or subspecific names represent junior synonyms and seven species are new to science. Designations of new synonymies and descriptions of new species are provided below.

Several keys to the species of *Dendrocellus* have been published. Heller's key (1923: 303–304) included 11 Indo-Australian species. In that key, *Drypta aeneipes*

Wiedemann was mistreated as a member of *Dendrocellus*, and one couplet was omitted. Andrewes' key (1936: 136) included four Indian species; Jedlicka's key (1963: 486) included seven Asian species; Hansen's key (1967: 400–402) included nine southeastern Asia species/subspecies, but *Dendrocellus geniculatus* (Klug) was wrongly characterized. In all these keys, *Drypta longicollis* Macleay, 1825, was erroneously treated as a member of *Dendrocellus*, and none of them is worldwide in scope. Here, we provide a key to adults of all known *Dendrocellus* species, including the seven new species described in this paper.

Materials and Methods

We recognize two species as distinct based on the following working criteria: 1) consistent differences in genitalia denote differences at the species level unless there is significant and overlapping variation within populations; 2) if genitalia are similar, then consistent differences in one or more other morphological characters denote differences at the species level, again unless there is significant and overlapping variation within populations.

Body length was measured as the linear distance along the midline from the apex of the longer mandible to the apex of the longer elytron; eye length was measured along the longitudinal diameter of the eye (dorso-lateral view); gena length was measured from the hind margin of the eye to the front margin of the neck constriction (dorso-lateral view). Other measurements, and abbreviations used for them in this review, are as follows: Ant 1 = antennomere 1 (scape), length measured between its basal and distal extremities; Ant 3 = antennomere 3, length measured between its longitudinal extremities; HW = head width including the eyes; PL = length of pronotum measured along median line; PW = pronotum at its widest point; EL = length of elytron from base to apex; EW = combined elytral width at widest point (equal to body width). We measured at least 10 specimens (5 males and 5 females) for each species, except for those species for which fewer than 10 specimens were available, in which cases all available specimens were measured. Measurements were made with the aid of a Carl Zeiss Jena stereoscopic dissecting microscope with a micrometer at 2.5× magnification. All illustrations were drawn using a Leica MZ95 stereoscopic dissecting microscope fitted with a Wild TYP 308700 drawing tube. Many of the specimens examined in the course of this study were borrowed from the following collections: BMNH = Natural History Museum, London; CAS = California Academy of Sciences, San Francisco; CMNH = Carnegie Museum of Natural History, Pittsburg, Pennsylvania; ISNB = Museum de l'Institut Royal des Sciences Naturelles de Belgique; MBC = Martin Baehr personal collection, Zoologische Staatssammlung München, Germany; MCSN = Museo Civico di Storia Naturale, Genova; MNHN = Museum Nationale d'Histoire Naturelle, Paris; NMPC = National Museum (Natural History), Prague; SMTD = Staatliches Museum für Tierkunde, Dresden; and ZMHB = Museum für Naturkunde der Humboldt-Universität, Berlin. Except as otherwise noted, all specimens examined are deposited in the collection of the Institute of Zoology, Chinese Academy of Sciences, Beijing (IOZ).

Genus *Dendrocellus* Schmidt-Göbel 1846

Dendrocellus Schmidt-Göbel 1846:24; Chaudoir 1861:545; 1872:101; Bates 1892:385; Andrewes 1939:133; Jeannel 1949:1064; and Liang *et al.* 2004:379.

Desera Hope 1831:21; Dupuis 1912:319; Heller 1923:303; Csiki 1932:1553; Basilewsky 1960:177; Jedlicka 1963:486; Hansen 1967:400; and Habu 1967:277.

Type species. *Dendrocellus discolor* Schmidt-Göbel 1846 (= *Desera nepalensis* Hope 1831), designated by Andrewes 1939.

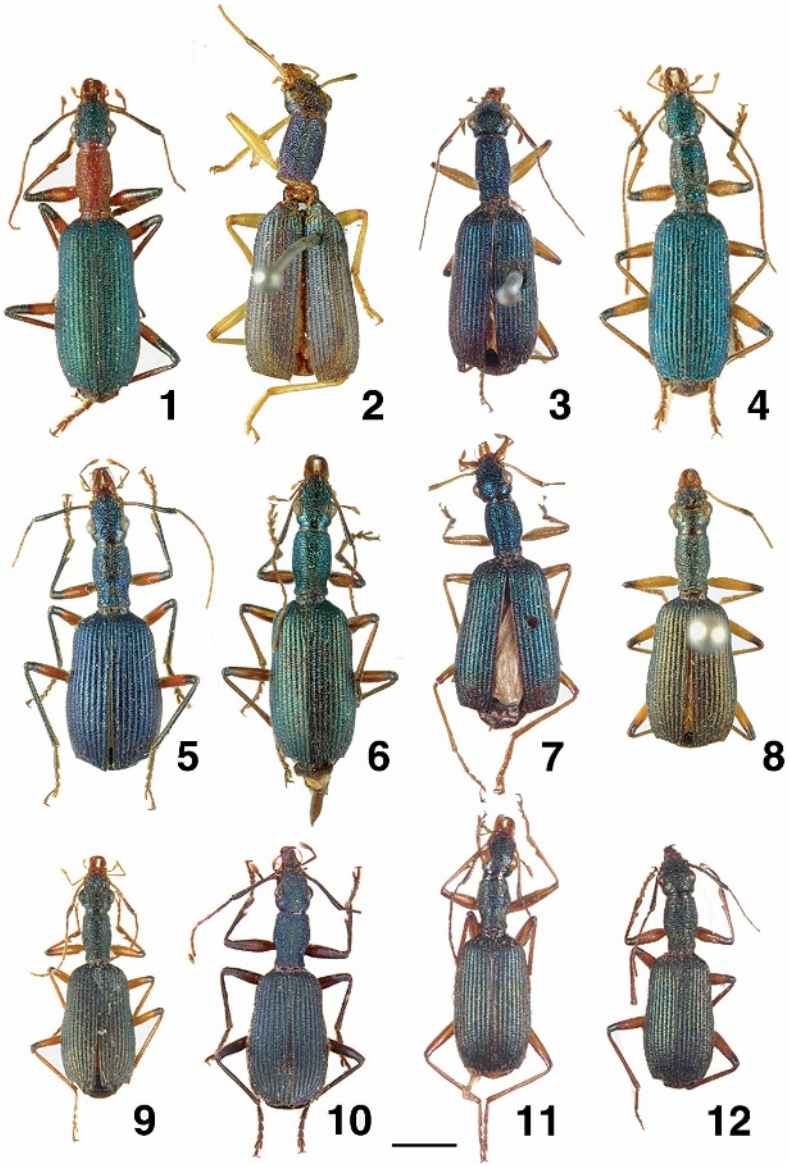
Description. Body narrow, elongate (Figs. 1–24), length 8.0–14.0 mm, width 2.5–4.2 mm. Black with blue or green luster, in some species mixed with coppery or purple luster; in some species, the pronotum red or brown, sternum brown with blue luster. Microsculpture distinct, forming isodiametric meshes. Head punctate and pubescent; Ant 1 elongate, 2.5–3.8 times as long as Ant 3; mandibles about 3.0 times as long as labrum, hooked at apex; maxillary and labial apical palpomeres securiform; labrum with medial lobe slightly (Figs. 25–27), moderately (Figs. 28, 29), or strongly (Fig. 30) protruded anteriorly; genae short and oblique (Figs. 31, 32), or long and distinctly tumid (Figs. 33, 34). Pronotum cylindrical, about 1.3–1.8 times as long as wide, punctate and pubescent, punctures larger than those on head and elytra. Elytra truncate at apex, outer angles more or less round (Figs. 35, 36), obtuse (Figs. 37, 38), slightly dentate (Figs. 39, 40), or strongly dentate and sharply pointed at apex (Figs. 41–43); striae shallow, punctate; intervals flat or slightly convex, punctate and pubescent; in some species, punctures nearly equal in size, quite dense, interspace between two adjacent punctures narrower than diameter of punctures (Fig. 44), in other species, punctures unequal in size, sparse, interspace between two adjacent punctures often wider than diameter of punctures (Figs. 45, 46). Hindwings full-sized, functional. Sterna densely punctate and pubescent; apical margin of terminal sternum slightly protruded posteriad medially in male (Figs. 47, 48), almost straight or widely rounded in female (Figs. 49, 50). Legs slender, protarsomere 3 strongly (Fig. 51) or slightly (Figs. 52) asymmetrical or symmetrical (Figs. 53) in male, symmetrical in female (Figs. 54–56), tarsomere 4 bilobed (Fig. 51–56); tarsal claws slender, more or less pectinate on inner side (Figs. 57–70), very different from those of *Drypta* (claws thick, strongly curved, and smooth on inner side; *e.g.*, Figs. 71, 72). In Asian species, aedeagus generally thin and long (Fig. 73, 74, 77–102), with apical lamella wide and long, round or truncate at apex (Figs. 73–86), narrow, digitiform (Figs. 87–96), or short and round at apex (Figs. 97–102); in African species, aedeagus stout, with lamella long or short (Figs. 103–108), apex round, thickened (Figs. 104, 108) or thin (Fig. 106).

Biology. These beetles live on vegetation, but adults of some species (*e.g.*, *D. nepalensis* (Hope)) also hide under shrub debris or inside decayed tree trunks. Adults are attracted to light traps.

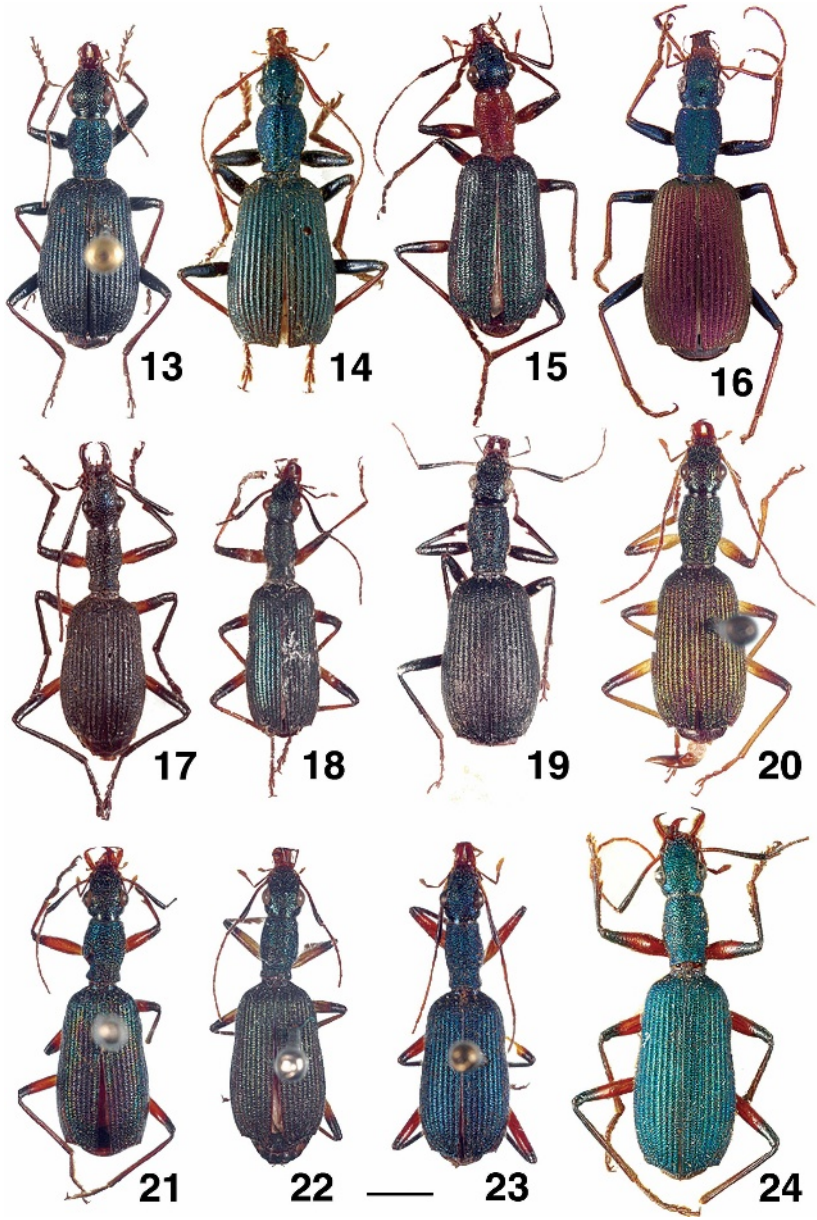
Distribution. Asia, Australia and Africa.

Key to the species of the genus *Dendrocellus* Schmidt-Göbel

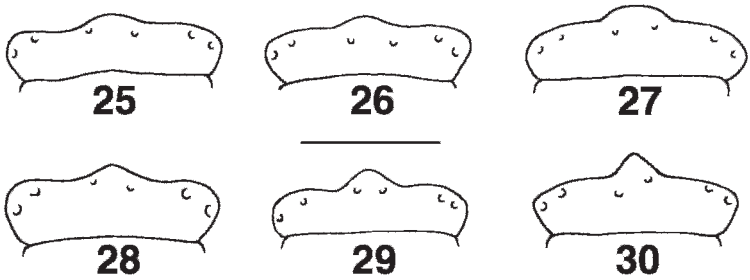
1	Pronotum red or brown, with purple luster (Figs. 1, 15)	2
1′	Pronotum black with green or blue metallic luster	4
2 (1)	Claw with long pectinations in inner side (Fig. 65). Angola, Cameroon, Congo, Kenya, Mozambique, South Africa, Senegal, Uganda, Zambia	*D. australis* Péringuey
2′	Claw with very short pectinations in inner side (Fig. 70)	3



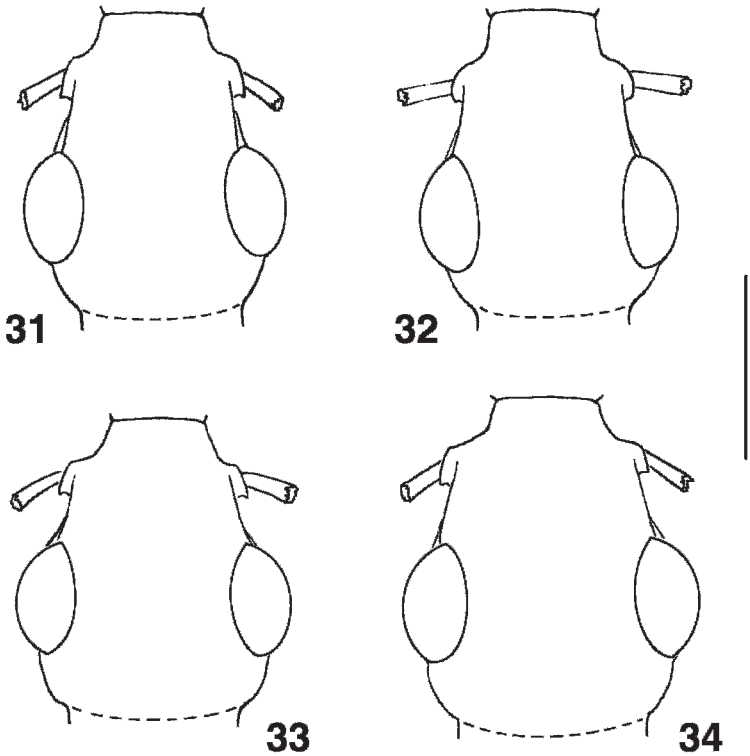
Figs. 1–12. Habitus of *Dendrocellus* species. **1)** *D. australis* (male, Congo); **2)** *D. coelestinus* (syntype); **3)** *D. coelestinus* (type of *D. paralellus*); **4)** *D. confusus* (male, Thailand); **5)** *D. crassus* (male, Borneo); **6)** *D. elegans* (male, New Guinea); **7)** *D. rugicollis* (lectotype); **8)** *D. geniculatus* (holotype); **9)** *D. geniculatus* (holotype of *D. gilsoni*); **10)** *D. gestroi* (lectotype); **11)** *D. inexpectus* (holotype); **12)** *D. javanus* (holotype). Scale line = 2.0 mm.



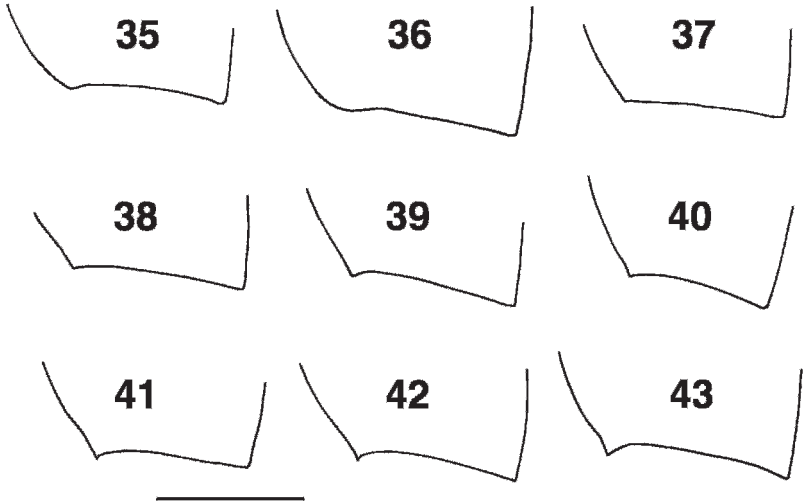
Figs. 13–24. Habitus of *Dendrocellus* species. **13)** *D. kulti* (male, Yunnan); **14)** *D. kulti* (holotype of *D. kulti reconditus*); **15)** *D. micropectinatus* (holotype); **16)** *D. nepalensis* (male, Pedong, India); **17)** *D. nigripennis* (holotype); **18)** *D. queenslandicus* (holotype); **19)** *D. schultzei* (lectotype); **20)** *D. sinicus* (holotype); **21)** *D. smaragdinus* (holotype); **22)** *D. ternatensis* (holotype); **23)** *D. unidentatus* (male, Java); **24)** *D. viridipennis* (male, Congo). Scale line = 2.0 mm.



Figs. 25–30. Labrum of *Dendrocellus* species. **25)** *D. australis* (male, Congo); **26)** *D. geniculatus* (male, Tibet); **27)** *D. sinicus* (holotype); **28)** *D. coelestinus* (syntype); **29)** *D. rugicollis* (lectotype, India); **30)** *D. confusus* (male, Thailand). Scale line = 0.5 mm.



Figs. 31–34. Head of *Dendrocellus* species. **31)** *D. queenslandicus* (holotype); **32)** *D. ternatensis* (male, Batchian, Indonesia); **33)** *D. rugicollis* (lectotype, India); **34)** *D. javanus* (holotype). Scale line = 1.0 mm.

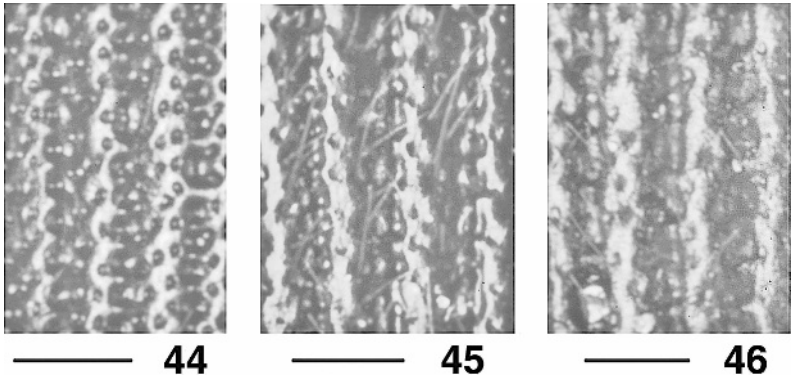


Figs. 35–43. Left elytron apex of *Dendrocellus* species. **35)** *D. kulti* (male, Yunnan); **36)** *D. nepalensis* (male, Pedong, India); **37)** *D. rugicollis* (lectotype, India); **38)** *D. micropectinatus* (holotype); **39)** *D. australis* (male, Congo); **40)** *D. geniculatus* (male, Tibet); **41)** *D. sinicus* (holotype); **42)** *D. elegans* (male, New Guinea); **43)** *D. unidentatus* (male, Java). Scale line = 1.0 mm.

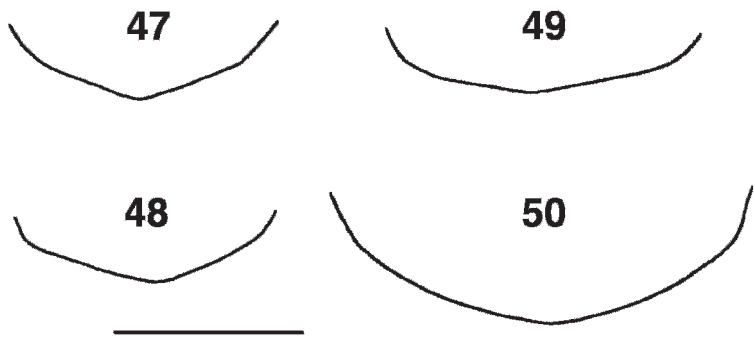
3(1′) Elytra bicolored, basal two-thirds bluish-green, apical third dark purple to black, (Fig. 109), striae faintly impressed, nearly effaced. Malawi ..... *D. bicoloripennis*, **new species**

3′ Elytra unicolored, green throughout (Fig. 15), striae deeply impressed, distinct. Congo, Zambia ..... *D. micropectinatus*, **new species**

4(1′) Scutellum reddish brown, meso- and meta-sternum brown. Angola, Cameroon, Congo, Gabon, Gambia, Senegal, Sierra Leone, Tanzania ..... *D. viridipennis* (Hope)

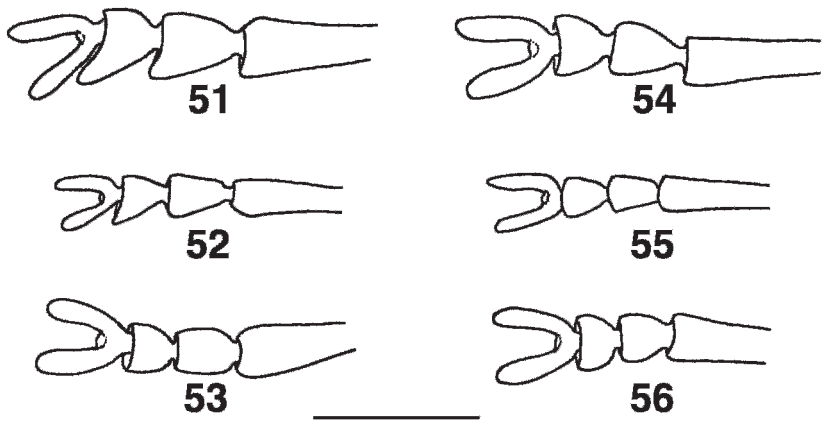


Figs. 44–46. Elytral punctation of *Dendrocellus* species. **44)** *D. geniculatus* (male, Tibet); **45)** *D. crassus* (male, Borneo). **46)** *D. nigripennis* (holotype). Scale line = 0.25 mm.

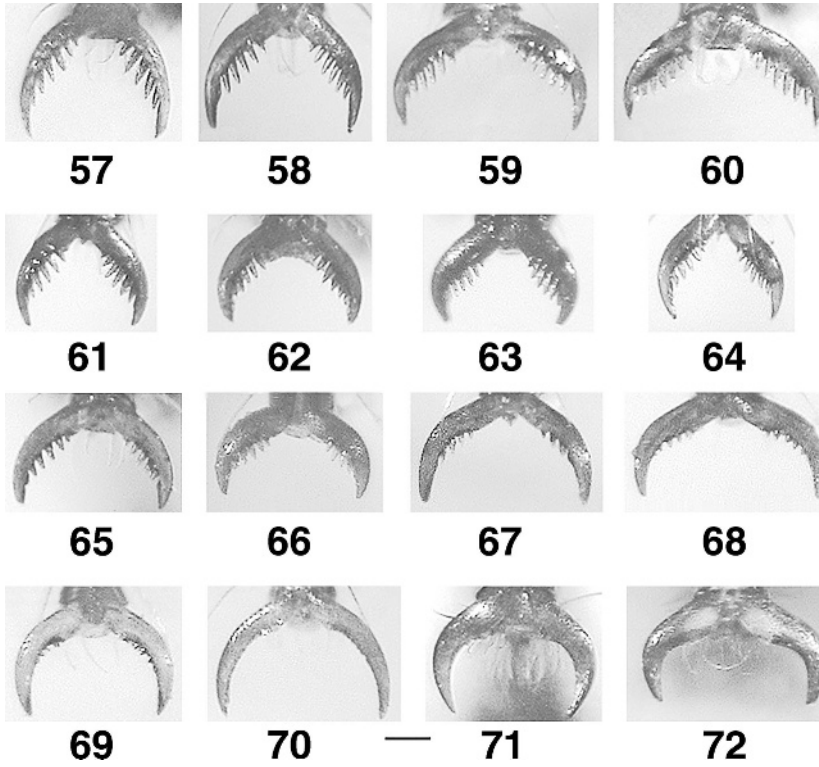


Figs. 47–50. Apical margin of terminal sternum of *Dendrocellus* species. **47)** and **49)** *D. geniculatus* (Tibet); **48)** and **50)** *D. crassus* (Borneo); 47 and 48 = males; 49 and 50 = females. Scale line = 1.0 mm.

4′	Scutellum black, meso- and meta-sternum black with blue luster. Asia, Australia 5
5(4′)	Femora and tibiae all black (Fig. 19). Philippines, Indonesia ..... *D. schultzei* (Heller)
5′	At least part of femora or tibiae not black 6
6(5′)	Femora black with blue luster; elytra with outer angles round (Fig. 35–36) 7
6′	Femora at most black at apical half; elytra with outer angles obtuse or dentate 8
7(6)	Head, pronotum and elytra all with blue luster (Fig. 13). China ..... *D. kulti* (Jedlicka)
7′	Head and pronotum with blue, elytra with purple (Fig. 16) or green luster. Bhutan, China, India, Nepal, Vietnam ..... *D. nepalensis* (Hope)



Figs. 51–56. Tarsomeres 1–4 of right protarsus of *Dendrocellus* species (dorsal view). **51)** and **54)** *D. viridipennis* (Congo); **52)** and **55)** *D. geniculatus* (Tibet); **53)** and **56)** *D. crassus* (Borneo); 51 to 53 = males; 54 to 56 = females. Scale line = 1.0 mm.



Figs. 57–72. Tarsal claws of hind tarsi of *Dendrocellus* species and *Drypta* species. **57)** *D. rugicollis* (lectotype); **58)** *D. elegans* (male, New Guinea); **59)** *D. schultzei* (lectotype); **60)** *D. sinicus* (holotype); **61)** *D. inexpectus* (holotype); **62)** *D. javanus* (male, Java Occid., paratype); **63)** *D. nigripennis* (holotype); **64)** *D. geniculatus* (male, Tibet); **65)** *D. australis* (male, Congo); **66)** *D. queenslandicus* (holotype); **67)** *D. confusus* (male, Thailand); **68)** *D. nepalensis* (male, Pedong, India); **69)** *D. coelestinus* (syntype); **70)** *D. micropectinatus* (male paratype, Congo); **71)** *Drypta longicollis* Macleay 1825 (male, Thailand); **72)** *Drypta lineola virgata* Chaudoir 1850 (male, Vietnam). Scale line = 0.1 mm.

8(6′) Femora with basal two-thirds dark red, apical third black (Fig. 10); eyes small, about 1.9 times as long as genae; EL/EW = 1.56. Myanmar ..... *D. gestroi* Bates

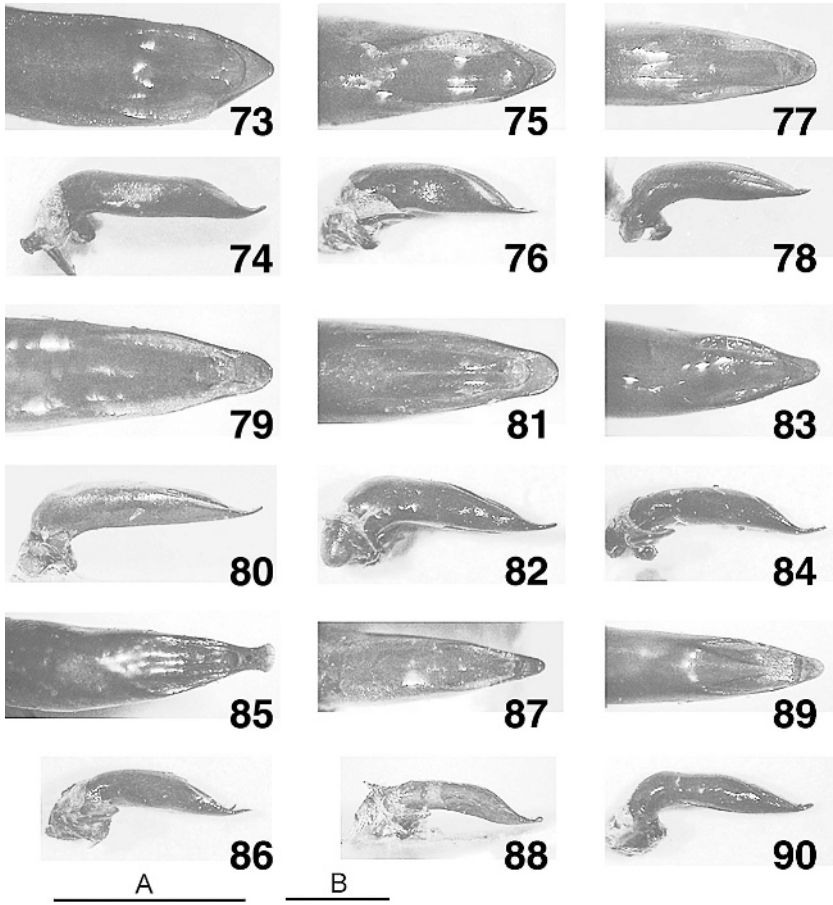
8′ Femora at least with basal half brown or yellow; eyes large, more than 2.0 times as long as genae; EL/EW > 1.60 9

9(8′) Elytral intervals sparsely punctate (Figs. 45–46); protarsomere 3 symmetrical in male (Fig. 53) 10

9′ Elytra intervals densely punctate (Fig. 44); protarsomere 3 asymmetrical in known male (Fig. 52) 11

10(9) Femora with apical sixth or seventh black; aedeagus with lamella round at apex (Fig. 83). Indonesia (Java, Sumatra), Borneo (Kalimantan) ..... *D. crassus* (Andrewes)

10′ Femora with apical half black; aedeagus with lamella truncate at apex (Fig. 85). Malaysia (N. Kalimantan) ..... *D. nigripennis*, **new species**

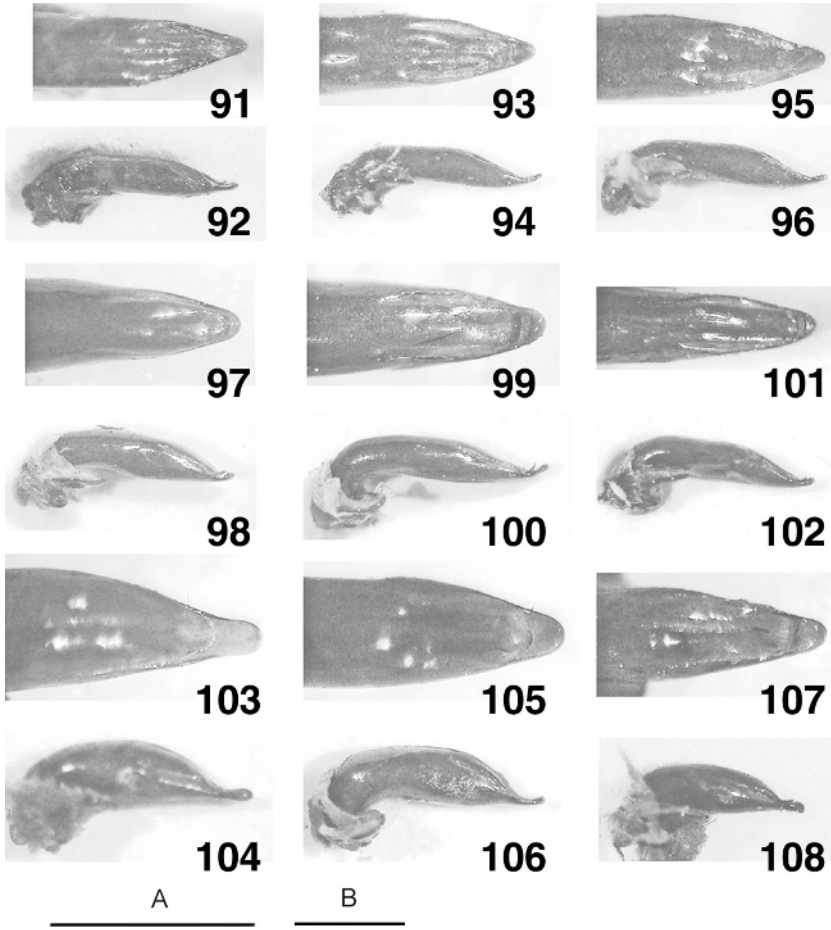


Figs. 73–90. Male genitalia of *Dendrocellus* species. **73)** and **74)** *D. confusus* (Thailand); **75)** and **76)** *D. rugicollis* (lectotype); **77)** and **78)** *D. coelestinus* (Thailand); **79)** and **80)** *D. nepalensis* (Pedong, India); **81)** and **82)** *D. kulti* (Hubei, China); **83)** and **84)** *D. crassus* (Borneo); **85)** and **86)** *D. nigripennis* (holotype); **87)** and **88)** *D. geniculatus* (Pedong, India); **89)** and **90)** *D. javanus* (holotype). Scale lines = 1.0 mm, scale line A for Figs. 73, 75, 77, 79, 81, 83, 85, 87, 89 (apical part, dorsal view); scale line B for Figs. 74, 76, 78, 80, 82, 84, 86, 88, 90 (left lateral view).

11(9′) Labrum with medial lobe strongly protruded anteriorly (Fig. 30); Ant 1/Ant 3 between 2.50 and 2.67. China, India, Indonesia, Japan, Laos, Pakistan, Thailand ..... *D. confusus* (Hansen)

11′ Labrum with medial lobe at most moderately protruded anteriorly (Figs. 26–29); Ant1/Ant 3 greater than 3.0 12

12(11′) Tarsal claw with 3–5 pectinations, the longest pectination about one fourth as long as the width of claw base (Fig. 69). Bhutan, China, Indonesia, Laos, Malaysia, Myanmar, Pakistan, Thailand..... ..... *D. coelestinus* (Klug)



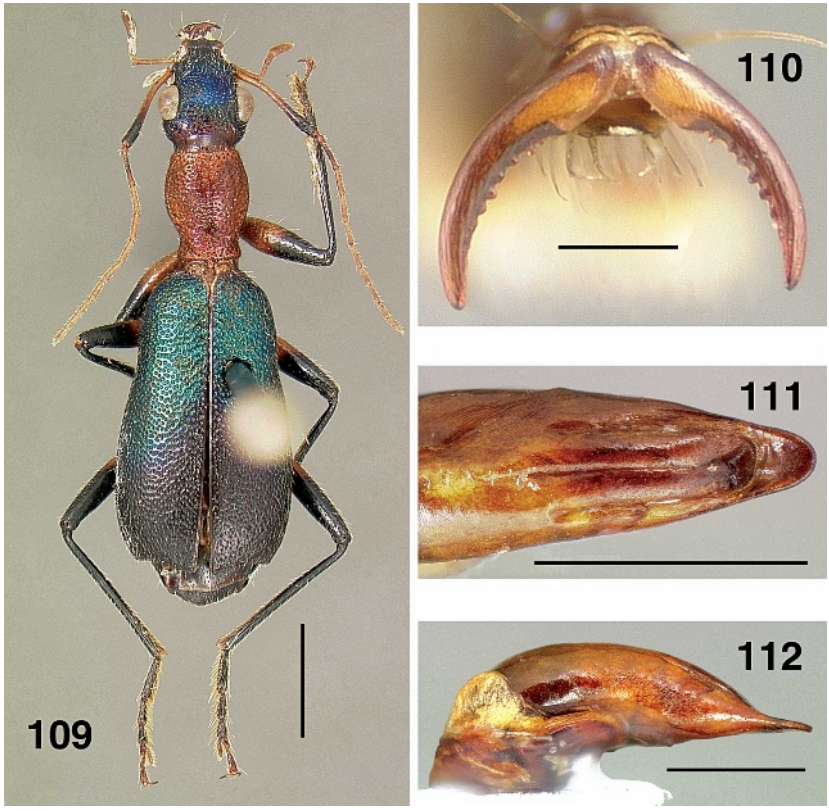
Figs. 91–108. Male genitalia of *Dendrocellus* species. **91)** and **92)** *D. queenslandicus* (holotype); **93)** and **94)** *D. ternatensis* (Batchian, Indonesia); **95)** and **96)** *D. elegans* (New Guinea); **97)** and **98)** *D. unidentatus* (male, Java); **99)** and **100)** *D. inexpectus* (holotype); **101)** and **102)** *D. sinicus* (holotype); **103)** and **104)** *D. viridipennis* (male, Congo); **105)** and **106)** *D. micropectinatus* (holotype); **107)** and **108)** *D. australis* (male, Congo). Scale lines = 1.0 mm, scale line A for Figs. 91, 93, 95, 97, 99, 101, 103, 105, 107 (apical part, dorsal view); scale line B for Figs. 92, 94, 96, 98, 100, 102, 104, 106, 108 (left lateral view).

12′ Tarsal claw with 5–7 pectinations, the longest pectination longer than half width of claw base (Figs. 58–64, 66) 13

13(12′) Elytra long, EL/EW more than 2.0, lateral margins paralleled; apical third of femora black (Fig. 18); Australia (Northern Territory, Queensland) ..... *D. queenslandicus*, **new species**

13′ Elytra short, EL/EW less than 1.9 14

14(13′) Elytral outer angles strongly dentate, sharply pointed at apex (Figs. 41, 42, 43), tarsal claw with long pectinations (Figs. 58, 60) ... 15



Figs. 109–112. *Dendrocellus bicoloripennis* (holotype). **109)** Habitus; scale line = 2.0 mm. **110)** Tarsal claws of right hind tarsus; scale line = 0.1 mm. **111)** Male genitalia, dorsal view; scale line = 1.0 mm. **112)** Male genitalia, left lateral view; scale line = 1.0 mm. Note: The existence of this new species, *D. bicoloripennis*, became known to us, based on specimens provided by one of the reviewers, only after submission of our manuscript for publication. All figures for this species are presented together here to avoid reorganization and renumbering of all the other figures throughout the manuscript.

14′	Elytral outer angles obtuse or slightly dentate (Figs. 37, 38, 40); tarsal claw with long or short pectinations 17
15(14)	Femora brown with apical eighth or tenth darker; lamella of aedeagus long and narrow, digitiform (Figs. 95–96). New Guinea .... *D. elegans* Sloane
15′	Femora with apical sixth to third darker; lamella of aedeagus short and wide (Figs. 97–98, 101–102) 16
16(15′)	Femora brown with apical sixth black, tibiae and tarsi black (Fig. 23). China, India, Indonesia (Java), Myanmar, Pakistan, Thailand, Vietnam ..... *D. unidentatus* (Macleay)
16′	Femora yellow with apical third black, tibiae and tarsi yellow (Fig. 20). China ..... *D. sinicus*, **new species**
17(14′)	Tibiae and tarsi nearly black. Australia ..... *D. smaragdinus* Chaudoir

17′ Tibiae and tarsi yellow or brown 18
18(17′) Apical fourth of femora black; genae short, oblique (Figs. 32). Eastern Indonesia (Ambon, Batchian, Sulawesi, Ternate) ..... *D. ternatensis* Chaudoir
18′ Apical fifth or seventh of femora black or brown; genae long, tumid (Figs. 33–34) 19
19(18′) Tarsal claw slender, longest pectination longer than width of claw base (Fig. 57); lamella of aedeagus wide, triangular (Figs. 75–76). China, India, Nepal ..... *D. rugicollis* Chudoir
19′ Tarsal claw stout, longest pectination equal to or shorter than width of claw base (Figs. 61–62, 64); lamella of male genitalia round or narrow (Figs. 87–90, 99–100) 20
20(19′) Tibiae brown, apical seventh to sixth of femora dark brown; lamella of male genitalia short and round (Figs. 99–100). India ..... *D. inexpectus*, **new species**
20′ Tibiae yellow or brown, apical fifth to sixth of femora black; lamella of male genitalia long and narrow (Figs. 87–90) 21
21(20′) Ant 1/Ant 3 = 3.62 (3.46–3.76); lamella of male genitalia narrow, apex thickened (Fig. 88). India east to Japan and south to Java ..... *D. geniculatus* (Klug)
21′ Ant 1/Ant 3 = 3.35 (3.24–3.46); lamella of male genitalia wide, apex thin (Fig. 90). Java ..... *D. javanus*, **new species**

Dendrocellus australis Péringuey
(Figs. 1, 25, 39, 65, 107–108)

Dendrocellus australis Péringuey 1896: 160 (South Africa, Mozambique)
Desera australis Péringuey, Liebke 1928: 97; Basilewsky 1960: 180; Lorenz 1998: 477

Specimens examined. Total 23 specimens: **Angola**: 1 female (CAS), ''L'alange, Angola, IX-11-49, Malkin''. **Cameroon**: 1 male (CAS), ''Br. Cameroon, Upper farm, Buea, V. 9-20.49, B. Malkin''/''Elevation 4,500 ft''/''*Drypta* sp.6, det. D.H. Kavanaugh 1991''; 1 female (CMNH) ''Efullen, Kameron, H. L. Weber''/March 1922''/Carn. Mus. Acc. 7,363''/''*Desera australis* (Per.), det. R. Davidson''. **Congo**: 1 male (ISNB), ''Fort-Crampel, Congo-Français''/''R. Mus. Hist. Nat. Belg. I.G. 12.595''/''*Desera australis* Pér., P. Basilewsky det. 1948''; 1 male (ISNB), ''Congo Belg, Sandoa, X-1931''/''R. Mus. Hist. Nat. Belg. I.G. 12.773''/''*Desera australis* Pér., P. Basilewsky det. 1948''; 1 female (ISNB), ''Congo-belge: Kwango, Ngowa 5-XI-1937, R. P. J. Mertens''/''R. Mus. Hist. Nat. Belg. I.G. 11.520''/''*Desera australis* Pér., P. Basilewsky det. 1948''; 2 females (ISNB), ''Congo belge, Kivu: Masisi''/''R. Mus. Hist. Nat. Belg. I.G. 12.595''/''*Desera australis* Pér., P. Basilewsky det. 1948''; 1 female (ISNB), ''Congo Belge P. N. U. Gorges de la Pelenge (1,150 m), 21–23 VI 1947, Mis. G. F. de Witte: 529a''/''*Dendrocellus australis* Péringuey, P. Basilewsky det. 1952''; 1 male (ISNB), ''Congo Belge P. N. U. Gorges de la Pelenge (1,150 m), 20-21-VI-1947, Mis. G. F. de Witte: 528a'', 1 female (ISNB), ''Congo Belge P. N. U., R. Lusinra (1,760 m), 16.17-VII-1947, Mis. G. F. de Witte: 580a''/''*Dendrocellus australis* Péringuey, P. Basilewsky det. 1952''; 1 male (ISNB), ''Congo Belge P. N. U., R. Lusinra (1,760 m), 16.17-VII-1947, Mis. G. F. de Witt: 603a''; 1 male (ISNB), ''Congo Belge P. N. U. riv. Kambi-affllt. Kafwi, versant S. E. 25-27-VI-1945, G. F. de Witte. 164–165''/''*Dendrocellus australis* Péringuey, P. Basilewsky det. 1952''; 2 males (ISNB), ''Congo Belg P. N. G. Miss H. de Saeger, II/gb/6, 16-5-1951, Réc. J. Verschuren 1,790''/''*Desera*

australis Pér., P. Basilewsky det. 1959''; 1 female (ISNB), ''Congo Belg P. N. G. Miss H. de Saeger, II/gd/8, 10-V-1951, Réc. H. de Saeger, 1,696''; 1 female (ISNB), ''Congo Belge, P. N. G. Miss. H. de Saeger, Ppk. 10/d/10, 5-III-52, H. de Saeger, 3,167''/''*Desera australis* Pér., P. Basilewsky det. 1959''; 1 male (ISNB), ''Congo Belge, P. N. G. Miss. H. de Saeger, I/a/1, 5-VI-1950, réc. H. de Saeger, 577''/''*Desera australis* Pér. P. Basilewsky det. 1959''; 1 male (ISNB), ''Congo Belge, P. N. G. Miss. H. de Saeger, II/fd/18, 30-V-1952, H. de Saeger, 3,548''/''*Desera australis* Pér., P. Basilewsky det. 1959''; 1 female (ISNB), ''Congo Belge P. N. G. Miss. H. de Saeger, II/gd/4, 8-XI-1951, réc. H. de Saeger, 2,739''; 1 male (ISNB), ''Congo Belge P. N. G. Miss. H. de Saeger, II/fd/17, 14-XII-1951, réc. H. de Saeger, 2,910''; 1 male (ISNB), ''Congo Belge P. N. G. Miss. H. de Saeger, Inimvua, 20-V-1952, H. de Saeger, 3,488''/''P. Basilewsky det. 1959, *Desera australis* Pér.''. **Kenya**: 1 male (ISNB), ''Kenya-Nairobi, Ngang Forest, Alt. 1,900 m''/''R. Mus. Hist. Nat. Belg. I.G. 12.595''/''*Desera australis* Pér., P. Basilewsky det. 1947''.

Description. Because the original description (Péringuey 1896: 160–161) is quite detailed, we simply add the following: length 10.8–14.0 mm, width 3.0–4.2 mm. Apical third of Ant 1 and basal two-thirds of Ant 3 black or dark brown; femora reddish brown with apical third or half black; tibiae nearly black. Head wider than pronotum (Fig. 1), HW/PW = 1.19 (1.11–1.30); Ant 1/Ant 3 = 3.40 (3.20–3.57); labrum with medial lobe slightly protruded anteriorly (Fig. 25); genae long, slightly tumid; eyes large, about 1.8 times as long as genae. Pronotum widest slightly before middle, PL/PW = 1.56 (1.45–1.62). Elytra with lateral margins nearly parallel; outer angles slightly dentate, not sharply pointed at apex (Fig. 39), EW/PW = 2.27 (2.09–2.56), EL/EW = 1.89 (1.81–2.04). Protarsomere 3 strongly asymmetrical in male; tarsal claws with 5–6 pectinations on inner side, length of the longest pectination subequal to width of claw base (Fig. 65). Aedeagus stout (Fig. 108), with apical lamella narrow, thickened and rounded at apex (Fig. 107).

Distribution. Angola, Cameroon, Congo, Kenya, Mozambique, South Africa, Senegal, Uganda, Zambia.

Remarks. We did not check the type. Our description is based on specimens determined by Basilewsky. Members of this species are readily distinguished from those of other members of the genus by their red pronota and long tarsal claw pectinations.

Dendrocellus bicoloripennis Liang and Kavanaugh, New Species
(Figs. 109–112)

Types. Holotype: a male (CBNH), ''Malawi: Chitipa District, Jembya Reserve, 18 km SSE Chisenga. 10-08S, 33-27E, 1,870 m. 11–20 Dec 1988, J. Rawlins, S. Thomson''/''HOLOTYPE, *Dendrocellus bicoloripennis* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [red label]. Paratypes (total 4 specimens): 3 females (1 in CAS, 2 in CBNH), same collecting locality and collectors but ''1–10 Jan 1989''; 1 female (CBNH), same collecting locality and collectors but ''11–20 Jan 1989''.

Type locality. 18 km SSE of Chisenga, Jembya Reserve, Malawi.

Diagnosis. Pronotum reddish brown; elytra with bluish-green luster at basal three-fourths, black or dark purple at apical fourth; hind femora with apical half or two-thirds black, tibiae black; tarsal claw pectinations very short, the longest pectination shorter than one-forth width of claw base.

Description. Length: 9.8–11.3 mm, width: 3.2–3.4 mm. Head and abdominal sterna with blue luster; neck, pronotum, scutellum, thoracic sterna, episterna, and epimera, Ant 2–11, and basal half of femora red or brown; elytra with bluish-green

luster at basal three-fourths, black or dark purple at apical fourth with an anteriorly directed triangular extension along suture; apical half or two-thirds of femora, tibiae, tarsomeres 1–3, and apical third of Ant 1 black; basal two-thirds of Ant 1, Ant 2–11, tarsomeres 4–5 brown or yellow. Head densely punctate on vertex; labrum with medial lobe slightly protruded anteriorly; Ant 1/Ant 3 = 3.22 (3.13–3.31); genae developed, strongly tumid; eyes large, convex, 1.8 times as long as genae. Pronotum short, cylindrical, widest slightly before middle, PL/PW = 1.29 (1.26–1.35), HW/PW = 1.15 (1.14–1.16); slightly widened from apical angles to middle, then narrowed posteriad, strongly sinuate before basal angles; basal angles obtuse, strongly protruded laterally. Elytra wide, densely punctate throughout; lateral margins nearly parallel in basal forth, distintly widened posteriad to apical fourth, then narrowed to apex; EL/EW = 1.69 (1.63–1.73), EW/PW = 2.16 (2.11–2.25); striae effaced, almost invisible (only striae 1–3 traceable in apical regions); outer apical angles nearly round, only vaguely angulate. Protarsomere 3 strongly asymmetrical in male; tarsal claws with 5–6 min pectinations, length of the longest pectination less than one-fifth width of claw base (Fig. 110). Aedeagus stout, with apical lamella moderately long, thin, linguiform, rounded at apex (Figs. 111–112).

Distribution. Malawi.

Etymology. This species is named for the pattern of two different colors on the elytra.

Remarks. Members of this new species are similar to those of African Dryptini species *Drypta ruficollis* Dejean, 1831, *Drypta thoracica* Boheman, 1848, and *Dendrocellus australis* Péringuey in having red pronota, but differ from them in having slender tarsal claws with short pectinations (in *Drypta ruficollis* and *Drypta thoracica* specimens, the tarsal claws are smooth; and in *Dendrocellus australis* specimens, the tarsal claws have long pectinations). The bicolored elytral color pattern and effaced elytral striae appear to be unique in the genus (in other members of the genus, the elytra are unicolored, and all striae are distinct).

Dendrocellus coelestinus (Klug)
(Figs. 2, 3, 28, 69, 77–78)

Drypta coelestina Klug 1834: 53 (Java)

Desera coelestina (Klug), Andrewes 1927: 100

Dendrocellus coelestinus (Klug), Chaudoir 1861: 545 (Java)

Dendrocellus parallelus Chaudoir 1872: 101 (Sumatra); lectotype, here designated, a male (MNHN), labeled "*Dendrocellus parallelus*"/"Ex Musaeo, Chaudoir"/"Museum Paris"/"*macrodera* Chaudoir, Sumatra, Doüé/"LECTOTYPE Dendrocellus parallelus Chaudoir designated by H. B. Liang & D. H. Kavanaugh 2006" [red label]; **new synonymy**

Specimens examined. Total 23 specimens: **Bhutan**: 1 female (ISNB), "Coll. I. R. Sc. N. B. Inde-British Bootang, Maria Basti 1900, ex Coll. Oberthur". **China**: 1 male, "Hainan, Tongshi, 340 m"/"1960.IV.25, Xuezhong Zhang collector"; 1 male, "Hainan, Tongshi, 340 m"/"1960.IV.25, Changqing Li collector"; 1 female, "Hainan, Qiongzhong, 400 m"/"1960.VII.15, Suofu Li collector"; 1 male, "Hainan, Jianfengling, 75 m"/"1980.III.26, Shuyong Wang colllector"; 1 female, "Yunnan, Xishuangbanna, Xiaomengyang, 850 m", 1958.X.3, Xuwu Meng collector"; 1 male, "Yunnan, Xishuangbanna, Damenglong, 650 m"/"1958.VIII.7, Yiran Zhang collector"; 1 male, "Yunnan, Hekou, 80 m, 1956.VI.8, Keren Huang collector"/"*Desera geniculata* Klug, Kryzhanovsky det."; 1 male, "Botanical Garden, Xihuangbanna, Yunnan Prov., 5-6-VII-2005, Lizhen Li leg."; 1 female, "Tibet, Mêdog"/"1984.VIII"; 1 male, "Tibet, Mêdog, 820 m"/"1983.II.2, Yinheng Han

collector''. **India**: 1 male (ISNB), ''*geniculata* Klug, ex. coll. Bonneull, Inde''/''Coll. R. I. Sc. N. B. Inde''. **Indonesia**: 1 female (ZMHU), ''709''/''Java''/''*coelestina* Kl.''/ ''Syntypus *Drypta coelestina* Klug 1834, labeled by MNHUB 2004'' [red label]; 1 male (ISNB) ''Sud-Celebes, Bantimoeng, C. Ribbe, 1883'', Coll. R. I. Sc. N. B. Indonesia''. **Laos**: 1 female (ISNB), ''Laos, Pakneun, 1-IX-1918, R. Vitalis de Salvaza''/''2,074''/''*Desera geniculata* Kl. Det. R. Vitalis de Salvaza''/''Coll. R. I. Sc. N. B.''. **Malaysia**: 1 female (ZMHU), ''Malacca, Mniszcch''; 1 male, ''*longicollis* 9,953''/''Malacca''/''Soc. Ent. Belg. Coll. Putzeys'', Coll. R. I. Sc. N. B. Malaisie''. **Myanmar**: 1 male (MCSN), ''Carin Chebà, 900–1,100 m, L. Fea''/''*Drypta* sp. ?''/ ''det. H. Bates 1892''/''*Desera geniculata* Klug''/''Museo Civico di Genova''. **Pakistan**: 1 female (CAS), ''E. Pakistan, Harbang For. 6 mi N. Chiringa, IX-18-61, 50 ft''/''Collectors E. S. Ross, D. Q. Cavagnaro''/''*Desera* sp.5, det. D. H. Kavanaugh, 1991''/''*Dendrocellus coelestinus* Klug 1834, det. Liang H.B. 2005.3''. **Thailand**: 1 male (ZMHU), ''Mon Angget, Chiang Mai, Thailand, 31.V.1990, K. Masumoto''/''*Desera geniculata* (Klug), det. N. Ito, 1995''; 1 female (CAS), ''Thailand, Tak, vicinity of Umphang, mid January to Mid April 1991, native collectors, Calif. Acad. Sci. Collection''/''*Drypta* sp. 19, det. D. H. Kavanaugh 1995''/ ''*Dendrocellus coelestinus* Klug 1834, det. Liang H.B. 2005.3''; 1 male (MBC), ''Thai, 13.5.1993, 19.29N, 98.18E, Soppong 750 m, L. Bocák lgt.''; 1 female (MBC), ''Thai, 13.5.1993, 19.29N, 98.18E, Soppong 750 m, Vit Kubáň leg.''.

Description. Length 9.5–10.4 mm, width 2.4–2.9 mm. Black with green and blue luster; apical third of Ant 1 black, basal two-thirds brown; femora yellow or brown with apical sixth or eighth black; tibiae yellow. Head wider than pronotum, HW/PW = 1.27 (1.18–1.33); Ant 1/Ant3 = 3.41 (3.21–3.62); labrum with medial lobe moderately protruded anteriorly (Fig. 28); genae moderately tumid, eyes large, about 2.3 times as long as genae. Pronotum narrow, PL/PW = 1.66 (1.57–1.74); lateral margins nearly parallel in apical two thirds. Elytra with lateral margins nearly parallel in both sexes; EL/EW = 2.04 (1.85–2.13), EW/PW = 2.18 (2.00–2.29); outer angles slightly dentate; intervals flat, densely punctate. Protarsomere 3 slightly asymmetrical in male; tarsal claws with 3–5 short pectinations, length of the longest pectination shorter than half width of claw base (Fig. 69). Aedeagus with apical lamella thin, wide, linguiform (Figs. 77–78).

Distribution. Bhutan, China, India, Indonesia (Java, Sumatra, Sulawesi), Laos, Malaysia, Myanmar, Pakistan, Thailand.

Remarks. The syntype of *D. coelestinus* (Klug) we examined is teneral, with bluish purple luster on pronotum and elytra. *D. parallelus* Chaudoir was described from Sumatra. When we compared the type of *D. parallelus* with that of *D. coelestinus*, we were unable to find any significant difference.

Chaudoir (1861: 545) treated *D. coelestinus* (Klug) as a synonym of *D. unidentatus* (Macleay). Andrewes (1927: 100) disagreed with this treatment and pointed out that *D. coelestinus* (Klug) was probably a pale variety of *D. geniculatus* (Klug). However, adults of *D. coelestinus* have very much shorter tarsal claw pectinations (Andrewes also noticed this character, 1927: 100) and males have a triangular lamella of the aedeagus, and, therefore, this species is distinct from *D. geniculatus* (Klug).

Dendrocellus confusus (Hansen), **new combination**
(Figs. 4, 30, 67, 73–74)

Desera confusa Hansen 1967: 406 (Laos)

Specimens examined. Total 24 specimens: **China**: 2 males, ''Fujiang, Jiangle, Longqishan''/''1991.V.20, Wenzhu Li collector''; 1 male, ''Fujiang, Aotou,

1980.6.22, by light trap, Juchang Huang collector''; 1 female, ''Fujiang, Xiadaoshui''/''1980.VI.25, Yuanhong Chen collector''; 1 male, ''Guangdong, Zhanjiang, 1982.9.23''/''On sugarcane, Jiao Chen collector''; 1 male (BMNH), ''Guangxi, Jinxiu, Luoxiang, 450 m, 2000.VI.30, Jian Yao collector''; 1 female, ''Guangxi, Jinxiu, Linhai Shanzhuang, 1,000 m, 2000.VII.2, Jian Yao collector''; 1 female, ''Guangxi, Jinxiu, Shengtangshan, 900–1,900 m, 2000.VI.28, Wenzhu Li collector''; 1 male (IOZ) and 1 female (BMNH), ''Guangxi, Jinxiu''/''By light trap, 1983.V.31, Subai Liao collector''. **India**: 1 female (ISNB), ''Inde''/''Coll. P. Dupuis''/''*Desera geniculata*, det. P. Dupuis''/''*Desera geniculata* Kl.''/''Coll. R. I. Sc. N. B. Inde''. **Indonesia**: 1 female (ISNB), ''Java''/''Collection P. Dupuis''/ ''Coll. R. I. Sc. N. B. Java''; 1 female (ZMHU), ''Java, Boemi Ajoe''/ ''*Dendrocellus geniculatus*, Fairm.''; 1 male (ZMHU), ''Java, Baugalan, 1922''/ ''*Drypta coelestina* Kl.''; 1 male (ZMHU), ''Deli, auf Sumatra, Hartert''; 1 female (ZMHU), ''Ober-Langkat, Deli, Sumatra, 1894, M. Ude S.''/''93278''. **Japan**: 1 male (ISNB), ''Japon''/''Collect Balls''/''Japan''/''Collection E. Rousseau''/''Coll. R. I. Sc. N. B. Japon''; 1 female (ISNB), ''Japon''/''Collect Balls''/''Japan''/''Coll. R. I. Sc. N. B. Japon''. **Pakistan**: 1 female (CAS), ''E. Pakistan, Ichamati, 28 mi E. Chittagong, IX-14-61, 50 ft'', Collection E. S. Ross, D. Q. Cavagnaro''; 1 male (ZMHU), ''Süd borneo, Bandjermasin, L. W. Schaufuss G.''. **Thailand**: 1 female (ISNB), ''Coll. I. R. Sc. N. B. Thailand (Ioei), Na-Haeo (Field res. stat.), 15-19.V.2003, light trap, leg. J. Constant, K. Smets & P. Grootaert''; 1 male (MBC), ''Thai, 13.5.1993, 19.29N, 98.18E, Soppong, 750 m, L. Bocák lgt.''; 2 females (MBC), ''Thai, 13.5.1993, 19.29N, 98.18E, Soppong, 750 m, Vit Kubáň leg.''.

Description. Length 10.2–11.2 mm, width 2.7–3.0 mm. Black with green luster; Ant 1 with apical fourth blackish brown, basal three fourths yellow; femora yellow, with apical sixth black; tibiae yellow. Head slightly wider than pronotum, HW/PW = 1.19 (1.12–1.24); labrum with medial lobe strongly protruded anteriorly (Fig. 30); Ant 1/Ant 3 = 2.62 (2.50–2.67); genae slightly tumid, eyes large, about 2.3 times as long as genae. Pronotum widest at the middle, slightly narrowed anteriorly, PL/PW = 1.58 (1.45–1.67). Elytra long, lateral margins nearly parallel in both sexes; outer angles slightly dentate, EW/PW = 2.21 (2.03–2.31), EL/EW = 1.99 (1.93–2.05). Protarsomere 3 slightly asymmetrical in male; tarsal claws with 3 or 4 pectinations, length of the longest pectination less than half width of claw base (Fig. 67). Aedeagus with apical lamella thin, triangular (Figs. 73–74).

Distribution. China, India, Indonesia (Java, Sumatra, Kalimantan), Japan, Laos, Pakistan, Thailand.

Remarks. We have not examined the type. Members of this species are readily recognized by the strongly protruded medial lobe of the labrum, which is unique in the genus. *Dendrocellus confusus* is widely distributed in southeastern Asia from Japan and China to Java. Hansen (1967: 406) stated that adults of this species were similar to those of *D. geniculatus* (Klug) in having short tarsal claw pectinations. However, he wrongly characterized *D. geniculatus* (Klug) (see remarks under *D. geniculatus*). Actually, adults of this species are similar to those of *D. coelestinus* (Klug) in having short claw pectinations, but different from the latter in having a longer medial lobe of the labrum and smaller ratio of Ant 1/Ant 3.

Dendrocellus crassus (Andrewes), **new combination**
(Figs. 5, 45, 48, 50, 53, 56, 83–84)

Desera crassa Andrewes 1931: 477 (Borneo = Pulau Kalimantan)

Specimens examined. Total 18 specimens: **Indonesia**: 1 female (ISNB), ''Coll. I. R. Sc. N. B. Borneo 1900, Pontianak, ex coll. Oberthur''; 1 female (ISNB), ''Coll.

I. R. Sc. N. B. Java – Togoe, 1902, ex. Coll. Oberthur''; 1 female (ISNB), ''Beokit Gabah, Z. W. K. Sumatra, leg. H. Lucht, I.1919''/''Coll. I. R. Sc. N. B. Sumatra''; 1 male (ZMHU), ''W. Sumatra, No. 18, VII.1991''. **Malaysia**: 2 females (ZMHU), ''Near Keningau, Is. Borneo, Sabah, E. Malaysia, 16 II 1989, M. Itoh''/''*Desera geniculata* (Klug) det. N. Ito, 1993''; 1 male and 1 female (ISNB), ''Kina Balu, Borneo''/''Collection P. Dupuis''/''Coll. R. I. Sc. N. B. Borneo''; 1 male and 1 female (ISNB), ''Kina balu, Borneo 1,500 m, H. Hille, Berlin SW11''/''R. I. Sc. Nat. Belg. I.G. 16.500''/''Coll. R. I. Sc. N. B. Borneo''; 1 female (ISNB), ''Coll. I. R. Sc. N. B. Nord Borneo, Kina Balu, Fr. Buffat, 1904''; 1 female (ISNB), ''Coll. I. R. Sc. N. B. Indonesie, N. Borneo, Mont Kina Balu, 5.VIII.1903, leg. John Waterstradt, ex coll. Oberthur IG. 18.293''. **Kalimantan** (Malaysia or Indonesia): 1 male (ISNB), ''Borneo''/''Collection P. Dupuis''/''Coll. R. I. Sc. N. B. Borneo''; 1 female (ISNB), ''Borneo''/''Collection P. Dupuis''/''*Desera unidentata* M.L. det. P. Dupuis, 1913''/''*Desera unidentata*''/''Coll. R. I. Sc. N. B. Borneo''; 1 male (ISNB), ''Borneo''/''Reg. Mus. Hist. Nat., Belg. I.G. 10294''/''*longicollis* Dj''/''G. Fagel''/''G. Fagel det. *Desera longicollis* Dej''/''Coll. R. I. Sc. N. B. Borneo''; 1 male and 2 females (CAS), ''Borneo, M. L. Hauschild''/''Van Dyke collection''/''*Dendrocellus crassus* Andrewes 1931, det. Liang H. B. 2005.3''.

Description. Andrewes (1931) provided a detailed description and illustration. We simply add the following: length 9.4–10.4 mm, width 2.9–3.3 mm. Apical (not basal as stated in original description) four fifths of Ant 1 black; femora brown, with apical sixth or seventh black; Ant 1/Ant 3 = 3.45 (3.33–3.56); HW/PW = 1.17 (1.12–1.21); PL/PW = 1.53 (1.48–1.57); EW/PW = 2.36 (2.18–2.42); EL/EW = 1.72 (1.64–1.81); labrum with medial lobe slightly protruded anteriorly; genae short, slightly tumid; eyes moderately large, 2.5 times as long as genae; elytral punctation as in Fig. 45; protarsomere 3 symmetrical in male (Fig. 53); tarsal claws with 5–6 pectinations, length of the longest pectination subequal to the width of claw base (similar to Fig. 63); last sternum as in Fig. 48 or 50. Aedeagus with apical lamella thin, linguiform (Figs. 83–84).

Distribution. Indonesia (Sumatra), Malaysia (N. Kalimantan).

Remarks. We have not examined the type (in BMNH). Members of this species are readily recognized by their elytral intervals sparsely punctate (Fig. 45), femora with apical sixth black, and tibiae completely black.

Dendrocellus elegans Sloane
(Figs. 6, 42, 58, 95–96)

Dendrocellus elegans Sloane 1907: 473 (New Guinea)

Specimens examined. Total 18 specimens: **New Guinea**: 1 female (ZMHU), ''D. N. Guinea''/''Sattelberg''/''*Desera elegans* Sloane, Andr.''; 1 male (ZMHU), ''D. N. Guinea''/''Sattelberg''; 1 male (ISNB), ''Brit. N. Guinea''/''Reg. Mus. Hist. Nat. Belg. I. G. 10294''/''*parallela* Chd.''/''G. Fagel''/''G. Fagel det. *Desera parallela* Chd.''/''Coll. R. I Sc. N. B. Papua New Guinea''; 1 male (ISNB), ''New Pommern, Reg. Mus. Hist. Nat. Belg. I.G. 10294''/''*unidentata* M.L.''/''G. Fagel''/''G. Fagel det. *unidentata* M.L.''/''Coll. R. I. Sc. N. B. Papua New Guinea''; 1 male and three females (ISNB), ''Jule Island''/''Coll. R. I. Sc. N. B. New Zealand'' [not New Zealand, Jule Island is in New Guinea]; 1 female (CAS), ''Papua New Guinea, Madang Province, Simbai, 51°7′S, 144°26′E, Norman D. Penny''/''*Desera elegans* Sloane, det. D. H. Kavanaugh, 1987''; 1 male (CAS), ''Finschhafen, New Guinea, IV-44, E. S. Ross''/''*Desera elegans* det. Darl. 1967''; 1 male (CAS), ''Papua New Guinea, Madang Province, Nagada Harbor,

Christensen Res. Inst., 3 m, 27 February 1989, stop # 89-2''/''D. H. Kavanaugh and G. E. Ball collectors, Cal. Acad. Sci. Coll.''/''Papua New Guinea Expedition-1989''; 1 male (CAS), ''West New Guinea/Paniai Prov./IR25 Enarotall, Danau Paniai, 1,900 m, Swamps n. the village 29.7–4.8 1991, leg. Balke & Hendrich''; 1 female (CAS), ''New Guinea: Morobe District, Wau, 15-X-1969, James E. Tobler, Cal. Acad. Sci. Coll.''/''*Desera elegans* Sloane, det. D. H. Kavanaugh 1991''; 1 male (CMNH), ''Dec 29, 1981''/''Papua New Guinea, Wau-Morobe Prov. Coll. A. Allison, light trap 1,230 m''/''*Desera elegans* det. R. T. Bell''/''*Desera elegans* (Sloane) det. R. Davidson''; 1 male (CMNH), ''Jan 17, 1982''/''Papua New Guinea, Wau-Morobe Prov. Coll. A. Allison, light trap 1,230 m''/''*Desera elegans* det. R. T. Bell''/''*Desera elegans* (Sloane) det. R. Davidson''; 1 female (CMNH), ''Dec 28, 1981''/''Papua New Guinea, Wau-Morobe Prov. Coll. A. Allison, light trap 1,230 m''/''*Desera elegans* det. R. T. Bell''/''*Desera elegans* (Sloane) det. R. Davidson''; 1 female (CMNH), ''Papua New Guinea, Wau, Apr. 28, 1982, Coll. R. T. Bell, light trap''/''*Desera elegans* det. R. T. Bell''/''*Desera elegans* (Sloane) det. R. Davidson''; 1 female (CMNH), ''Papua New Guinea, Morobe Province, Wau Ecology Inst., 19 May 1984, 1,200 m, Coll. Chen Young''/''*Desera elegans* (Sloane) det. R. Davidson''

Description. Because Sloane's description (1907: 473) is detailed, we simply add the following: length 9.1–10.7 mm, width 2.6–3.5 mm. Femora brown, with apical ninth or tenth blackish brown; tibiae brown. Ant 1/Ant 3 = 3.37 (3.13–3.50); HW/PW = 1.16 (1.09–1.19); PL/PW = 1.58 (1.53–1.65); EW/PW = 2.41 (2.22–2.58); EL/EW = 1.74 (1.62–1.81); labrum with medial lobe slightly protruded anteriorly; genae short, slightly tumid; eyes large, about 2.5 times as long as genae; elytra with lateral margins nearly parallel in both sexes; elytral outer angles strongly dentate, sharply pointed at apex (Fig. 42); protarsomere 3 slightly asymmetrical in male; tarsal claws with 5 or 6 pectinations, longest pectination slightly longer than width of claw base (Fig. 58). Aedeagus with apical lamella narrow, slightly digitiform (Figs. 95–96).

Distribution. New Guinea.

Remarks. We have not examined the type. Members of this species can be recognized by their brown femora with very short dark apices. In most specimens, the elytra possess strongly dentate outer angles as described by Sloane (1907: 473), and in some specimens, the outer angles are sharpened into a short spine (*e.g.*, from Jule Island). We found one specimen (in CAS) of this species with obtuse outer angles; but because it is similar to other specimens of this species in other characters, including shape of the aedeagus, this is probably just an abnormal specimen. This species is the only member of *Dendrocellus* distributed in New Guinea and appears to be endemic to this island.

Dendrocellus geniculatus (Klug)
(Figs. 8–9, 26, 40, 44, 47, 49, 52, 55, 64, 87–88)

Drypta geniculata Klug 1834: 52 (India)

Dendrocellus geniculatus Klug, Schmidt-Göbel 1846: 25

Desera (*Dendrocellus*) *gilsoni* Dupuis 1912: 319 (China: Taiwan), **new synonymy**
Desera gilsoni continentalis Hansen 1967: 405 (Laos), **new synonymy**

Specimens examined. Total 180 specimens: **Bangladesh**: 1 female (ZMHU), ''Chota Nagpore, Bengal''/''Ex Museo, H. Bates 1892''/''67777''. **Bhutan**: 1 female (ISNB), ''Coll. I. R. Sc. N. B. Inde, British Bootang, Maria Basti, 1900 ex coll. Oberthur''; 1 male (ISNB), ''Coll. I. R. Sc. N. B. Inde Pandang Bouthan, ex coll. R. Oberthür''. **China**: 1 female (ISNB), ''*Desera gilsoni* Dupuis''/''Dupuis det.''/

''Takao Formosa, Sauter XI-07''/''Type'' [red label], ''W. Hansen vid., 1966, *Desera gilsoni* Dup.''; 1 male and 1 female (ISNB), ''*Desera gilsoni* Dup., P. Dupuis det. 1913''/''Type''/''Formosa, Polisha, X.09, H. Sauter S. G.''/''Paraype''/''W. Hansen vid., 1966, *Desera gilsoni* Dup.''; 1 female (ISNB), ''*Desera gilsoni* Dup., P. Dupuis det. 1913''/''Formosa, Hoozan, I.10, H. Sauter S. G.''/''Paratype''/''W. Hansen vid., 1966, *Desera gilsoni* Dupuis''; 1 female (ISNB), ''*Desera gilsoni* Dup., P. Dupuis det. 1913''/''Formosa, Hoozan, XII.09, H. Sauter S. G.''/''Paratype''/''W. Hansen vid., 1966, *Desera gilsoni* Dupuis''; 1 male (ZMHU), ''China''/''*Dendrocellus geniculatus* Klug, det. Ing. Jedlicka''; 1 female (ZMHU), ''S. Formosa, Fuhosho, 4.09, H. Sauter S. V.''; 1 female (ZMHU), ''Formosa, Hoozan, 1.10, H. Sauter S. G.''; 1 female (ZMHU), ''Formosa, Hoozan, XII.09, H. Sauter S. G.''; 1 male (ZMHU), ''Formosa, Polisha, X-09, H. Sauter S. G.''; 1 female (ZMHU), ''Formosa, Hoozan, I.10, H. Sauter S. G''; 1 male (CAS), ''Chung Kon, Hainan Id, VII-22-35''/''L. Gressitt Collector''/''L. Gressitt Collection''; 1 male (CAS), ''Dwa Bi, Hainan Id, VII-22-35''/''L. Gressitt Collector''/''L. Gressitt Collection''; 1 male (CAS), ''Kuraru, VI-14-34, Formosa''/''L. Gressitt Collector''/''L. Gressitt Collection''; 1 female (CAS), ''Rokki, Formosa, V-17-34''/''L. Gressitt collector''/''L. Gressitt Collection''; 1 female (CAS), ''Rokki, Formosa, V-15-34''/''L. Gressitt collector''/''Van Dyke Collection''; 1 male, ''Hainan, Baoting, 80 m'', 1960.V.14, Suofu Li collector''; 1 male, ''Hainan, Baoting, 80 m''/''1960.VII.25, Xuezhong Zhang collector''; 1 female, ''Hainan, Tongshi, 340 m''/''1960.VIII.5'', Suofu Li collector''; 1 female, ''Hainan, Qiongzhong, 400 m''/''1960.VII.15'', Suofu Li collector''; 1 male, ''Hainan, Jianfengling, 70 m''/''1980.III.26, light trap, Fuji Pu collector''; 1 male, ''Fujian, Jiangle, Longqishan, 500 m''/''1991.VIII.13, Shimei Song collector''; 1 female, ''Fujian, Jiangyang, Huangkeng, 270–360 m''/''1960.III.26, Yiran Zhang collector''; 1 male, ''Fujian, Jianyang, Tongyou, 170 m''/''1978, Shixiong Shen collector''; 1 male, ''Fujian, Fuzhou''/''Light trap, 1979.VIII.12''; 1 male, ''Shanghai, Jiangwan, 6.8.1942''; 1 female, ''Zi-ka-wei, 19.5.20'' [Shanghai]; 1 male, ''Guangxi, Jinxiu, Shengtangshan, 900 m, 1999.V.17, Fusheng Huang collector''; 1 female, ''Guangxi, Napo, Defu, 1,350 m, 2000.VI.18, Wenzhu Li collector''; 1 female, ''Guangxi, Napo, Defu, 1,350 m, 2000.VI.18, Chaodong Zhu collector''; 1 female, ''Guangxi, Napo, Defu, 1,350 m, 2000.VI.19, Jian Yao collector''; 1 female, ''Guangxi, Tianlin, Yaojiawan, 1,200–1,400 m, 2002.VI.1, Xiujuan Yang collector''; 1 female, ''Guangxi, Tianlin, Laoshan Nongchang, 1,200–1,600 m, 2002.VI.4, Xiujuan Yang collector''; 2 males and 1 female, ''Guangxi, Jinxiu County''/''Light trap, 1983.V.30-31, Subai Liao collector''; 1 male, ''Guangxi, Longshen''/''1980.VI.16''; 1 male, ''Guangxi, Longshen''/''1980.VI.16, Shimei Song collector''; 1 female, ''Guangxi, Longshen, 300 m''/''1963.V.23, Wang Chunguang collector'', 2 males and 1 female, ''Guangxi, Guilin, Yanshan, 200 m, light trap''/''1963.V.12-13, Wang Chunguang collector''; 1 female, ''Guangxi, Guilin, Yanshan, 1952.10.3''; 1 female, ''Guangxi, Guilin, Yanshan, 1953.6.5''; 1 male, ''Guangxi, Guilin, Yanshan, 1953.8.18''; 1 male, ''China, Jiangxi, Longnan, Jiulianshan''/''1975.VI.8, light trap, Youwei Zhang collector''; 1 male, ''Jiangsi, Dayu, Lannijing, Sanjiangkou, 400 m''/''1985.VIII.11, Subai Liao collector''; 3 males, ''Guizhou, Chishui, Jinsha, 500 m''/''2000.IX.21-22, Liang H.B.''; 2 females, ''Guizhou, Luodian''/''1980.VI-VII''; 1 male, ''Guangdong, Shenzhen, 1980.5, Shaohua Du collector''; 1 male and 1 female, ''Guangdong, Shipai, 1964.5, Shoujian Chen collector''; 1 female, ''Yunnan, Xishuangbanna, Yunjinghong, 650 m''/''1958.VII.13, Xuwu Meng collector''; 1 male, ''Yunnan, Xishuangbanna, Damenglong, 650 m''/

''1958.VII.17, Yiran Zhang collector''; 1 female, ''China, Yunnan, Fugong, Shangpa, Guquan, roadside, 26.88897°N, 98.86558°E''/''1,230 m, 2004.4.21, Liang H.B., Li X.Y. coll., California Academy & IOZ, Chinese Acad. Sci.''; 1 female, ''China, Yunnan, Fugong, Lumadeng, Yaping, Yaping Bridge''/ ''2004.4.30 day, Guangxu Peng coll., Institute of Zool., CAS and California Acad. Sciences''. 1 female, ''China, Yunnan, Gongshan, Cikai, Dashaba, along Nujiang, 27.73268°N, 98.67099°E'', 1,435 m, 2004.11.10, night, Hongbin Liang collector, California Academy & IOZ, Chinese Acad. Sci.''; 1 female, ''Sichuan, Beibei, 15.10.1940''; 21 males and 8 females, ''Tibet, Mêdog, 1,000–1,100 m''/ ''1983.I.23, Zai Lin collector''; 1 male and 3 females, ''Tibet, Mêdog, 800 m''/ ''1983.II.7, Zai Lin collector''; 2 females, ''Tibet, Mêdog, 820 m''/''1982.II.2, Yinheng Han collector''; 1 female, ''Tibet, Mêdog, Baibung, 850 m''/''1983.III.7, Yinheng Han collector''. **India**: 1 female (ZMHU), ''Ind. Ori. Sal.''/''*geniculata* Kl.''/''Hist.-Coll. (Coleoptera), Nr. 709, *Drypta geniculata* Klug, India Orient., Salinger, Zool. Mus. Berlin''/''Holotypus, *Drypta geniculata* Klug 1834, Labeled by MNHUB 2004''[red label]; 1 male (ZMHU), ''S. India, Karikal, Pondicherry State, Febr. 1966, P. S. N.''; 1 female (ISNB), ''Pedong''/''Pedong (Desgodins), ''Coll. R. I. Sc. N. B. Malaisie ? ''[India]; 1 male (ISNB), ''Pedon, A. Desgodins''/ ''Pedong''/''Coll. R. I. Sc. N. B. Malaisie ? '' [India]. **Indonesia**: 1 male (ZMHU), ''Batoe Doelang, Batoe Lanteh, Zeb. 800–1,200 m, Bensch 10-15.5.27''; 1 female (ZMHU), ''Sumatra, Dryrolle''/''40538''; 1 female (ZMHU), ''W. Sumatra''/ ''No. 18, VII 1991''; 3 males (ISNB), ''Jadraboera, Sumatra W.C., E. Wegas''/ ''Collection E. Rousseau''/''Coll. R. I. Sc. N. B. Sumatra''; 1 male and 1 female (ISNB), ''Sumatra''/''Collection P. Dupuis''/''*Desera*''/''Coll. R. I. Sc. N. B. Sumatra''; 1 female (ISNB), ''Java, Koller''/''Coll. R. I. Sc. N. B. Java''; 1 male (ISNB), ''Sumatra''/''Coll. Ogier de Baulny''/''6,180''/''Coll. R. I. Sc. N. B. Sumatra''. **Malaysia**: 1 female (ZMHU), ''Malacca, Tengah Gebirge, P. Zobris V.''; 1 male (ISNB), ''*D. geniculatus* Malacca (DL)Kl.''/''Soc. Ent. Belg. Coll. Putzeys''/''Coll. R. Sc. N. B. Malaisie''. **Pakistan**: 3 males and 8 females (CAS), ''Pakistan, Ichamati 28 mi E. Chittagong, IX-14-61, 50 ft''/''Collectors E. S. Ross, D. Q. Cavagnaro''. **Philippines**: 1 male (ISNB), ''Ile Basilan, Philippines''/ ''R. Mus. Illist. Nat. Belg. I. G. 12.595''/''Coll. R. I. Sc. N. B. Philippines''; 1 male (CAS), ''Mt. Makiling, Laguna P.I., I-1-1931''/''F.C. Hadden Collection''; 1 male (CAS), ''Mt. Makiling, Laguna P.I., VIII-9-1931''/''V. Madrid collector''/''F.C. Hadden Collection''; 1 female (CAS), ''Mt. Makiling, Laguna P.I., VIII-1-1931''/ ''F.C. Hadden Collection''/''Elevation 3,000 ft''; 1 female (CMNH), ''Philippines: Mt. Baco, Mindoro, Sept 1987''/''*Desera geniculata* Klug''; 1 male (CAS), ''San Jose, Mindoro P. I., 1945, E. S. Ross''. **Sikkim**: 1 male (ZMHU), ''Himalaya Sikkim''/''*Desera geniculata* Klug, H. E. Andrewes''; 12 males and 9 females (ZMHU), ''Himalaya Sikkim, Coll. Hauser''. **Thailand**: 1 female (CMNH), ''Thailand: Chiang Mai Prov., San Sai, 6–8 May 1986''; 1 male and 2 females (ZMHU), ''Thailand, Wang Takrai-Park, Nakhon Nayok Prov.''/''4-7.9.1978'', gekätschert, leg. H. J. Bremer''; 1 female (ZMHU), ''Nordost-Thailand, Khon Kaen ad Iucem''/''Dr. Sastri, Saowakontha leg. 2.9.1980''; 1 male (CAS), ''Thailand, Chonburi, February, 1982, G. A. Shook, coll.''. **Vietnam**: 6 males and 4 females (ZMHU), ''Annam, Phuc-Son, Nov. Dez. H. Fruhstorfer''; 1 female (ISNB), ''Coll. R. I. Sc. N. B.''/''Tonkin Hoabinh (North Vietnam), Ex coll. Oberthur, IG. 18.293''; 1 female (ISNB), ''Annam Cua Thung''/''R. I. Sc. N. B. 21042''/''Coll. R. I. Sc. N. B. North Vietnam''; 1 female (ISNB), ''Annam Phuison''/''Coll. R. I. Sc. N. B. North Vietnam''; 1 male and 2 females (ISNB), ''Annam Phuc-Son Nov. Dez, H. Fruhstorfer''/''Coll. R. I. Sc. N. B North

Vietnam''; 1 male (CAS), ''Quang Nam Province, Kim Lien, Republic of Vietnam, Bruce W. Miller, VII.26.1968''/''D.H. Kavanaugh Collection''; 1 male, ''Tonkin, Hoa-Binh, III.1937, leg A. de Cooman''; 1 male, ''Tonkin, Hoa-Binh, leg A. de Cooman''.

Description. Length 8.0–10.2 mm, width 2.4–3.0 mm. Black with green or blue luster, often mixed with coppery luster; Ant 1 with apical third dark brown, Ant 3 with basal two-thirds slightly darker than apical third; femora yellow, with apical sixth or seventh blackish brown; tibiae yellow. Head wider than pronotum, HW/PW = 1.24 (1.18–1.31); Ant 1/Ant3 = 3.63 (3.46–3.76); labrum (Fig. 26) with medial lobe slightly protruded anteriorly; genae short, tumid; eyes large, about 2.6 times as long as genae. Pronotum widest at middle, slightly narrowed anteriorly, PL/PW = 1.51 (1.45–1.63). Elytra with lateral margins slightly widened posteriad to apical third, then narrowed gradually to outer apical angles in female (Fig. 8), nearly parallel in male; EL/EW = 1.82 (1.69–1.89), EW/PW = 2.29 (2.10–2.47); outer angles obtuse or slightly dentate (Fig. 40), punctation of intervals as in Fig. 44. Protarsomere 3 slightly asymmetrical in male (Fig. 52); length of the longest tarsal claw pectinations slightly shorter than width of claw base (Fig. 64). Last sternum as in Fig. 47 or 49. Aedeagus with apical lamella narrow, digitiform, apex thickened (Figs. 87–88).

Distribution. Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Japan, Laos, Malaysia, Pakistan, Philippines, Sikkim, Thailand, Vietnam.

Remarks. We compared the types of *Dendrocellus gilsoni* (Dupuis) with that of *D. geniculatus* (Klug) and no significant difference was found. Hansen (1967: 405) described *D. gilsoni continentalis* from Laos, stating that it differs from the nominate subspecies in having a shorter testaceous portion of Ant 1 at base, longer black portion of femora at apex, and more convex elytral intervals. We examined many specimens with these features from China, Vietnam, Thailand, and Philippines, and no significant difference was found except for the femora black at apical fifth and Ant 1 brown at apical two-fifths. In our opinion, these are just variant forms of *D. geniculatus* (Klug). Moreover, Hansen (1967: 401) stated *D. geniculatus* (Klug) has short tarsal claw pectinations. Actually, *D. geniculatus* (Klug) has long and fine tarsal claw pectinations (Fig. 64).

D. geniculatus (Klug) is widely distributed in southeastern Asia, from India east to Japan and south to Java. Its members can be recognized by the following combination of character states: small size (usually less than 10 mm), large ratio of Ant 1/Ant 3 (3.46–3.76), elytra often with coppery luster, elytral outer angles obtuse or slightly dentate, tarsal claw pectinations fine and long, lamella of aedeagus very narrow and thickened at apex. Adults of several species (*i.e.*, *D. coelestinus*, *D. confusus*, *D. crassus*; see ''Specimens examined'' for each species) often have been wrongly determined as *D. geniculatus* (Klug).

Dendrocellus gestroi Bates
(Fig. 10)

Dendrocellus gestroi Bates 1892: 385 (Myanmar)

Desera gestroi (Bates 1892), Heller 1923: 303

Type. Lectotype, here designated, a female (MCSN), labeled ''Carin Chebà, 900–1,100 m, L. Fea, V XII-88''/''Typus''/''*Dendrocellus gestroi* Bates''/''*Gestroi* Bates''/''*Dendrocellus Gestroi* Typus Bates''/''Syntypus, *Dendrocellus gestroi* Bates 1892''[red label]/, ''Museo Civico di Genova''/''LECTOTYPE, *Dendrocellus gestroi* Bates, designated by H. B. Liang & D. H. Kavanaugh 2006'' [red label].

Description. Length 10.0 mm, width 3.2 mm. Black with blue luster, apical two-thirds of Ant 1, Ant 2 and basal two-thirds of Ant 3 blackish brown, basal one-third of Ant 1, apical one-third of Ant 3 and Ant 4–11 brown; mandibles and palpi brown; tibiae and apical one-third of femora black, basal two-thirds of femora dark red, tarsi dark brown. Head with vertex slightly convex, densely punctate; Ant 1/Ant 3 = 3.33; labrum with medial lobe slightly protruded anteriorly; genae long, distinctly tumid; eyes small, 1.9 times as long as genae. Pronotum densely punctate, PL/PW = 1.36, HW/PW = 1.06, widest slightly before middle; apical angles round, lateral margins straight and widened from apical angles to widest point, then narrowed posteriorly and sinuate to basal angles; basal angles acute, pointed laterally; lateral furrow distinct; basal foveae deep; middle line fine. Elytra short and wide, lateral margins widened from base to apical third, then narrowed to apex; EL/EW = 1.56, EW/PW = 2.22; intervals slightly convex, moderately punctate, interspace between two adjacent punctures 1.5–2.0 times diameter of punctures; outer angles strongly dentate, apex pointed (similar to Fig. 41). Tarsal claws with 5–6 long pectinations, length of individual pectination subequal to width of claw base (similar to Fig. 60).

Distribution. Myanmar.

Remarks. In his original description of *D. gestroi*, Bates gave no indication of the number of specimens in his type series. This means that, although only a single female specimen is to be found in the MCSN collection, bearing both ''typus'' and ''syntypus'' labels (see above), it must, according to the International Code of Zoological Nomenclature (Article 73.2), be considered a syntype and designated as a lectotype.

The single known specimen of this species is similar to those of *D. unidentatus* (Macleay) in having acute elytral outer angles, long tarsal claw pectinations, and black tibiae, but differs from the latter in having a short pronotum (PL/PW = 1.36, but 1.50–1.67 in *D. unidentatus*) and wider elytra (EL/EW = 1.56, but 1.67–1.93 in *D. unidentatus*). Its acute elytral outer angles and long tarsal claw pectinations are different from those of *D. nepalensis* (Hope) and *D. kulti* (Jedlicka) adults. The dark red base of the femora and small eyes of this specimen (and presumably all members of this species) are apparently unique within the genus.

Dendrocellus inexpectus Liang and Kavanaugh, new species
(Figs. 11, 61, 99–100)

Types. Holotype: a male (ISNB), ''Barway, P. Cardon''/''Coll. R. I. Sc. N. B. Inde''/''HOLOTYPE, *Dendrocellus inexpectus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [red label]. Paratypes (total 9 specimens): 1 male and 3 females (ISNB), ''Barway, P. Cardon''/''Coll. R. I. Sc. N. B. Inde''/''PARATYPE, *Dendrocellus inexpectus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 2 males (ISNB), ''Konbir''/''Coll. R. I. Sc. N. B. Inde''/''PARATYPE, *Dendrocellus inexpectus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 2 males (ISNB), ''Belgaum Bombay, H. E. Andrewes''/''*Desera geniculata* Klug, det. H. E. Andrewes, 1920''/''W. Hansen vid. 1966, *Desera geniculata* Klug''/''Coll. R. I. Sc. N. B. Inde''/''PARATYPE, *Dendrocellus inexpectus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 male (ISNB), ''Barnai, 1892''/''Collection E. Candeze''/''*Dendrocellus geniculatus* Klug, M. Maindron det. 1910''/''W. Hansen vid. 1966, *Desera geniculata* Klug''/''Coll. R. I. Sc. N. B.

Inde''/''PARATYPE, *Dendrocellus inexpectus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label].

Type locality. Barway (near Chota Nagpur), India.

Diagnosis. Femora brown with apical sixth or seventh dark brown; tibia brown; apical two thirds of Ant 1 black; elytral outer angles slightly dentate; aedeagus with apical lamella short, round at apex (Fig. 99).

Description. Length 9.2–10.5 mm, width 2.6–3.1 mm. Black with green luster, mixed with some copper luster, apical third of Ant 1 black, basal two thirds of Ant 1, Ant 2–11 brown; mandibles and palpi brown; tibia and apical sixth or seventh of femora dark brown, basal two-thirds of femora brown. Head with vertex slightly convex, densely punctate; Ant 1/Ant 3 = 3.54 (3.31–3.69); labrum with medial lobe slightly protruded anteriorly; genae short, distinctly tumid; eyes large, 2.7 times as long as genae. Pronotum densely punctate, PL/PW = 1.48 (1.43–1.57), HW/PW = 1.21 (1.16–1.27), widest slightly before middle; apical angles round; lateral margins slightly widened from apical angles to widest point, strongly narrowed behind, then sinuate to basal angles; basal angles obtuse, pointed laterally; lateral furrow indistinct; basal foveae shallow; middle line fine. Elytra short and wide, EL/EW = 1.76 (1.69–1.85), EW/PW = 2.35 (2.28–2.50); intervals nearly flat, densely punctate; outer angles slightly dentate. Protarsomere 3 slightly asymmetrical in male; tarsal claws with 5–6 long pectinations, length of individual pectination subequal to width of claw base (Fig. 61). Aedeagus with apical lamella thin, very short, apex round (Figs. 99–100).

Distribution. Barway and Bombay in India.

Etymology. This species is named for its discovery, which was unexpected.

Remarks. Members of this species are very similar to those of *D. geniculatus* (Klug). In fact, we had not distinguished this species from *D. geniculatus* (Klug) until the specimens were dissected for genitalia comparison. Males can be distinguished from those of *D. geniculatus* (Klug) by the short and round lamella of the aedeagus. Moreover, femora of both sexes of this new species are brown with dark brown apex, whereas the femora of most *D. geniculatus* (Klug) specimens, including those of the holotype, are typically yellow with a black apex. Some specimens of *D. geniculatus* (Klug) do possess brown femora (*e.g.*, from Vietnam and Sumatra), but the apex is still black, not dark brown.

Dendrocellus javanus Liang and Kavanaugh, new species
(Figs. 12, 34, 62, 89–90)

Types. Holotype: a male (ISNB), ''Java, Seokaboemi''/''R. I. Sc. N. B. 19.458, Coll. Le Moult''/''Coll. R. I. Sc. N. B. Java''/''HOLOTYPE, *Dendrocellus javanus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [red label]. Paratypes (total 5 specimens): 1 female (ISNB), ''Java, Soc. Ent. Belg., Coll. Putzeys''/''Coll. R. I. Sc. N. B. Java''/''PARATYPE, *Dendrocellus javanus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 male and 1 female (ISNB), ''Java''/''R. Mus. Hist. Nat. Belg. I.G. 12.595''/''Coll. R. I. Sc. N. B. Java''/''PARATYPE, *Dendrocellus javanus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 female (ISNB), ''Java''/''Soc. Ent. Belg. Coll. Putzeys''/''Coll. R. I. Sc. N. B. Java''/''PARATYPE, *Dendrocellus javanus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 male (ZMHU), ''Java Occid. Dr. Standgr.''/''*Dendrocellus geniculatus* Klug''/''PARATYPE, *Dendrocellus javanus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label].

Type locality. Java, Indonesia.

Diagnosis. Femora brown with apical fifth or sixth black; tarsal claws (Fig. 62) with longest pectination subequal to width of tarsal claw base; elytra with outer angles slightly dentate; aedeagus with apical lamella moderately long, slightly digitiform, not thickened at apex (Figs. 89–90).

Description. Length 9.2–10.2 mm, width 2.7–2.9 mm. Black, head, pronotum, and elytra with green luster, mixed with slight blue luster; apical third of Ant 1 and basal two thirds of Ant 3 black, basal two thirds of Ant 1, apical third of Ant 3, and Ant 4–11 brown or yellow; apical fifth or sixth of femora black, remainder brown or yellow; tibiae and tarsi brown or yellow. Head (Fig. 34) wider than pronotum, HW/PW = 1.18 (1.13–1.23); vertex convex, coarsely punctate; Ant 1/Ant 3 = 3.35 (3.24–3.46); labrum with medial lobe slightly protruded anteriorly; genae moderately tumid; eyes large, about 2.2 times as long as genae. Pronotum densely punctate, narrow, PL/PW = 1.46 (1.40–1.50); lateral margins gradually widened from apical angles to middle, strongly sinuate before basal angles; basal angles protruded laterally; basal foveae quite deep; middle line shallow. Elytra long, slightly widened from base to apical third, then narrowed to apex in both sexes (more so in female); EL/EW = 1.82 (1.70–1.86), EW/PW = 2.23 (2.12–2.32); outer angles slightly dentate (similar to Fig. 40); interval flat, densely punctate. Protarsomere 3 slightly asymmetrical in male; tarsal claw with 5–6 long pectinations, length of the longest pectination subequal to width of claw base (Fig. 62). Aedeagus with apical lamella moderately long, slightly digitiform, unthickened at apex (Figs. 89–90).

Distribution. Presently known only from type locality.

Etymology. The new species is named for Java, its type locality.

Remarks. Members of this new species are similar to those of *D. geniculatus* (Klug) in having tumid genae, green body luster, and similar femoral and tibial color, but differ in having the ratio of Ant 1/Ant 3 smaller and the lamella of aedeagus not thickened (Fig. 90). They are also similar to adults of *D. ternatensis* Chaudoir in the form of male genitalia, but differ from the latter in femoral color and in having more tumid genae (Fig. 34) and smaller ratio of Ant 1/Ant 3.

Dendrocellus kulti (Jedlicka), **new combination**
(Figs. 13–14, 35, 81–82)

Desera kulti Jedlicka 1960: 598 (Yunnan)

Desera kulti recondita Hansen 1967 (Taiwan), **new synonymy**

Specimens examined. Total 8 specimens. **China**: 1 female (NMPC), ''China, Prov. Yunnan, Vallis Flumin, Soling-ho''/''Typus''[red label]/''Desera kulti sp. n. det. Ing. Jedlicka''; 1 male and 1 female (ISNB), ''Sse-Tsong, alt. 2,000 m, Est Yunnan'', Coll. R. S. Sc. N. B. China''; 1 male, ''Tibet, Nyalam County, Zham Township, 2,200 m''/''1966.V.7, light trap, Shuyong Wang collector''; 1 female, ''Yunnan, Wenquan''/''1982.III.26, Subai Liao collector''; 1 male, ''Hubei, Xingshan, Longmen River, 1,330 m''/''1995.VI.11, Shuyong Wang collector''; 1 male (ISNB), ''*Desera kuntzeni* P. Dupuis det. 1919''/''S. Formosa, Chip Chip, H. Sauter S. V.''/''W. Hansen det., 1966, *Desera kulti* Jedl. ssp. *recondita* nova''/''Type''[red label]; 1 female (ISNB), ''*Desera kuntzeni* P. Dupuis det. 1919''/''Type''/''Formosa, Hoozan, III.10, H. Sauter S. G.''/''W. Hansen det., 1966, *Desera kulti* Jedl. ssp. *recondita* nova''/''Paratype''.

Description. Length 9.6–11.6 mm, width 3.2–3.9 mm. Black with blue luster; Ant 1 pale yellow or with apical third brown; femora black with blue luster, tibiae yellow (dark brown in specimen from Hubei). Head almost equal in width to

pronotum, HW/PW = 1.03 (0.97–1.10), Ant 1/Ant3 = 3.39 (3.13–3.62); labrum with medial lobe slightly or moderately protruded anteriorly; genae short, distinctly tumid (less so in males); eyes large, slightly protruded laterally, 2.6 times as long as genae. Pronotum short, PL/PW = 1.29 (1.19–1.35), widest at apical third. Elytra wide and short, El/EW = 1.58 (1.51–1.66), EW/PW = 2.14 (2.07–2.24), outer angles slightly round (Fig. 35); intervals slightly convex, sparsely punctate, punctures small, mixed with some larger ones. Protarsomere 3 slightly asymmetrical in male; tarsal claws with 3–5 short pectinations, length of individual pectination less than half width of claw base (similar to Fig. 64). Aedeagus with apical lamella thin, wide, linguiform (Figs. 81–82).

Distribution. China (Hubei, Taiwan, Tibet, Yunnan).

Remarks. We compared type specimens of *Dendrocellus kulti kulti* (Jedlicka) and *D. kulti reconditus* (Hansen) and found no significant difference, except that the former (length 9.6 mm) is slightly smaller than the latter (length 11.4–11.6 mm). Members of this species can be recognized by their short pronota, blue elytra and black femora. This seemed to us at first to be just a blue color variation of *D. nepalensis* (Hope); but the color is very stable in all specimens we examined, and we treat it as a distinct species. *Dendrocellus kulti* (Jedlicka) is distributed only in China, from Tibet to Taiwan, its range partly overlapping with that of *D. nepalensis* Hope.

Dendrocellus micropectinatus Liang and Kavanaugh, new species
(Figs. 15, 38, 70, 105–106)

Types. Holotype: a male (ISNB), ''Rhodésie du Nord, Abercorn, 19-V-1943, H.-J. Brédo''/''R. I. Sc. N. B. I.G. 15.472''/''Coll. R. I. Sc. N. B. Rhodésie du Nord''/''HOLOTYPE, *Dendrocellus micropectinatus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [red label]. Paratypes (total 12 specimens): 1 female (ISNB), same collecting data as holotype; 1 female (ISNB), ''Rhodésia du Nord, Abercorn, XI-1943, H.-J. Brédo''/''R. Mus. Hist. Nat. Belg. I.G. 15.472''/''Coll. R. I. Sc. N. B. Rhodésie du Nord''/''PARATYPE, *Dendrocellus micropectinatus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 male and 6 females (ISNB), ''Coll. R. I. Sc. N. B. Congo belg. Kafakumba, coll. Le Moult''/''PARATYPE, *Dendrocellus micropectinatus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 2 males (MBC), ''Zambia, 8.11.02, Mwinilunga, ca 20 km N-W, leg. Wachtel''/''PARATYPE, *Dendrocellus micropectinatus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 female (MBC), ''leg. Wachtel, Zambia, Mwinilunga, 20 km NW, 8.11.2002''/''PARATYPE, *Dendrocellus micropectinatus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label].

Type locality. Abercorn, Zambia.

Diagnosis. Pronotum red with purple luster; femora with apical half black, tibiae black; tarsal claw pectinations extremely short, the longest pectination shorter than one-fifth width of claw base (Fig. 70).

Description. Length: 9.8–10.9 mm, width: 2.9–3.4 mm. Head and abdominal sterna with blue luster; neck, pronotum, scutellum, thoracic sterna, episterna, and epimera, Ant 4–11, and basal half of femora red or brown; pronotum with purple luster; elytra with green luster; apical one-third or apical half of hind femora, tibiae, and apical half of Ant 1 black; tarsomeres, Ant 2, Ant 3, and basal half of Ant 1 dark brown. Head densely punctate on vertex; labrum with medial lobe

slightly protruded anteriorly; Ant 1/Ant 3 = 3.02 (2.88–3.14); genae oblique, hardly tumid; eyes large, convex, 2.5 times as long as genae. Pronotum short, cylindrical, widest at apical third, PL/PW = 1.38 (1.34–1.43), HW/PW = 1.19 (1.11–1.26); slightly widened from apical angles to anterior one-third, then narrowed posteriad, slightly sinuate before basal angles; basal angles obtuse, weakly protruded laterally. Elytra nearly parallel in basal half, slightly widened posteriad to apical fourth, then narrowed to apex; EL/EW = 1.85 (1.79–1.99), EW/PW = 2.16 (1.95–2.26); striae shallow, punctate; intervals flat, densely punctate; outer apical angles nearly rectangular, not pointed (Fig. 38). Protarsomere 3 strongly asymmetrical in male; tarsal claws with 3–5 min pectinations, length of the longest pectination less than one-fifth width of claw base (Fig. 70). Aedeagus stout, with apical lamella moderately long, thin, rounded at apex (Figs. 105–106).

Distribution. Congo, Zambia.

Etymology. This species is named for the very short pectinations on its tarsal claws.

Remarks. Members of this new species are similar to those of another African *Dendrocellus* species, *D. bicoloripennis* n. sp., but differ from them in having unicolorous green elytra with distinct humeri and nearly parallel lateral margins. In *D. bicoloripennis* adults, the elytra are bicolored bluish green and dark purple or black with indistinct humeri and lateral margins distinctly widened posteriorly.

Dendrocellus nepalensis (Hope)
(Figs. 16, 36, 68, 79–80)

Desera nepalensis Hope 1831: 21 (Nepal)

Dendrocellus nepalensis (Hope), Chaudoir 1872: 102

Dendrocellus discolor Schmidt-Göbel 1846: 24 (Myanmar); Andrewes 1923: 7

Specimens examined. Total 50 specimens: **Bangladesh**: 1 female (ISNB), ''Bengale''/''Collection P. Dupuis''/''*Desera discolor* S.G., P. Dupuis det. 1913''/''Coll. R. I. Sc. N. B. Inde''. **Bhutan**: 1 male and 1 female (ISNB), ''Coll. I. R. Sc. N. B. Inde, Padang Bouthan, ex coll. R. Oberthür''; 2 males and 2 females (ISNB), Ex Museo R. Oberthür, British Bootang, Padong (Himalaya), 1914-L. Durel''/''R. I. Sc. N. B. 18.293''/''Coll. I. R. Sc. N. B. Inde''. **China**: 1 male, ''Tibet, Mêdog, 1,000–1,100 m''/''1982.I.27, Yinheng Han collector''; 1 female, ''Yunnan, Jinping, Hetouzhai, 1,700 m, 1956.V.16, Keren Huang collector''/''*Desera nepalensis* Hope, Kryzhanovskij det. 1986''; 1 female, ''China, Yunnan Province, Gongshan Co. Cikai Town, along street, 27.74944°N, 98.66444°E''/''1,515 m, 2002.9.25, night, Hongbin Liang''; 1 female, ''China, Yunnan Province, Gongshan Co. Cikai, Cikai Bridge, 27.72472°N, 98.68250°E''/''1,442 m, 2002.10.4, day, Xiang Xu, C.M. Yin''; 1 female, ''China, Yunnan, Gongshan County, Cikai Township, Pula He just above Nu Jiang Road, 1,440 m, 27.74861°N, 098.66675°E''/''8 October 2002, stop#2002-039A, D.H. Kavanaugh, P.E. Marek, H.B. Liang & W.D. Ba collectors''; 1 male and 1 female, ''China, Yunnan Province, Baoshan, Bawan, Dasheyao forest station, roadside, 24.92942°N, 98.75858°E''/''2,320 m, 2003.10.16, day, Liang H.B. & Yang J.J. Coll.''; 1 male and 1 female, ''China, Yunnan Province, Gaoligongshan Mountain, Nujiang Prefecture, Gangfang Sancha Lukou, 26°07.3′N, 98°34.5′E''/''1,500 m, 14–15 October 1998, stop#98-117C, D.H. Kavanaugh, C.E. Griswold,, C. Farraris, & C.L. Long collectors''; 1 male (CAS), ''China, Tibet, Friendship Bridge, 14-VI-1980, 1,600 m (5,250 ft), Lawrence W. Swan, Donated to CAS 1981''; 1 female, ''China, Yunnan, Fugong,

Lumadeng, Yaping, Yamuhe, roadside, 27.11876°N, 98.83118°E''/''1,800 m, 2004.4.26 day, Liang Hongbin collector; 1 female, ''China, Yunnan, Fugong, Lumadeng, Yaping road above Shilajia, 27.13086°N, 98.83874°E''/''1,630 m, 2004.4.26 day, D.Kavanaugh & C.Greswold; 1 male, ''China, Yunnan, Fugong, Lumadeng, Yaping-Shibali, 11 km, 27.13839°N, 98.82147°E''/''1,850 m, 2004.4.25 day, Liang Hongbin collector''; 1 male, ''China, Yunnan, Gongshan, Dulongjiang, Bapo, along roadside, 27.73902°N, 98.34975°E''/''1,424 m, 2004.10.26 night, Hongbin Liang collector''; 1 female, ''China, Yunnan, Gongshan, Dulongjiang, 0.6 km N Dizhengdang, 28.08442°N, 98.32652°E''/''1,880 m, 2004.10.29 night, D. Kavanaugh collector''; 1 male and 3 females, ''China, Yunnan, Lushui, Pianma, Gangfang, Xuetang, 26.12218°N, 98.57546°E''/''1,625 m, 2005.V.16 N, Kavanaugh D. Dong D.Z.''; 1 male, ''China, Yunnan, Fugong, Lumadeng, Yamuqiao, 27.13056°N, 98.83926°E''/''1,635 m, 2004.8.16 day, Tang Guo, plant beating''; 1 male, ''China, Yunnan, Fugong, Lumadeng, 9 km up Laoshibali, 27.10421°N, 98.73274°E''/''2,800 m, 2004.8.13 day, Tang Guo, plant beating''; 1 male, ''China, Yunnan, Fugong, Pihe, Zhiziluo, 26.54419°N, 98.92676°E''/''2,285 m, 2004.8.20 day''. **India**: 2 males (ISNB), ''Khasia Hill, Assam''/''R. I. Sc. N. B. I.G. 21.042''/''Coll. R. I. Sc. N. B. Inde''; 2 males (ISNB), ''Pedong''/''W. Hansen det., 1966, *Desera nepalensis* Hope''; 1 male (ISNB), ''Pedong, A. Desgodins''/''W. Hansen det., 1966, *Desera nepalensis* Hope''; 2 females (ISNB), ''Pedong, A. Desgodins''/''Collection E. Rousseau''/''W. Hansen det., 1966, *Desera nepalensis* Hope''; 1 male and 2 females (ISNB), ''Pedong''/''Collection P. Dupuis''/''*Desera discolor* S.G., P. Dupuis det. 1913''; 2 males and 1 female (ISNB), ''Pedong, A. Desgodins''/''Reg. Mus. Hist. Nat. Belg. I.G. 10294''; ''*discolor* S.G.'' ''G. F. Fagel''/''G. Fagel det. *Drypta discolor* S. G.''; 1 male (ISNB), ''W. Hansen det., 1966, *Desera nepalensis* Hope''/''Assam Plains, Collect Bates''; 1 female (ISNB), ''Surauva Bref. Sud.'', Collection P. Dupuis''/''*Desera discolor* S.G., P. Dupuis det. 1913''/''coll. R. I. Sc. N. B. Inde''; 2 males (ISNB), ''Konbir''/''Coll. R. I. Sc. N. B.''. **Myanmar**: 2 males (ISNB), ''Burmah''/''Collection P. Dupuis''/''*Desera discolor* S.G., P. Dupuis det. 1913''/''Coll. R. I. Sc. N. B.''. **Sikkim**: 1 male and 1 female (ISNB), ''Sikkim India''/''Coll. R. I. Sc. N. B. Inde''; Vietnam.

Description. Length 9.8–11.7 mm, width 3.2–3.8 mm. Black, head and pronotum with blue luster; elytra with purple luster, and in some specimens mixed with slight blue or green luster; Ant 1 yellow or with apical fourth brown; femora black with blue luster, tibiae yellow. Head equal to or slightly wider than pronotum, HW/PW = 1.06 (1.00–1.11); Ant 1/Ant 3 = 3.31 (3.07–3.48); labrum with medial lobe slightly or moderately protruded anteriorly; genae short, moderately tumid; eyes large, convex, 2.7 times as long as genae. Pronotum short, PL/PW = 1.30 (1.25–1.39), widest at apical third. Elytra short, EW/PW = 2.18 (2.00–2.31), EL/EW = 1.63 (1.53–1.70), widened posteriad to apical fourth, then slightly narrowed to apex; outer angles broadly rounded (Fig. 36); intervals slightly convex, sparsely punctate, punctures small, mixed with some larger ones. Protarsomere 3 slightly asymmetrical in male; tarsal claws with 4–5 short pectinations, length of the longest pectination less than half width of claw base (Fig. 68). Aedeagus with apical lamella wide, thin, linguiform (Figs. 79–80).

Distribution. Bangadesh, Bhutan, China, India, Myanmar, Nepal, Sikkim, Vietnam.

Remarks. We have not examined the type. Members of this species are readily recognized by their short pronota and purple elytra. They are very similar to *D. kulti* Jedlicka members, but differ in having purple elytra and more rounded elytral outer angles (Figs. 35–36).

Dendrocellus nigripennis Liang and Kavanaugh, new species
(Figs. 17, 46, 63, 85–86)

Types. Holotype: a male (ISNB), ''Kina Balu, Borneo''/''Collection P. Dupuis''/''Coll. R. I. Sc. N. B.''/''HOLOTYPE, *Dendrocellus nigripennis* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [red label]. Paratypes (total 2 specimens): 1 male and 1 female (ISNB), ''Bornéo''/''Collection P. Dupuis''/''Coll. R. I. Sc. N. B.''/''PARATYPE, *Dendrocellus nigripennis* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label].

Type locality. Mount Kinabalu, Pulau Kalimantan.

Diagnosis. Elytra black with very slight blue luster, intervals sparsely punctate (Fig. 46); femora with apical half black, basal half brown; tibiae and tarsi black; protarsomere 3 symmetrical in male; tarsal claws with 4–5 pectinations, length of the longest pectination nearly half width of claw base (Fig. 63); aedeagus with lamella wide, apex truncate (Figs. 85–86).

Description. Length 9.2–11.0 mm, width 2.8–3.4 mm. Black, head and pronotum with blue luster; elytra with very slight blue luster, restricted to outer intervals in many specimens; tibiae, tarsi, apical half of femora, and apical four-fifths of Ant 1 black, Ant 2, Ant 3, and basal fifth of Ant 1 dark brown; Ant 4–11 and palpi brown. Head wider than pronotum, HW/PW = 1.22 (1.21–1.23); vertex convex, coarsely punctate; labrum with medial lobe slightly protruded anteriorly; Ant 1/Ant 3 = 3.48 (3.40–3.56); genae slightly tumid; eyes large, about 2.4 times as long as genae. Pronotum coarsely punctate, PL/PW = 1.65 (1.63–1.70); lateral margins strongly sinuate before basal angles; basal angles protruded laterally; basal foveae deep. Elytra short, EL/EW = 1.66 (1.62–1.68), EW/PW = 2.41 (2.33–2.58); lateral margins slightly emarginate in the basal fourth, widened posteriad to apical third, then narrowed to apex; outer angles slightly dentate, pointed; intervals convex, sparsely punctate, punctures small, mixed with some larger ones, interspace between two adjacent punctures 1.5–2.0 times diameter of punctures (Fig. 46). Protarsomere 3 symmetrical in male and female; tarsal claws with 4–5 pectinations, length of the longest pectination subequal to the width of claw base (Fig. 63). Aedeagus with apical lamella wide, apex truncate (Figs. 85–86).

Distribution. Known only from the type locality.

Etymology. The new species is named for its black elytra.

Remarks. Initially, we assumed this to be just a black variety of *D. crassus* (Andrewes). However, the color of the femora and shape of the apex of the aedeagus (Fig. 85) are both very different from those of *D. crassus* members, so we treat this as a distinct species.

Dendrocellus queenslandicus Liang and Kavanaugh, new species
(Figs. 18, 31, 66, 91–92)

Types. Holotype: a male (ISNB), ''Queensland''/''Collection P. Dupuis''/''Coll. R. I. Sc. N. B., Australia-Queensl.''/''*Desera smaragdina* Ch., dét. P. Dupuis''/''*Desera smaragdina* Ch.''/''HOLOTYPE, *Dendrocellus queenslandicus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [red label]. Paratypes (total 4 specimens): 1 male (ISNB), ''Queensland''/''Collection P. Dupuis''/''Coll. R. I. Sc. N. B., Australia-Queensl.''/''*Desera smaragdina* Ch., dét. P. Dupuis''/''*Desera smaragdina* Ch.''/''PARATYPE, *Dendrocellus queenslandicus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 male (ISNB), ''Queensland''/''Collection P. Dupuis''/''Coll. R. I.

Sc. N. B.''/''PARATYPE, *Dendrocellus queenslandicus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 male (CMNH), ''Mainoru, ENE of Katherine, N.T., 14 Dec. 1982, A. Walford-Huggins''/''Walford-Huggins collection, Carnegie Museum Accession 35338''/''*Desera smaragdina* Chd''/*Desera smaragdina* (Chaudoir) det. R. Davidson''/''PARATYPE, *Dendrocellus queenslandicus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 male (CMNH), ''Australia QLD. 7 km. NE/Tolga, May 8, 1989, R. I Storey, at light''/''*Desera smaragdina* (Chaudoir) det. R. Davidson''/''PARATYPE, *Dendrocellus queenslandicus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label].

Type locality. Queensland, Australia.

Diagnosis. Elytra with parallel sides, intervals densely punctate; femora with apical third black, basal two-thirds brown; tibiae and tarsi yellow; protarsomere 3 asymmetrical in male; tarsal claws with 5 pectinations, length of the longest pectination subequal to half width of claw base (Fig. 66); aedeagus with apical lamella thin, digitiform, unthickened at apex (Fig. 91).

Description. Length 9.0–9.9 mm, width 2.5–2.8 mm. Black, head and pronotum with blue luster mixed with slight green luster; elytra with green luster mixed with slight blue luster; apical two thirds of Ant 1 black, basal third dark brown, Ant 2 and Ant 3 dark brown, Ant 4–11 brown; apical third of femora black, basal two-thirds brown; tibiae and tarsi yellow. Head much wider than pronotum, HW/PW = 1.34 (1.27–1.37); vertex convex, coarsely punctate; Ant 1/Ant 3 = 3.31 (3.23–3.38); labrum with medial lobe slightly protruded anteriorly; genae short, oblique; eyes large, about 2.8 times as long as genae (Fig. 31). Pronotum coarsely punctate, narrow, PL/PW = 1.64 (1.60–1.71); lateral margins slightly sinuate before basal angles; basal angles almost rectangular; basal foveae deep. Elytra long, lateral margins almost parallel, EL/EW = 2.04 (2.00–2.06), EW/PW = 2.21 (2.16–2.30); outer angles slightly dentate, pointed; intervals convex, densely punctate, interspace between two adjacent punctures narrower than diameter of punctures. Protarsomere 3 slightly asymmetrical in male; tarsal claws with 5 pectinations, length of the longest pectination subequal to half width of claw base (Fig. 66). Aedeagus with apical lamella thin, narrow, not thickened at apex (Figs. 91–92).

Distribution. Known from Queensland and Northern Territory, Australia.

Etymology. The new species is named for its type locality.

Remarks. This new species at first appears to be just a variety of *D. ternatensis* Chaudoir, based on the similarity in genitalia. However, the longer black portion of the femora and longer, parallel-sided elytra of its members are quite different from those of *D. ternatensis* members, so we treat this as a distinct species.

Dendrocellus rugicollis Chaudoir
(Figs. 7, 29, 33, 37, 57, 75–76)

Dendrocellus flavipes, Schmidt-Göbel 1846: 24 (India)

Dendrocellus rugicollis Chaudoir 1861: 546 (Nepal, India)

Types. Lectotype, designated here, a male (NMPC), ''Mus. Pragense, Coll. Helfer''/''Calcutta, Helfer''/''*flavipes* Wied. Col. Helfer''/''LECTOTYPE, *Dendrocellus rugicollis* Chaudoir, designated by H. B. Liang & D. H. Kavanaugh 2006'' [red lab]. Paralectotype: a male (NMPC), ''Mus. Pragense, Coll. Helfer''/''Calcutta''/''*flavipes* Wied. Col. Helfer''/''PARALECTOTYPE, *Dendrocellus rugicollis* Chaudoir, designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label].

Other specimens examined. Total 6 specimens: **China**: 1 male, ''Guangxi, Tianlin, Lidongshan, 1,300–1,400 m, 2002.V.28, Jianwen Liu collector''; 1 male, ''Guangxi, Tianlin, Langpin, 1,300 m, 2002.VI.1, Jianwen Liu collector''; 1 female, ''Guangxi, Tianlin, Yaojiawan, 1,200–1,400 m, 2002.VI.1, Xiujuan Yang collector''. **India**: 1 female (MNHN), ''Ex Musaeo Chaudoir''/''Museum Paris''/''*rugicollis* Chaudoir, *flavipes* Schmidt-Göbel, Indes. Bor. Or. C. Laferté''; 1 male (MNHN), ''*nepalensis* Hope''/''Ex Musaeo Chaudoir''/''Museum Paris''/''*rugicollis* Chaudoir, *flavipes* Schmidt-Göbel, Indes. Bor. Or. C. Laferté''; 1 male (MNHN), ''Sabatoa, Boucard''/''Ex Musaeo Chaudoir''/''*rugicollis* Chaudoir, *flavipes* Schmidt-Göbel, Indes. Bor. Or. C. Laferté''.

Description. Length 9.4–10.0 mm, width 2.8–3.2 mm. Black with blue and green luster (head and pronotum with blue luster only in the paralectotype specimen); palpi, tibia, basal two-thirds of Ant 1, Ant 2–11, basal six sevenths of femora yellow; apical third of Ant 1, apical seventh of femora brown or black. Head (Fig. 33) with vertex slightly convex; Ant 1/Ant 3 = 3.16 (2.93–3.31); labrum with medial lobe moderately protruded anteriorly (Fig. 29); genae short, slightly tumid; eyes large, about 2.5 times as long as genae. Pronotum cylindrical, HW/PW = 1.14 (1.11–1.19), PL/PW = 1.40 (1.34–1.48); lateral margins widened from apical angles to middle, then narrowed posteriad, sinuate before basal angles; basal angles nearly rectangular; middle line very shallow. Elytra with lateral margins slightly widened posteriad from base to apical third, then narrowed to apex (both sexes); outer angles obtuse, not pointed (Fig. 37); EL/EW = 1.83 (1.71–1.92), EW/PW = 2.20 (2.06–2.38); striae shallow; intervals densely punctate. Protarsomere 3 slightly asymmetrical in male; tarsal claw slender, with 5–6 long pectinations, length of individual pectination longer width of claw base (Fig. 57). Aedeagus stout, with apical lamella wide, linguiform (Figs. 75–76)

Variation. Apical seventh of femora and apical third of Ant 1 are paler (brown) in lectotype and paralectotype than in others (black).

Distribution. China, India, Nepal.

Remarks. Schmidt-Göbel has been recognized as the author of this species, but this is incorrect. When he described his new genus, *Dendrocellus* (Schmidt-Göbel 1846), he included *Drypta flavipes* Wiedemann in that genus and redescribed that species, based on specimens that he had misidentified. He clearly did not intend to describe a new species at that time. Chaudoir (1861: 546) recognized that Schmidt-Göbel's description of *D. flavipes* Wiedemann actually represented a distinct and new species, for which he provided the name, *Dendrocellus rugicollis*. According to Article 72.4.2 of the International Code of Zoological Nomenclature, when a new nominal species group taxon is based on a published misidentification by an earlier author, the type series consists of or includes the specimens that had been misidentified. Consequently, the specimens studied by Schmidt-Göbel constitute the type series for *D. rugicollis* Chaudoir; and we have selected one of two Schmidt-Göbel specimens in NMPC as lectotype, the other as paralectotype.

Andrewes (1921: 173 [in a footnote], and again in 1923: 8) treated the name *D. flavipes* Schmidt-Göbel as a synonym of *Dendrocellus geniculatus* (Klug). When we examined Schmidt-Göbel's specimens, we found that they possess quite long tarsal claw pectinations (Fig. 57) and an aedeagus with linguiform lamella; and this species, therefore, is clearly distinct from *D. geniculatus* (Klug).

Dendrocellus schultzei (Heller), **new combination**
(Figs. 19, 59)

Desera schultzei Heller 1923: 303 (Philippines)

Types. Lectotype, here designated, a female (SMTD), labeled: ''Luzon, Montalban, W. Schultze''/''*schultzei* Typus'' [red label]/''1920''/''Staatl. Museum für Tierkunde, Dresden''/''LECTOTYPE, *Desera schultzei* Heller, designated by H. B. Liang & D. H. Kavanaugh 2006'' [red label]. Paralectotypes (total 2 specimens): 1 female (SMTD), ''Luzon, Montalban, W. Schultze''/''*Dendrocellus schultzei* det. Heller''/''Staatl. Museum für Tierkunde, Dresden''/''PARALECTOTYPE, *Desera schultzei* Heller designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 female (SMTD), ''Luzon, Montalban, W. Schultze''/''Coll. W. Schultze, Ankauf 1942''/''Staatl. Museum für Tierkunde, Dresden''/''PARALECTOTYPE, *Desera schultzei* Heller designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label].

Other specimens examined. Total 1 specimen: 1 female (MBC), ''Bali, 8 km e. Cekik, W. Bali NP, 8°11′S, 114°30′E, 13-16.12.2000, leg. Gerstmeier'', ''*Desera schultzei* Heller, det. M. Baehr '02''.

Description. Length 10.8–11.4 mm, width 3.4–3.6 mm. Black, head and pronotum with slight blue luster; elytra with very slight green luster; apical two-thirds of Ant 1 black, basal third brown, Ant 2 and Ant 3 dark brown, Ant 4–11 brown; femora and tibiae black, tarsi dark brown. Head slightly wider than pronotum, HW/PW = 1.11 (1.08–1.13); vertex convex, coarsely punctate; Ant 1/Ant 3 = 3.63 (3.50–3.72); labrum with medial lobe slightly protruded anteriorly; genae long, distinctly tumid; eyes large, 2.5 times as long as genae. Pronotum densely punctate, wide, PL/PW = 1.47 (1.45–1.49); lateral margins gradually widened from apical angles to middle, sinuate before basal angles; basal angles protruded laterally, nearly rectangular; basal foveae shallow; middle line fine. Elytra short, EL/EW = 1.69 (1.67–1.72), EW/PW = 2.35 (2.30–2.38); lateral margins widened posteriad to apical third, then narrowed to apex; outer angles sharp, with a short tooth; intervals flat, densely punctate, interspace between two adjacent punctures narrower than diameter of punctures. Tarsal claws with 6 long pectinations, the longest pectination subequal to the width of claw base (Fig. 59).

Distribution. Philippines, Indonesia.

Remarks. Members of this species are similar to those of *D. unidentatus* (Macleay) in having long claw pectinations and a large ratio of Ant 1/Ant 3, but differ in having a shorter pronotum, nearly black elytra, and black femora. They are also similar to members of *D. gestroi* Bates, as stated by Heller (1921: 303), but differ in having a longer pronota than *D. gestroi* members. The femora and tibiae of adults of *D. schultzei* are all black, which is unique within the genus.

Dendrocellus sinicus Liang and Kavanaugh, new species
(Figs. 20, 27, 41, 60, 101–102)

Types. Holotype: a male (CAS), ''Wang Sa Shui, S. Kiangsi, S. China, 7-11-36''/''L. Gressitt Collector''/''HOLOTYPE, *Dendrocellus sinicus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [red label]/''California Academy of Sciences Type No. 18233''. Paratypes (total 6 specimens): 1 male (CAS), ''Tai Au Hong, S. Kiangsi, ''/''L. Gressitt Collector''/''L. Gressitt Collection''/''PARATYPE, *Dendrocellus sinicus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 female (CAS), ''Gang-keu, SW. Fukien, S. China''/''L. Gressitt Collector''/''L. Gressitt Collection''/''PARATYPE, *Dendrocellus sinicus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 2 females, ''Guangdong, Xinfeng, September-October 1983, Wenlian Huang collector''/''PARATYPE, *Dendrocellus sinicus* Liang & Kavanaugh n. sp.,

designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 female, ''Guangdong, Xinfeng, August 1983, Minlian Huang collector''/''PARATYPE, *Dendrocellus sinicus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label]; 1 female, ''Guangdong, Xinfeng, September 1983''/''PARATYPE, *Dendrocellus sinicus* Liang & Kavanaugh n. sp., designated by H. B. Liang & D. H. Kavanaugh 2006'' [yellow label].

Type locality. Jiangxi, China.

Diagnosis. Elytra with sharp outer angles (Fig. 41), intervals densely punctate; femora with apical third black, basal-two thirds brown; tibiae and tarsi yellow, protarsomere 3 asymmetrical in male; tarsal claws with 5–6 long pectinations, length of the longest pectination equal to width of claw base (Fig. 60).

Description. Length 10.6–11.0 mm, width 3.1–3.4 mm. Black, head and pronotum with blue luster mixed with slight green luster; elytra with green luster mixed with slight coppery luster; apical third of Ant 1 dark brown, basal two-thirds brown, Ant 2 and Ant 3 brown, Ant 4–11 yellow; apical third of femora black, basal two thirds brown; tibiae and tarsi yellow. Head wider than pronotum, HW/PW = 1.22 (1.18–1.27); vertex convex; Ant 1/Ant 3 = 3.53 (3.47–3.64); labrum (Fig. 27) coarsely punctate, with medial lobe slightly protruded anteriorly; genae long, moderately tumid; eyes large, 2.5 times as long as genae. Pronotum densely punctate, narrow, PL/PW = 1.53 (1.47–1.60); lateral margins gradually widened from apical angles to middle, sinuate before basal angles; basal angles protruded laterally, nearly rectangular; basal foveae very deep; middle line shallow. Elytra short, EL/EW = 1.75 (1.69–1.79), EW/PW = 2.19 (2.11–2.33); lateral margins widened posteriad to apical third, then narrowed to apex; outer angles strongly dentate, pointed (Fig. 41); intervals convex, densely punctate, interspace between two adjacent punctures narrower than diameter of punctures. Protarsomere 3 slightly asymmetrical in male; tarsal claw with 6–7 pectinations, the longest pectination subequal to the width of claw base (Fig. 60). Aedeagus with apical lamella short, round at apex (Figs. 101–102).

Variation. The pronotum in the holotype is shorter (PL/PW = 1.47), and lateral margins are more rounded than in the paratypes (PL/PW = 1.52–1.60).

Distribution. Presently known from three provinces of China: Jiangxi, Fujian, and Guangdong.

Etymology. This new species is named for China, the country of its type locality.

Remarks. Members of this new species are similar to those of *D. unidentatus* (Macleay). However, the lateral margins of the pronota are more rounded before the middle (Fig. 20), the femora have a longer black portion, the tibiae are yellow, and the genae are more rounded than in *D. unidentatus* members. They are similar also to *D. schultzei* (Heller) members in shape of the pronotum and elytral outer angles, but differ from the latter in having green and coppery elytra and their tibiae and bases of femora all pale yellow (all black in *D. schultzei*).

Dendrocellus smaragdinus Chaudoir
(Fig. 21)

Dendrocellus smaragdinus Chaudoir 1861: 545 (Melbourne, Australia)

Specimens examined. Australia: 1 female (holotype, MNHN), ''Ex Musaeo, Chaudoir''/''Museum Paris''/''*smaragdinus* Chaud., Australie, Melbourne, Stevens''/''HOLOTYPE *Dendrocellus smaragdinus* Chaudoir labeled by H.B. Liang & D.H. Kavanaugh 2006'' [red label].

Description. Length 10.0 mm, width 3.0 mm. Black with green luster, apical half of Ant 1 and basal two-thirds of Ant 3 black, basal half of Ant 1, apical third of Ant 3, and Ant 4–11 brown; mandibles and palpi brown; apical sixth of femora black, basal two-thirds of femora brown; tibiae and tarsi nearly black (especially hind ones). Head with vertex convex, densely punctate; Ant 1/Ant 3 = 3.60; labrum with medial lobe slightly protruded anteriorly; genae distinctly tumid; eyes large, 2.5 times as long as genae. Pronotum densely punctate, PL/PW = 1.46, HW/PW = 1.14, widest slightly before the middle; apical angles round, lateral margins slightly widened from apical angles to widest point, gradually narrowed behind, then strongly sinuate to basal angles; basal angles obtuse, pointed laterally; lateral furrow indistinct; basal foveae shallow; middle line fine. Elytra long, lateral margins slightly widened to apical third, then narrowed to apex; EL/EW = 1.87, EW/PW = 2.35 (2.28–2.50); intervals nearly flat, densely punctate; outer angles slightly dentate. Tarsal claws with 5 long pectinations, length of individual pectination subequal to width of claw base.

Distribution. Australia.

Remarks. The type locality is questionable. Moore *et al.* (1987: 311) stated the following: ''…Melbourne, Vic., this locality seems to be an error as the species distribution is limited to northern Qld.''. The actual distribution of *D. smaragdinus* needs further clarification.

The description of *D. smaragdinus* was based on a single female specimen. It may be simply a dark variation of *D. geniculatus* (Klug), with blackish tibia and tarsi. Comparison of male genitalia is required to resolve the status of this nominal species. Since its original description, *D. smaragdinus* has been compared only by Sloane (1907: 473, based on his specimen, not the type) and only with his *D. elegans*. However, we have found that many of Sloane's comparisons were inaccurate. For example, he claimed that *D. elegans* members have (1) pronota with lateral margins more deeply sinuate posteriorly and more strongly reflexed laterally toward the base, and (2) elytra wider, more ampliate, and more declivous basally than *D. smaragdinus* members. This is incorrect, and we suspect that his comparison was based on a *D. queenslandicus* specimen rather than one of *D. smaragdinus*.

Dendrocellus ternatensis Chaudoir
(Figs. 22, 32, 93–94)

Dendrocellus ternatensis Chaudoir 1872: 102 (Ternate, Indonesia)

Type. Lectotype, here designated, a female (MHNP), labeled ''Ex Musaeo, Chaudoir''/''Paris Museum''/''*ternatensis* Chaud. Ternate, Deyrolle''/''LECTOTYPE, *Dendrocellus ternatensis* Chaudoir, designated by H. B. Liang & D. H. Kavanaugh 2006'' [red label].

Other specimens examined. Total 10 specimens: **Indonesia**: 1 female (holotype, MNHN), ''Ex Musaeo, Chaudoir''/''Paris Museum''/''*ternatensis* Chaud. Ternate, Deyrolle''; 1 male, (ZMHU), ''Batchian, Schaum'' [Bacan, Indonesia]/''41699''/''No. 95, examined by Prof. Thaxter for Laboulbeniaceae''/''*tenatensis*''; 2 females (CAS), ''Tondano, N. Celebis, VI-1-32''/''Van Braekel Collector''/F. C. Hadden Collection''; 1 male and 1 female (CAS), ''Indonesia, Moluccas, Ambon Island, 70 m, 21.V.1960, A.M.R. Wegner, Coll. at light''; 1 male (CAS), ''Indonesia, Moluccas, Ambon Island, 70 m, 18.VI.1960, A.M.R. Wegner, Coll. at light''; 1 female (CAS), ''Indonesia, Moluccas, Ambon Island, 70 m, 13.V.1960, A.M.R. Wegner, Calif. Academy of Scc. 1972''; 1 female (CAS), ''Indonesia, Moluccas, Ambon Island, 70 m, 6.V.1961, A.M.R. Wegner, Coll. at

light''; 1 male (CAS), ''Indonesia, Moluccas, Ambon Island, 70 m, 17.I.1962, A.M.R. Wegner, Coll. at light''; 1 male (CMNH), ''Indonesia, Sulawesi Utara, Dumoga-Song N. P., 23 Aug. 1985, Coll. Chen Young''/''Base Camo 211 m, Project Wallace''.

Description. Length 8.6–10.3 mm, width 2.7–3.2 mm. Black with green luster, apical third of Ant 1 and basal two-thirds of Ant 3 black or dark brown, basal third of Ant 1, apical third of Ant 3, and Ant 4–11 brown; mandibles and palpi brown; apical fourth of femora black, basal three fourths yellow; tibiae and tarsi yellow. Head (Fig. 32) with vertex convex, densely punctate; Ant 1/Ant 3 = 3.60 (3.46–3.86); labrum with medial lobe slightly protruded anteriorly; genae short, slightly tumid; eyes large, 2.9 times as long as genae. Pronotum densely punctate, PL/PW = 1.52 (1.48–1.59), HW/PW = 1.21 (1.13–1.28), widest slightly before the middle; apical angles round, lateral margins slightly widened from apical angles to widest point, gently narrowed behind, then strongly sinuate to basal angles; basal angles obtuse, pointed laterally; lateral furrow indistinct; basal foveae shallow; middle line fine. Elytra long, lateral margins slightly widened to apical third, then narrowed to apex; EL/EW = 1.79 (1.73–1.91), EW/PW = 2.33 (2.23–2.40); intervals nearly flat, densely punctate; outer angles slightly dentate, pointed. Protarsomere 3 slightly asymmetrical in male; tarsal claw with 5 long pectinations, length of individual pectination subequal to width of claw base. Aedeagus with apical lamella thin, slightly digitiform, not thickened at apex (Figs. 93–94).

Distribution. Indonesia (Ambon, N. Sulawesi, Ternate).

Remarks. This species was described based on a single female specimen. Specimens from Ambon, northern Sulawesi, and Batchian are similar to the type from Ternate, based on color of femora (apical fourth black) and ratio of Ant 1/Ant 3 (3.46–3.86), but slightly smaller (length 8.2–9.5 mm) than the type (length 10.3 mm). The apical black portions of the femora in the specimen from Sulawesi are slightly shorter than in other specimens of this species, nearly as in specimens of *D. javanaus* in this regard, but different from the latter in having oblique, only slightly tumid genae (genae less oblique and moderately tumid in *D. javanus* specimens).

Dendrocellus unidentatus (Macleay)
(Figs. 23, 43, 97–98)

Drypta unidentata Macleay 1825: 28 (Java)

Desera unidentata (Macleay 1825), Andrewes 1919: 167

Dendrocellus unidentata Macleay, Chaudoir 1861: 545

Specimens examined. Total 33 specimens: **India**: 1 male (ISNB), ''Andaman''/''Collect Bates''/''Andaman'', Collection E. Rousseau''/''Coll. R. Sc. N. B. Andaman Islands''; 1 female (ISNB), ''Khasi Hieej''/''Collection P. Dupuis''/''*Desera longicollis* Dej, P. Dupuis det. 1913''/''Coll. R. I. Sc. N. B. Inde''; 1 male (ISNB), ''Inde''/''Collection P. Dupuis''/''*Desera longicollis* Dej, P. Dupuis det.''/''Coll. R. I. Sc. N. B. Inde''; 2 males (ISNB), ''Khasia Hills, Assam''/''R. I. Sc. N. B. I.G. 21.042''/''Coll. R. I. Sc. N. B. inde''. **Indonesia**: 1 male (ISNB), ''*Dendrocellus longicollis* Schmidt G., Sumatra, ex coll. Bonneull''/''Coll. R. I. Sc. N. B. Sumatra''; 1 male and 1 female (ISNB), ''Java, Seokaboemi''/''R. I. Sc. N. B. 19.458, Coll. Le Moult''/''Coll. R. I. Sc. N. B. Java''; 1 male and 2 females (ISNB), ''Java, Seokaboemi''/''R. I. Sc. N. B. 12.595, Coll. Le Moult''/''Coll. R. I. Sc. N. B. Java''. **Myanmar**: 1 female (ISNB), ''Matupi, Neu-Britannien''/''R. I. Sc. Nat. Belg. I.G. 16.500''/''Coll. R. I. Sc. N. B. Birmanie ? 26°36′N-93°27′E''; 1

male (MCSN), ''Tenasserim, Thagata Fea, Apr. 1887''/''*Dendrocellus longicollis* Dej.''/''det. H. Bates''/''Museo Civico di Genova''; 1 female (MCSN), ''Carin Cheba, 900–1,100 m, L. Fea V.88''/''*Dendrocellus longicollis* Dej. det. H. Bates 1892''/''Museo Civico di Genova''. **Pakistan:** 1 male (CAS), ''E. Pakistan, Ichamati, 28 mi E. Chittagong, IX-14-61, 50 ft''/''Collectors E. S. Ross, D. Q. Cavagnaro''. **Thailand**: 1 male and 2 females (ISNB), ''Coll. I. R. Sc. N. B., Thailande (Loei) Na haeo (bio station), 05-12.V.2001, Light trap, leg. Constant & Grootaert''. See Liang *et al.* (2004) for other 15 specimens, including the holotype.

Description. Labrum with medial lobe slightly protruded anteriorly; genae long, distinctly tumid; eyes large, about 2.3 times as long as genae; lateral margins of pronotum nearly parallel before middle (Fig. 23); outer apical angles of elytra strongly dentate, pointed (Fig. 43); protarsomere 3 slightly asymmetrical in male; aedeagus with apical lamella short, round at apex (Figs. 97–98). For a more comprehensive description, see Liang *et al.* (2004: 381) and Andrewes (1919: 167).

Distribution. China, India, Indonesia (Java, Sumatra), Malaysia, Myanmar, Pakistan, Thailand, Vietnam.

Dendrocellus viridipennis (Hope), **new combination**
(Figs. 24, 51, 54, 103–104)

Desera viridipennis Hope 1842: 91 (Sierra Leone)

Drypta bocandei LaFerté-Senectère 1849: 348 (Senegal), Liebke 1928: 98

Dendrocellus bocandei LaFerté-Senectère, Chaudoir 1850: 35

Desera pectoralis Murray 1857: 157 (Angola), Basilewsky 1960: 179

Specimens examined. Total 32 specimens: **Cameroon**: 1 male (CMNH), ''Efullen, Kameron, H. L. Weber, M. C. Acc. 4,265''/''April 2, 1909''/''*D. viridipennis* Hope, det. R. Davidson''; 1 female (CMNH), ''Efullen, Kameron, H. L. Weber, M. C. Acc. 4,265''/''April 18, 1910''/''*D. viridipennis* Hope, det. R. Davidson''; 1 male (CAS), ''Joko, Kameron''/''From O. Bryant Coll.''/''*Desera* sp. 3, det. D. H. Kavanaugh, 1991''; 1 male and 4 females (CMNH), ''Lolodorf, Kamerun, J. A. Reis, Acc. 5,628''/''May 12 1914''/''*D. viridipennis* Hope, det. R. Davidson''; 1 male (CMNH), ''Lolodorf, Kamerun''/''Sept. 1913''/''Good Coll., acc. 5,263''/''*D. viridipennis* Hope, det. R. Davidson''; 3 males (CMNH), ''Lolodorf, Kamerun''/''June 2, 1914''/''Good Coll., acc. 5,263''/''*D. viridipennis* Hope, det. R. Davidson''; 1 male (CMNH), ''Lolodorf, Kamerun''/''June 6, 1914''/''Good Coll., acc. 5,263''/''*D. viridipennis* Hope, det. R. Davidson''; 1 female (CMNH), ''Lolodorf, Kamerun''/''June 1914''/''Good Coll., acc. 5,263''/''*D. viridipennis* Hope, det. R. Davidson''. **Congo**: 2 females (ISNB), ''Congo Belge, P. N. G. Miss. H. de Saeger II/fd/17, 9-VI-1951, rec. H. de Saeger 1888''/''P. Basilewsky det. 1959, *Desera viridipennis* Hope''; 1 female (ISNB), ''Belg. Kongostaat, Coll. Plason''/''Coll. R. I. Sc. N. B. Congo belge''; 1 male (ISNB), ''Congo Belge, P. N. G. Miss. H. de Saeger II/hd/8, 30-V-1951, Réc. H. de Saeger 1826''/''P. Basilewsky det. 1959, *Desera viridipennis* Hope''; 1 female (ISNB), ''Congo Belge, P. N. G. Miss. H. de Saeger II/gd/14, 6-VI-1951, Réc. H. de Saeger 1876''; 1 male (ISNB), ''Congo Belge, P. N. G. Miss. H. de Saeger, r. Buluka (Soudan), 21-V-1952, J. Verschuren, 3,540''/''P. Basilewsky det. 1959, *Desera viridipennis* Hope''; 2 females (ISNB), ''Congo Belge, P. N. G. Miss. H. de Saeger, II/hc/8, 5-VI-1951, Rec. H. de Saeger, 1869''/''P. Basilewsky det. 1959, *Desera viridipennis* Hope''; 1 female (ISNB), ''Congo- belge: Kwango, Ngowa-XI-1937, R. P. J. Mertens'', R. Mus. Hist. Nat. Belg. I. G. 11.648''/''*Desera bocandei* Laf. P. Basilewsky det. 1948''. **Gabon**: 1 male (ISNB), ''Gabon''/''Soc. Ent. Belg. Coll.

Putzeys''/''Coll. R. I. Sc. N. B. Gabon''; 1 female (ISNB), ''Gabon''/''Coll. Ogier de Baulny''/''6,179''/''Coll. R. I. Sc. B. B. Gabon''; 1 male (CMNH), ''Kangve, Ogove R., A. C. Good''/Holland Collection''/''*D. viridipennis* Hope, det. R. Davidson''; 1 female (CMNH), ''Ogove R., A. C. Good''/Holland Collection''/''*D. viridipennis* Hope, det. R. Davidson''. **Gambia**: 1 female (ISNB), ''Gambie''/''Gambie''/''coll. Bates''/''*Bocandei* Laf.''/''*Desera Bocandei* Laf. L. Burgeon 1935''/''Coll R. I. Sc. N. B. Gambie''; 1 female (ISNB), ''Gambie''/''Gambie''/''Coll. R. I. Sc. N. B. Gambie''. **Senegal**: 1 male (ISNB), ''Gallon''/''Gallon''/''Collect Bates''/''Collection E. Rousseau''/''*Bocandei* Laf. Sénégal''; 1 male (ISNB), ''Sénégal''/''*Drypta cyanea* Cast.''/''Collection P. Dupuis''/''*Dryta cyanea* Cast. det. P. Dupuis, 1913''/''*Desera Bocandei* Laf.''/''*Desera Bocandei* Laf. L. Burgeon''/''Coll. R. I. Sc. N. B. Sénégal''. **Tanzania**: 1 male (ISNB), ''Tanganika D. O. A.''/''Collection P. Dupuis''/''Coll. R. I. Sc. N. B. Congo belge''.

Description. Length 11.6–12.8 mm, width 3.4–3.8 mm. Black with green and blue luster; apical third of Ant 1 black, basal two-thirds red or brown; femora brown with apical fifth or sixth black; tibiae brown; scutellum, and meso- and metasternum brown, prosternum and metepisterna also brown in some specimens. Head wider than pronotum, HW/PW = 1.19 (1.15–1.23); Ant 1/Ant3 = 3.94 (3.69–4.08); medial lobe of labrum slightly protruded anteriorly; genae very long, slightly tumid; eyes large, about 2.3 times as long as genae. Pronotum narrow, widest slightly before the middle; PL/PW = 1.52 (1.47–1.55); lateral margins slightly widened from apical angles to widest point, gently narrowed behind, then slightly sinuate to basal angles; basal angles obtuse, pointed laterally; lateral furrow indistinct; basal foveae shallow; middle line fine. Elytra with lateral margins slightly widened to apical fourth, then narrowed to apex; outer angles acute, very slightly dentate; EL/EW = 1.85 (1.70–1.94), EW/PW = 2.33 (2.24–2.36); intervals flat, densely punctate. Protarsomere 3 strongly asymmetrical in male (Fig. 51); tarsal claws with 5–6 long pectinations, length of the longest pectination subequal to width of claw base (similar to Fig. 65). Aedeagus stout, with apical lamella narrow, digitiform, thickened at apex (Figs. 103–104).

Distribution. Angola, Cameroon, Congo, Gabon, Gambia, Senegal, Sierra Leone, Tanzania.

Remarks. We have not examined the types and have simply followed Basilewsky's (1960) interpretation of the names and synonymies. All members of this species have brown meso- and metasterna and some also have the prosternum brown. In these and other features, they are very similar to another African species, *D. australis*; but they differ from the latter in having blue pronota, longer ratio of Ant 1/Ant 3, and brown tibiae.

Drypta dimidiata Putzeys

Drypta dimidiata Putzeys 1880: 191 (Sumatra)
Desera dimidiata (Putzeys 1880), Lorenz 1998: 477

Distribution. Sumatra.

Remark. Lorenz (1998: 477; 2005: 503) moved *Drypta dimidiata* Putzeys into genus *Desera*. Dr. Rienk de Jong in Leiden Museum (Netherlands) kindly helped us examine the type specimen. It does not possess any trace of pectination in the inner side of tarsal claw, and therefore is a true member of *Drypta* as originally described.

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