

On the genus *Carpophilus* (Coleoptera: Nitidulidae: Carpophilinae) with two newly recorded species from China

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Abstract: Two species of the genus *Carpophilus* are newly recorded from China: *Carpophilus* (s. str.) *jelineki* Audisio & Kirejtshuk, 1988 and *Carpophilus* (s. str.) *subcalvus* Kirejtshuk, 1984. Differences compared with *Carpophilus* (s. str.) *hemipterus* Linnaeus, 1758 and *Carpophilus* (s. str.) *delkeskampii* Hisamatsu, 1963 which are closely related to *C.* (s. str.) *jelineki* are described and photographed. A checklist and key to all species of *Carpophilus* in China are provided.

Key words: sap beetles; morphology; distribution; taxonomy

谷露尾甲属分类并记二中国新记录种（鞘翅目：露尾甲科：谷露尾甲亚科）

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摘要: 报道中国谷露尾甲亚科谷露尾甲属 2 新记录种：耶氏谷尾甲 *Carpophilus* (s. str.) *jelineki* Audisio & Kirejtshuk, 1988 和纵斑谷露尾甲 *Carpophilus* (s. str.) *subcalvus* Kirejtshuk, 1984。同时比较了 *C.* (s. str.) *jelineki* 与其近缘种酱曲谷露尾甲 *Carpophilus* (s. str.) *hemipterus*, Linnaeus, 1758 和细胫谷露尾甲 *Carpophilus* (s. str.) *delkeskampii* Hisamatsu, 1963 的异同并提供相应特征图。本文还提供了谷露尾甲属 *Carpophilus* 中国已知种名录和检索表。

关键词: 露尾甲；形态学；分布；分类

Introduction

The genus *Carpophilus* Stephens, 1829 is the largest genus in the subfamily Carpophilinae and includes 9 subgenera with approximately 190 species in the world (Stephens 1829; Motschulsky 1858; Murray 1864; Reitter 1873; Horn 1879; Fall 1910; Grouvelle 1913; Reitter 1919; Dobson 1954; Ernesto 1987; Kirejtshuk 1997, 2008; Andrew & Paul 2013). Most species in this genus are distributed in tropical and subtropical regions, visiting flowers and exhibiting scavenging feeding habits (Kirejtshuk 1997, 1999). Some species may be found in distiller's yeast and dried-fruit (Dobson 1954; Phelan & Lin 1991) causing losses in quantity and quality of agricultural products.

According to the literature, only 17 species belonging to 5 subgenera in the genus

Carpophilus have been previously recorded from China. Here we add two species belonging to the subgenus *Carpophilus* and collected from rotten fruit in Yunnan Province. Both are reported for the first time from China.

Material and methods

Materials studied are deposited in the collection of the Entomological Museum in the College of Plant Protection in Northwest A&F University (NWAUFU), Yangling, China.

For dissection of males, individual specimens were completely relaxed for 24h in a chamber exposed to warm water. Desired genitalia structures were placed in a 10% NaOH/water mixture to eliminate muscle tissue for 24h. The respective bodies were then mounted to the original point using white emulsion glue on a paper triangle. Dorsal and ventral habitus images were made by using a Leica M205A microscope with a Leica DFC Camera. Images were produced using the software version LAS (Leica Application Suite) V3.7.

Morphological terminology used in this study follows Kirejtshuk (Kirejtshuk 2018).

Taxonomy

Carpophilus Stephens, 1829

Carpophilus Stephens, 1829: 81; 1830: 30; Erichson, 1843: 254; Motschulsky, 1858: 42; Murray, 1864: 341; Horn, 1879: 275; Sharp, 1889: 286; Grouvelle, 1913: 81; Parsons, 1943: 161; Dobson, 1954: 45; Kirejtshuk, 1992: 158.

Type species. *Dermestes hemipterus* Linnaeus, 1758.

Distribution. Oriental; Palearctic; Australian Regions.

Checklist of the genus *Carpophilus* from China

Carpophilus (*Carpophilus*) Stephens, 1829

Carpophilus (*Carpophilus*) Stephens, 1829: 81; Kirejtshuk, 1992: 114; Kirejtshuk, 1995: 3.

Type species. *Dermestes hemipterus* Linnaeus, 1758.

Carpophilus (*Tribrachys*) LeConte, 1861: 83.

Type species. *Carpophilus caudalis* LeConte, 1859 (= *Carpophilus discoideus* LeConte, 1858).

1. *Carpophilus* (*Carpophilus*) *chalybeus* Murray, 1864

Carpophilus (*Carpophilus*) *chalybeus* Murray, 1864: 369; Kirejtshuk, 1992: 114.

Carpophilus (*Carpophilus*) *canus* Murray, 1864: 369.

Heterhelus heterostomoides Reitter, 1877: 371.

Carpophilus punctatissimus Reitter, 1877: 372.

Distribution. China (Beijing, Taiwan); Russia; Japan; North Korea; Nepal.

2. *Carpophilus* (*Carpophilus*) *delkeskampi* Hisamatsu, 1963

Carpophilus (*Carpophilus*) *delkeskampi* Hisamatsu, 1963: 60.

Distribution. China (Heilongjiang, Hebei, Jiangxi, Fujian, Taiwan, Guangdong, Hainan, Guangxi, Guizhou, Yunnan, Tibet); Russia; Japan; India; Korea.

3. *Carpophilus (Carpophilus) flavipes* Murray, 1864
Carpophilus (Carpophilus) flavipes Murray, 1864: 359.
 Distribution. China (Shaanxi, Shanghai); Singapore.
4. *Carpophilus (Carpophilus) hemipterus* (Linnaeus, 1758)
Dermestes hemipterus Linnaeus, 1758: 358.
Silpha bimaculata Linnaeus, 1767: 569, non *Carpophilus bimaculatus* Melsheimer, 1844: 105.
Nitidula flexuosa Herbst, 1790: 246.
Nitidula quadriguttata Thunberg, 1794: 70.
Nitidula quadrata Fabricius, 1798: 74.
Nitidula cadaverina Fabricius, 1801a: 354.
Stenus ficus Fabricius, 1801b: 603.
Cateretes dimidiatus Heer, 1841: 413, non *Carpophilus dimidiatus* (Fabricius, 1792): 261.
Cateretes pictus Heer, 1841: 413, non *Carpophilus pictus* Jelínek, 1986: 456.
Carpophilus brevipennis Germain, 1856: 397.
Carpophilus aterrimus MacLeay, 1871: 161.
Carpophilus circumdatus Ragusa, 1892: 187.
Carpophilus (Carpophilus) hemipterus: Stephens, 1830: 50, non *Carpophilus hemipterus* Lewis, 1879: 460.
 Distribution. China (Jiangxi, Hubei, Jiangsu, Hunan, Fujian, Guangdong, Guangxi, Taiwan, Sichuan, Yunnan); Azerbaijan; Albania; Austria; Azores; Belgium; Bosnia Herzegovina; Belarus; Croatia; Czech Republic; Denmark; Finland; France; Hungary; Iceland; Ireland; Italy; Latvia; Malta; Moldavia; The Netherlands; Poland; Portugal; Slovakia; Spain; Sweden; Switzerland; Canary Islands; Libya; Madeira Archipelago; Tunisia; Iran; Iraq; Israel; Japan; Jordan; Lebanon; Saudi Arabia; Turkmenistan; Turkey.
5. *Carpophilus (Carpophilus) indicus* Hisamatsu, 1963
Carpophilus (Carpophilus) indicus Hisamatsu, 1963: 61.
 Distribution. China (Taiwan); Iran; Iraq; Jordan; Kuwait; Pakistan; Saudi Arabia.
6. *Carpophilus (Carpophilus) jelineki* Audisio & Kirejtshuk, 1988, rec. nov.
Carpophilus (Carpophilus) jelineki Audisio & Kirejtshuk, 1988: 791.
Carpophilus (Carpophilus) pictus Jelínek, 1986: 456.
 Distribution. China (Shaanxi, Zhejiang, Yunnan); Saudi Arabia; Iran; India; Sri Lanka.
7. *Carpophilus (Carpophilus) obsoletus* Erichson, 1843
Carpophilus (Carpophilus) obsoletus Erichson, 1843: 259.
Carpophilus (Carpophilus) cribellatus Motschulsky, 1858: 41.
Carpophilus (Carpophilus) immaculatus Lucas, 1846: 217.
Carpophilus (Carpophilus) sericeus Motschulsky, 1858: 41.
Carpophilus (Carpophilus) strigipennis Motschulsky, 1858: 41.
 Distribution. China (Hebei, Henan, Shaanxi, Jiangxi, Hubei, Jiangsu, Zhejiang, Hunan, Fujian, Taiwan, Guangdong, Hong Kong, Guangxi, Sichuan, Yunnan); Croatia; Greece; Italy; Malta; Portugal; Spain; Algeria; Egypt; Morocco; Tunisia; United Arab Emirates; Cyprus; Iran; Iraq; Israel; Japan; Lebanon; Saudi Arabia; India; Sikkim; Syria; Turkey.

8. *Carpophilus (Carpophilus) subcalvus* Kirejtshuk, 1984, rec. nov.*Carpophilus (Stauroglossicus) subcalvus* Kirejtshuk, 1984: 520.*Carpophilus (Carpophilus) subcalvus*: Kirejtshuk, 1992: 163.

Distribution. China (Yunnan); Russia.

Carpophilus (Ecnomorphus) Motschulsky, 1858*Carpophilus (Ecnomorphus)* Motschulsky, 1858: 42.Type species: *Nitidula sexpustulata* Fabricius, 1791.*Carpophilus (Eidocolastus)* Murray, 1864: 399.Type species: *Colastus plagiaticipennis* Motschulsky, 1858.*Carpophilus (Stauroglossicus)* Murray, 1864: 398.Type species: *Stauroglossicus terminalis* Murray, 1864.*Carpophilus (Microxanthus)* Murray, 1864: 341.Type species. *Carpophilus tempestivus* Erichson, 1843.

Distribution. China; Russia; Japan; North Korea; South Korea.

9. *Carpophilus (Ecnomorphus) acutangulus* Reitter, 1884*Carpophilus (Ecnomorphus) acutangulus* Reitter, 1884: 258.*Carpophilus (Ecnomorphus) cingulatus* Reitter, 1884: 258.

Distribution. China (Taiwan); Russia; Japan; North Korea; South Korea.

10. *Carpophilus (Ecnomorphus) sexpustulatus* (Fabricius, 1792)*Nitidula sexpustulata* Fabricius, 1792: 260.*Lyctus abbreviatus* Panzer, 1794: 21.*Carpophilus quadrimaculatus* Ragusa, 1892: 187.*Carpophilus sexpustulatus*: Erichson, 1843: 263.*Carpophilus (Ecnomorphus) sexpustulatus*: Motschulsky, 1858: 42.

Distribution. China (Henan); Austria; Belgium; Bosnia and Herzegovina; Bulgaria; Croatia; the Czech Republic; France; Britain; Germany; United States; Georgia; Greece; Hungary; Italy; The Netherlands; Poland; Portugal; Romania; Slovakia; Slovenia; Spain; Switzerland; Ukraine; Algeria; Morocco; Tunisia; Lebanon; Syria; Turkey.

Carpophilus (Megacarpolus) Reitter, 1919*Carpophilus (Megacarpolus)* Reitter, 1919: 56.Type species. *Carpophilus grandis* Motschulsky, 1860.

Distribution. China; Russia; Japan.

11. *Carpophilus (Megacarpolus) funereus* Murray, 1864*Carpophilus (Carpophilus) funereus* Murray, 1864: 358.*Carpophilus (Megacarpolus) funereus*: Kirejtshuk, 2018: 1191.

Distribution. China (Taiwan); Japan; India.

12. *Carpophilus (Megacarpolus) triton* Murray, 1864*Carpophilus (Carpophilus) triton* Murray, 1864: 357.*Carpophilus titanus* Reitter, 1884: 259.*Carpophilus (Megacarpolus) triton*: Kirejtshuk, 2005: 51.

Distribution. China (Taiwan); Russia; Japan.

Carpophilus (Myothorax) Murray, 1864

Carpophilus (Myothorax) Murray, 1864: 372.

Type species. *Carpophilus mutilatus* Erichson, 1843.

Distribution. China; Albania; Azores; Austria; Croatia; Czech Republic; Germany; Greece; Italy; Malta; The Netherlands; France; Portugal; Spain; Poland; Slovakia; Slovenia; Canary Islands; Egypt; Morocco.

13. *Carpophilus (Myothorax) dimidiatus* (Fabricius, 1792)

Nitidula dimidiata Fabricius, 1792: 261.

Carpophilus pusillus Stephens, 1830: 51.

Carpophilus auropilosus Wollaston, 1854: 117.

Carpophilus (Myothorax) dimidiatus Murray, 1864: 379.

Distribution. China (Hebei, Shanxi, Shandong, Henan, Gansu, Jiangxi, Anhui, Hubei, Jiangsu, Fujian, Guangdong, Sichuan, Yunnan); Azores; Greece; Italy; The Netherlands; Canary Islands; Egypt; Arab Emirates; Cyprus; Iraq; Japan; Jordan; Syria; Turkey.

14. *Carpophilus (Myothorax) maculatus* Murray, 1864

Carpophilus (Myothorax) maculatus Murray, 1864: 372.

Carpophilus (Myothorax) vittiger Murray, 1864: 373.

Distribution. China (Henan, Hubei, Guangxi); Japan.

15. *Carpophilus (Myothorax) mutilatus* Erichson, 1843

Carpophilus (Carpophilus) mutilatus Erichson, 1843: 258.

Carpophilus (Myothorax) mutilatus Murray, 1864: 378.

Carpophilus (Myothorax) luridus Murray, 1864: 377.

Carpophilus pilosellus Motschulsky, 1858: 41.

Distribution. China (Taiwan); Albania; Azores; France; Greece; Italy; Malta; The Netherlands; Portugal; Spain; Canary Islands; Tenerife; Egypt; Morocco; Afghanistan; Cyprus; Iran; Israel; Japan; Jordan; Lebanon; Saudi Arabia; Syria; Turkey.

16. *Carpophilus (Myothorax) schioedtei* Murray, 1864

Carpophilus (Myothorax) schioedtei Murray, 1864: 381.

Distribution. China (Taiwan).

17. *Carpophilus (Myothorax) truncatus* Murray, 1864.

Carpophilus (Myothorax) truncatus Murray, 1864: 381.

Carpophilus floridanus Fall, 1910: 122.

Carpophilus halli Dobson, 1954: 299.

Distribution. China (Jilin, Liaoning, Neimenggu, Hebei, Shanxi, Shandong, Henan, Gansu, Fujian, Taiwan, Guangdong, Hainan, Guangxi, Guizhou, Yunnan); Austria; Croatia; Czech Republic; France; Germany; Greece; Italy; Poland; Slovakia; Slovenia; Egypt; Morocco; Japan.

Carpophilus (Semocarpolus) Kirejtshuk, 2008

Carpophilus (Semocarpolus) Kirejtshuk, 2008: 113.

Type species. *Carpophilus marginellus* Motschulsky, 1858.

Distribution. China; Azores; Austria; Germany; Greece; Italy; France; Portugal; Spain; Poland; Russia; North Korea; South Korea.

18. *Carpophilus (Semocarpolus) marginellus* Motschulsky, 1858*Carpophilus (Carpophilus) marginellus* Motschulsky, 1858: 40.*Carpophilus nitens* Fall, 1910: 125.*Carpophilus (Semocarpolus) marginellus*: Kirejtshuk, 2008: 113.

Distribution. China (Neimenggu, Shandong, Jiangxi, Zhejiang, Hubei, Fujian, Taiwan, Guangxi, Sichuan, Yunnan); Austria; Azores; Belgium; Bulgaria; Belarus; Croatia; Czech Republic; Denmark; Finland; Italy; The Netherlands; Norway; Slovakia; Spain; Sweden; Caucasus; Canary Islands; Japan; Nepal; India; Korea.

19. *Carpophilus (Semocarpolus) succisus* Erichson, 1843*Carpophilus (Carpophilus) succisus* Erichson, 1843: 259.*Carpophilus (Semocarpolus) succisus*: Kirejtshuk, 2008: 113.

Distribution. China (Sichuan); Azore Islands.

Key to species of *Carpophilus* from China

- | | |
|---|----------------------------|
| 1. Body flattened | 2 |
| - Body convex | 3 |
| 2. Length of elytra shorter than combined width of elytra | <i>C. acutangulus</i> |
| - Length of elytra longer than combined width of elytra | <i>C. sexpustulatus</i> |
| 3. Pronotum squarish | 4 |
| - Pronotum subrectangular | 8 |
| 4. Elytra with spots | 5 |
| - Elytra without spots | 6 |
| 5. Elytra with spots near suture | <i>C. maculatus</i> |
| - Elytra with spots not near suture | <i>C. dimidiatus</i> |
| 6. Lateral sides of pronotum paler than discal portion | <i>C. schioedtei</i> |
| - Lateral sides of pronotum and discal portion of uniform color | 7 |
| 7. Pronotum and elytra without uniform color | <i>C. mutilatus</i> |
| - Pronotum and elytra with uniform color | <i>C. truncatus</i> |
| 8. Abdominal segment 6 with a spiracle | 9 |
| - Abdominal segment 6 without a spiracle | 10 |
| 9. Scutellum subpentagonal | <i>C. funereus</i> |
| - Scutellum subcircular | <i>C. triton</i> |
| 10. Metaventricle with larger axillary area | 11 |
| - Metaventricle with smaller or lacking axillary area | 12 |
| 11. Elytra with spots | <i>C. succisus</i> |
| - Elytra without spots | <i>C. marginellus</i> |
| 12. Elytra with spots | 13 |
| - Elytra without spots | <i>C. chalybeus</i> |
| 13. Spots on humerus and apex | 14 |
| - Spots just on humerus | 17 |
| 14. Mesoventricle with separated carinae | <i>C. indicus</i> |
| - Mesoventricle with adjacent carinae | 15 |
| 15. Metaventricle with mediolongitudinal impression | <i>C. jelineki</i> n. rec. |
| - Mesoventricle without mediolongitudinal impression | 16 |
| 16. Metatibiae subparallel | <i>C. delkeskampii</i> |

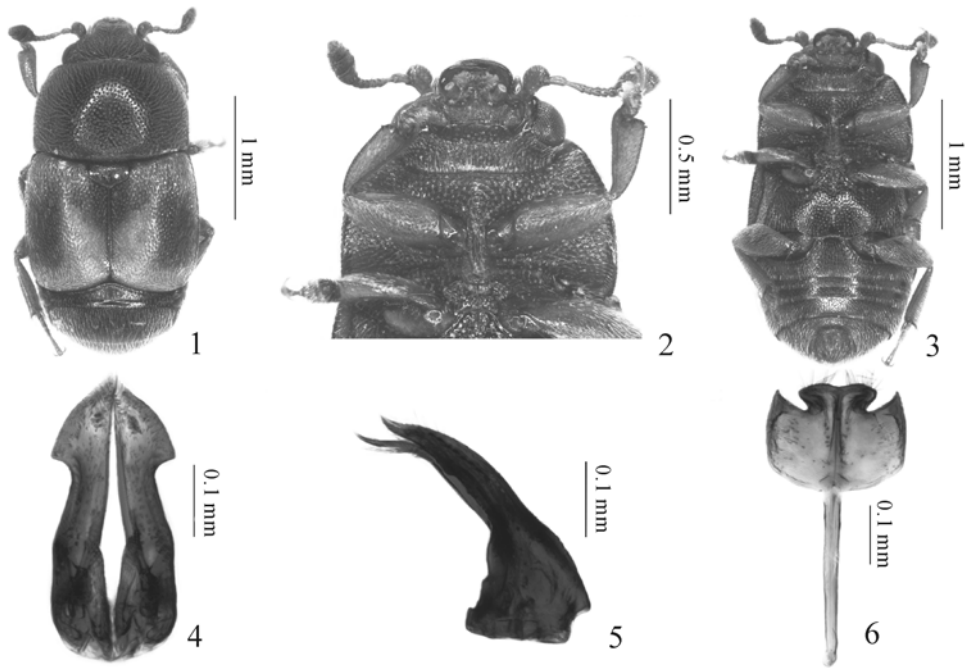
- . Metatibiae triangular *C. hemipterus*
- 17. Elytra widened at middle *C. flavipes*
- . Elytra subparallel 18
- 18. Pygidium of male with subacute apex *C. obsoletus*
- . Pygidium of male with round apex *C. subcalvus* n. rec

1. *Carpophilus (Carpophilus) jelineki* Audisio & Kirejtshuk, 1988 (Figs. 1–6), new record to China

Carpophilus pictus Jelínek, 1986: 456, non *Carpophilus pictus* (Heer, 1841): 413.

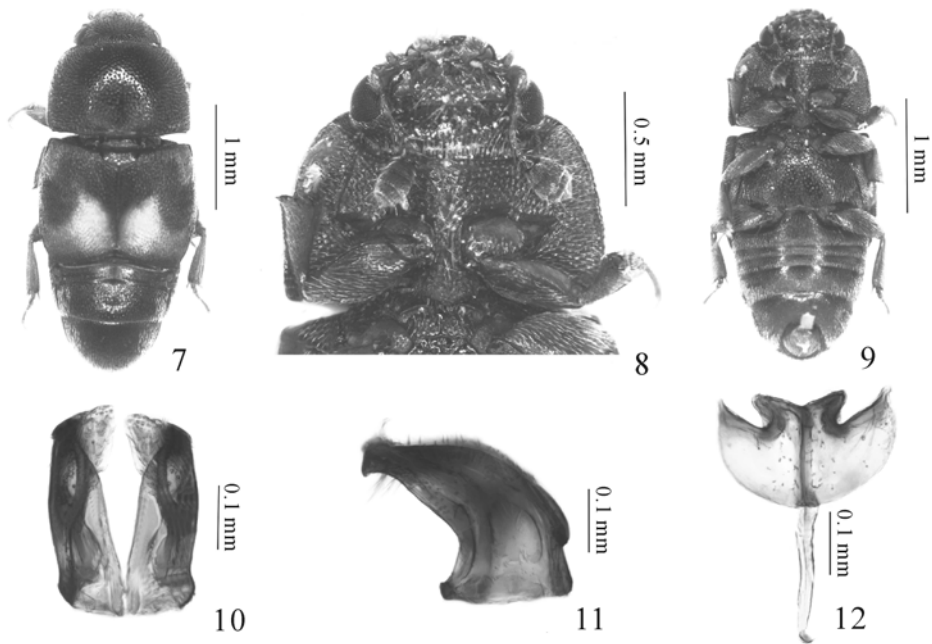
Carpophilus jelineki Audisio & Kirejtshuk, 1988: 791.

Description. Smaller and relatively flat, with brownish dorsal coloration combined with irregular yellowish spots on elytra. Prosternum transverse, nearly quadrilateral. Elytra together wider than pronotum. Prosternal process elongate and slender, gradually expanding along procoxa to round apex. Metaventrite (male) with mediolongitudinal impression. More detailed characteristics were described by Jelínek.

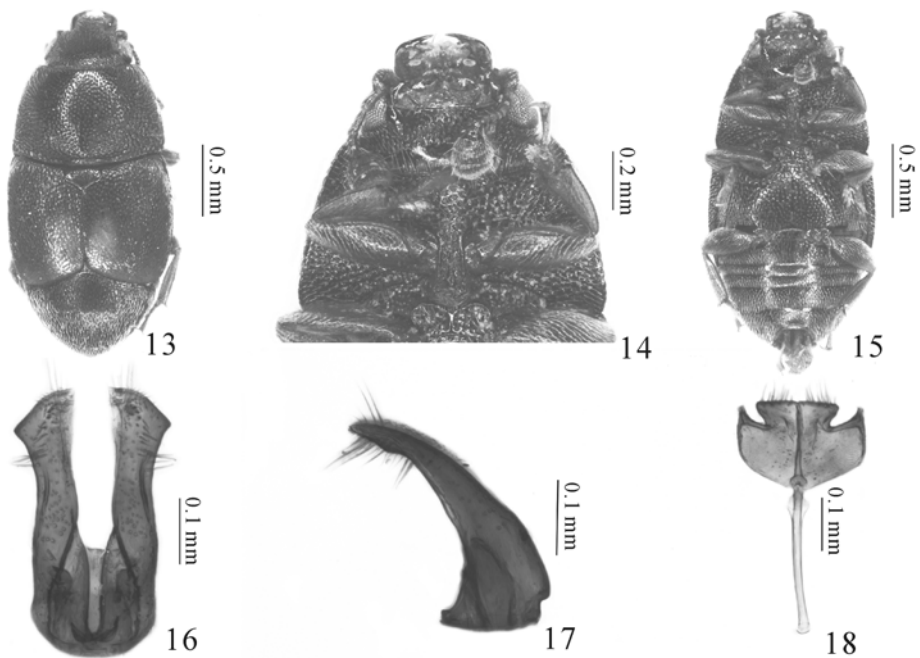


Figures 1–6. *Carpophilus jelineki* Audisio & Kirejtshuk, 1988. 1. Adult, dorsal view; 2. Head and proventrite, ventral view; 3. Adult, ventral view; 4. Tegmen, dorsal view; 5. Tegmen, lateral view; 6. 8th sternite.

Specimens examined. China, 2♂1♀, Shaanxi, Yangling, 22-VI-2016, coll. Xiaoxiao CHEN (NWAFU); 18♂11♀, Zhejiang, Ganbadu, 27-VII-2016, coll. Xiaoxiao CHEN (NWAFU); 3♂, Zhejiang, Ganbadu, 28-VII-2016, coll. Xiaoxiao CHEN (NWAFU); 1♀, Shaanxi, Yangling, 28-VIII-2016, coll. Xiaoxiao CHEN (NWAFU); 2♂, Yunnan, Xishuangbanna, 29-III-2017, coll. Xiaoxiao CHEN (NWAFU); 1♂1♀, Yunnan, Xishuangbanna, 05-IV-2017, coll. Xiaoxiao CHEN (NWAFU).



Figures 7–12. *Carpophilus hemipterus* Linnaeus, 1758. 7. Adult, dorsal view; 8. Head and proventrite, ventral view; 9. Adult, ventral view; 10. Tegmen, dorsal view; 11. Tegmen, lateral view; 12. 8th sternite.



Figures 13–18. *Carpophilus delkeskampi* Hisamatsu, 1963. 13. Adult, dorsal view; 14. Head and proventrite, ventral view; 15. Adult, ventral view; 16. Tegmen, dorsal view; 17. Tegmen, lateral view; 18. 8th sternite.

Distribution. China (Shaanxi, Yunnan, Zhejiang); Saudi Arabia; Iran; India; Sri Lanka.

Habitat. Rotting apples, grapes and jackfruit.

Remarks *Carpophilus* (*C.*) *jelineki*, *Carpophilus* (*C.*) *delkeskampi* and *Carpophilus* (*C.*) *hemipterus* belong to the *hemipterus*-group (Kireichuk & Kovalev 2018). *C.* (*C.*) *jelineki* is most similar to *C.* (*C.*) *delkeskampi* (Figs. 13–18) in ratio of width and length of prosternum (Figs. 1, 13). Jelínek has detailed a comparison of these species (Jelínek 1986; Audisio & Kirejtshuk 1988). This species is also similar to *C.* (*C.*) *hemipterus* (Figs. 7–12) in brownish body color and yellowish spots on elytra, but most different in its comparatively diverse polytropic pattern on its elytra (sometimes the spot near the suture extending to humerus and length of spot at apex being almost a quarter of the total length of the elytra), and the prosternal process has a more rounded apex (Figs. 2, 8) with a mediolongitudinal impression on the metaventrite (Figs. 3, 9).

2. *Carpophilus* (*Carpophilus*) *subcalvus* Kirejtshuk, 1984 (Figs. 19–24), new record to China.

Carpophilus (*Stauroglossicus*) *subcalvus* Kirejtshuk, 1984: 520.

Carpophilus (*Carpophilus*) *subcalvus* Kirejtshuk, 1992: 163.

Description. Male. Body length 2.8 mm, width 1.3 mm, height 0.6 mm. Slightly convex dorsally and strongly convex ventrally; brown black to blackish upper surface with orange or yellowish lateral edge of pronotum and longitudinal spots on elytra (usually near suture and humerus more and less symmetrical), and strongly darker on ventrite surface except lateral margin of prosternal and abdominal sternite obviously yellowish-brown; legs and antennae yellowish-brown except for darker club; integument of elytra with a few short and yellowish pubescence scattered near two sides.

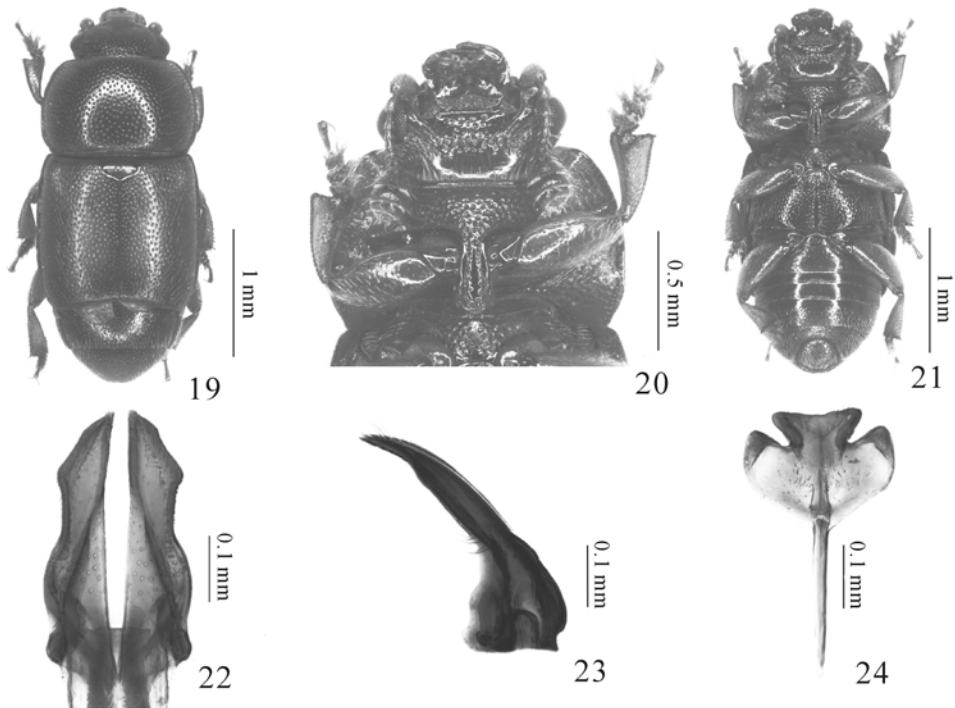
Punctures on head slightly round and deep, with diameter 1.5 times as large as that of eye facets, interspaces smooth with distance between them narrower than puncture diameter; punctures of pronotum on posterior half of disc with diameter 2 times eye facet, and then bigger and denser near sides, interspaces between them less than diameter of puncture. Transverse scutellum subpentagonal and glabrous with a few fine punctures at base, apex smooth and round. Punctures of elytra on disc fine and gradually larger and denser near sides. Integument of proventrite and metaventrite with distinct punctures but the former diameter is twice larger than facet in the middle. Surface of ventrites 1–5 with indistinct and fine punctures which become clearly microreticulated on ventrites 4 and 5.

Head with breadth longer than length. Medium-size eyes. Antenna length more than width of head, and length of 3rd segment longer than 2nd segment, club of antenna almost one third of total antennal length. Pronotum subrectangular with narrowed anterior, with somewhat inflected lateral margin before bisinuate base. Width of elytra longer than length with almost parallel sides. Prosternal process strongly widened, about 1.3 times as wide as club of antenna behind procoxa with round apex. Mesoventrite integument subflattened and coarse. Mesocoxal line somewhat separated to front of metepisternum, leaving small axillary space. Hypopygidium slightly longer than ventrite 4. Tibiae comparatively robust and short.

Aedeagus sclerotized, tegmen with strong depression in one-half and near base. 8th sternite with feebly emarginated apical margin.

Female. Differs from male, having bigger body and darker color, and pygidium with

obvious incision in the middle at apex.



Figures 19–24. *Carpophilus subcalvus* Kirejtshuk, 1984. 19. Adult, dorsal view; 20. Head and proventrite, ventral view; 21. Adult, ventral view; 22. Tegmen, dorsal view; 23. Tegmen, lateral view; 24. 8th sternite.

Specimens examined. China, 88♂83♀, Yunnan, Yuxi, 09-IV-2017, coll. Xiaoxiao CHEN & Dingkun HE (NWFU); 45♂30♀, Yunnan, Dali, 16-III-2017, coll. Xiaoxiao CHEN (NWFU); 13♂25♀, Yunnan, Qujing, 01-VII-2017, coll. Xiaoxiao CHEN & Ziyang HUI (NWFU).

Distribution. China (Yunnan); Russia (Vladivostok).

Habitat. Palm, banana flower, white magnolia.

Remarks Comparing the specimens newly collected from Yunnan with the type specimen described by Kirejtshuk from Russia, even though there are some subtle variations in the shorter diameter of punctures on the pronotum and the smoother prosternum and the interspace surface, they all share these same characteristics typically belonging to this species: 1) elytra presenting longitudinal spots; 2) pygidium apex of female with an incision; and 3) tegmen of male genitalia with strong depression at one-half and near base.

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