

ORIGINAL ARTICLE

Three new species of eriophyoid mites from Maixiu National Forest Park, Qinghai Province, China (Acari: Eriophyoidea)

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Abstract Three new species, *Phyllocoptes angustais* **sp. nov.** infesting *Sibiraea angustata* (Rehd.) Hand.-Mazz. (Rosaceae), *Aculops brevifolis* **sp. nov.** infesting *Caragana brevifolia* Kom. (Leguminosae), and *Diptacus acutifolius* **sp. nov.** infesting *Cotoneaster acutifolius* Turcz. (Rosaceae), are described and illustrated. All mites are collected from Maixiu National Forest Park, Zeku County, Huangnan Tibetan Autonomous Prefecture, Qinghai Province, China and are vagrant on the undersurfaces of leaves of their host plants.

Key words Sanjiangyuan National Natural Reserve, fauna, eriophyoid mites, new species.

1 Introduction

Maixiu National Forest Park (101°46'E–102°04'E, 35°08'N–35°21'N), located in Zeku County, Huangnan Tibetan Autonomous Prefecture, Qinghai Province, China, is a core area of ecological protection of Sanjiangyuan National Natural Reserve, with an average elevation of over 3500 m and about 200 resident flora (Zhou *et al.*, 2011).

Eriophyoid mites are widespread and phytophagous, and some of them can cause gall, erineum or rust on host leaves. Up to now, twenty-three species of eriophyoid mites from Qinghai Province have been reported (Li *et al.*, 2012), but the fauna of eriophyoid mites is scarcely known in Maixiu National Forest Park.

In August 2019, a survey was conducted for eriophyid mites in Maixiu National Forest Park. From leaves of indigenous wild trees, a few eriophyid mites were collected by the first author. Among them, three new species were identified, namely: *Phyllocoptes angustais* **sp. nov.** infesting *Sibiraea angustata* (Rehd.) Hand.-Mazz. (Rosaceae), *Aculops brevifolis* **sp. nov.** infesting *Caragana brevifolia* Kom. (Leguminosae), *Diptacus acutifolius* **sp. nov.** infesting *Cotoneaster acutifolius* Turcz. (Rosaceae).

2 Materials and methods

In the field, eriophyoid mites were collected from the underside of plant leaves with the aid of a hand-lens (20 X), and mite living bodies were immersed in 75% alcohol and kept in vials (30 ml). Each vial was marked with the collections data, such as collection date, location (altitude, longitude and latitude), collector, mite color, habits on its host, and so on. All mites were cleared and mounted on glass slides in laboratory according to Kuang (1995). Specimen slides were examined under

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an Olympus microscope (BX51) and were measured with the approaches proposed by de Lillo *et al.* (2010). The descriptions and illustrations of the eriophyoids follow Amrine *et al.* (2003). The measurements of the holotype are followed by the range of measurements from the paratypes. All measurements are in micrometers (μm) and are lengths when not specified. Type specimens are deposited in the Qinba Biological Herbarium, School of Modern Agriculture and Biotechnology, Ankang University, Ankang City, Shaanxi Province, China.

3 Results

Family Eriophyidae Nalepa, 1898

Subfamily Phyllocoptine Nalepa, 1892

Tribe Phyllocoptini Nalepa, 1892

Genus *Phyllocoptes* Nalepa, 1887

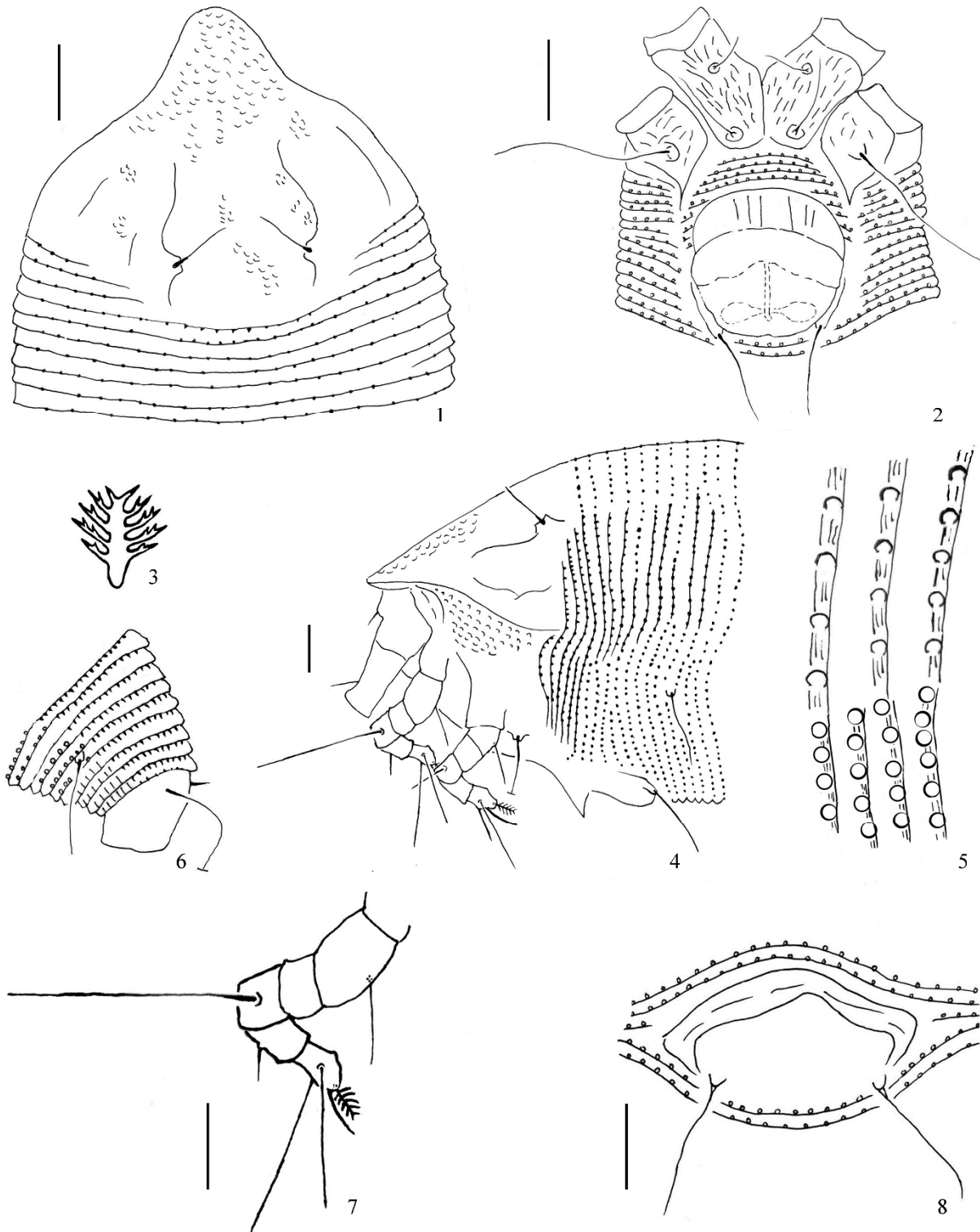
Phyllocoptes angustais sp. nov. (Figs 1–8)

Diagnosis. With the similar prodorsal shield design and the similar host plants from the family Rosaceae, the new species is similar to *P. gansunensis* Kuang & Luo, 1998, but can be differentiated from the latter by: admedian lines connected with scapular tubercles (admedian lines extending nearby capular tubercles in *P. gansunensis*), and female coverflap with 6 ribs (female coverflap with 10 ribs in *P. gansunensis*). Besides this, the species is also characterized by: Body fusiform, color light yellowish; gnathosoma moderate and projecting obliquely down, prodorsal shield with obvious shield lobe; median line missing, admedian lines connected with scapular tubercles, submedian lines uncomplete; scapular tubercles ahead of rear shield margin, scapular setae projecting up and centrad; coxisternal plates with short lines, prosternal apodeme present; legs with tarsal empodium simple, 5-rayed, tarsal solenidion unknobbed; opisthosoma dorsally with 53–59 semi-annuli, sculptured with round microtubercles on annular margin or taper microtubercles on rear annular margin; and ventrally with 71–74 semi-annuli, with rounded microtubercles except caudal 3–5 ventral semi-annuli with elongated microtubercles; setae *h1* present; female genitalia coverflap with 6 ribs.

Description. Female ($n = 10$). Body fusiform, 190 (180–220), 62 (62–75) wide, 74 thick; light yellowish in color. Gnathosoma 27 (25–27), projecting obliquely down; pedipalp coxal setae (*ep*) 3, dorsal pedipalp genual setae (*d*) 5 (5). Prodorsal shield 46 (40–46), 52 (52–65) wide, frontal lobe broad, covering with a few waxy materials. Shield design with median and admedian lines missing, submedian lines extending to scapular tubercles. Scapular tubercles ahead of rear shield margin, 18 (16–18) apart; scapular setae (*sc*) 10 (8–10), projecting up and centrad. Coxigenital region with 9–10 semi-annuli between coxae and genitalia. Coxal plates I and II with short lines, anterolateral setae on coxisternum I (*lb*) 6 (5–6), 12 (10–12) apart; proximal setae on coxisternum I (*la*) 12 (10–15), 6 (5–6) apart; proximal setae on coxisternum II (*2a*) 25 (20–30), 22 (20–26) apart; prosternal apodeme present, 7 (6–7). Leg I 30 (30–32), trochanter 3 (3), femur 10 (10–12), basiventral femoral setae (*bv*) 10 (10–12); genu 4 (4), antaxial genual setae (*l''*) 25 (20–28); tibia 7 (7), paraxial tibial setae (*l'*) 4 (3–5), located on nearly 1/2 from lateral base; tarsus 6 (6), paraxial, fastigial, tarsal setae (*ft'*) 15 (15–18), antaxial, fastigial, tarsal setae (*ft''*) 18 (18–20); tarsal empodium (*em*) 5 (5), simple, 5-rayed; tarsal solenidion (ω) 6 (6), unknobbed. Leg II 28 (28–30), trochanter 3 (3), femur 10 (10–12), basiventral femoral setae (*bv*) 8 (8–10); genu 4 (4), antaxial genual setae (*l''*) 8 (7–8); tibia 5 (5); tarsus 6 (6), paraxial, fastigial, tarsal setae (*ft'*) 7 (6–8), antaxial, fastigial, tarsal setae (*ft''*) 15 (15–18); tarsal empodium (*em*) 5 (5), simple, 5-rayed; tarsal solenidion (ω) 6 (6), unknobbed. Opisthosoma dorsally with 53 (53–59) semi-annuli, sculptured with round microtubercles on annular margin or taper microtubercles on rear annular margin; and ventrally with 71 (71–74) semi-annuli, with rounded microtubercles except caudal 4–5 semi-annuli with elongated microtubercles; setae *c2* 15 (15–20) on ventral semi-annulus 14–15, 48 (48–58) apart; setae *d* 25 (20–25) on ventral semi-annulus 29–30, 32 (31–32) apart; setae *e* 22 (18–25) on ventral semi-annulus 47–48, 12 (11–12) apart; setae *f* 25 (20–25) on 6th ventral semi-annulus from rear, 20 (20–23) apart. Setae *h1* 4, 4 (4) apart; setae *h2* 40 (40–50), 8 (8) apart. Female genitalia 18 (15–18), 23 (22–25) wide, coverflap with 6 ribs, setae *3a* 15 (13–20), 15 (15–18) apart.

Male ($n = 8$). Body fusiform, 133–170, 50–62 wide, 58–70 thick; Gnathosoma 23–25, projecting obliquely down; pedipalp coxal setae (*ep*) 3, dorsal pedipalp genual setae (*d*) 6. Prodorsal shield design pattern as female, 40–45, 50–55 wide. Scapular tubercles ahead of rear shield margin, 17 apart; scapular setae (*sc*) 8, projecting up and centrad. Coxal plates with anterolateral setae on coxisternum I (*lb*) 7–8, 12–13 apart; proximal setae on coxisternum I (*la*) 10–12, 6–7 apart; proximal setae on coxisternum II (*2a*) 18–20, 20–23 apart; prosternal apodeme 6. Leg I 28–31, trochanter 2, femur 8–11, basiventral femoral setae (*bv*) 10–13; genu 4, antaxial genual setae (*l''*) 23; tibia 8, paraxial tibial setae (*l'*) 5; tarsus 6, paraxial, fastigial,

tarsal setae (*ft'*) 10, antaxial, fastigial, tarsal setae (*ft''*) 15; tarsal empodium (*em*) 6, simple, 5-rayed; tarsal solenidion (ω) 5, unknobbed. Leg II 27–30, trochanter 2, femur 8–11, basiventral femoral setae (*bv*) 10; genu 4, antaxial genual setae (*l''*) 10; tibia 7; tarsus 6, paraxial, fastigial, tarsal setae (*ft'*) 5–6, antaxial, fastigial, tarsal setae (*ft''*) 12–15; tarsal empodium (*em*) 5, simple, 5-rayed; tarsal solenidion (ω) 6, unknobbed. Opisthosoma dorsally with 43–46 semi-annuli, and ventrally with



Figures 1–8. *Phyllocoptes angustais* **sp. nov.**, female. 1. Antero-dorsal mite. 2. Coxal-genital region (the coverflap of female flipped up). 3. Empodium (enlarged). 4. Antero-lateral view. 5. Lateral opisthosoma (enlarged). 6. Postero-lateral mite. 7. Leg I (enlarged). 8. Genital region of male. Scale bars: 1–2, 4, 7–8 = 10 μ m.

64–67 semi-annuli; setae *c2* 18–20 on ventral semi-annulus 13–14, 32–40 apart; setae *d* 13–25 on ventral semi-annulus 25–26, 23–28 apart; setae *e* 10–18 on ventral semi-annulus 41–42, 6–11 apart; setae *f23* on 6th ventral semi-annulus from rear, 15–21 apart. Setae *h1* 3–4, 4 apart; setae *h2* 40–60, 6–8 apart. Male genitalia 20 wide, setae *3a* 13–15, 13–15 apart.

Type material. Holotype ♀, from *Sibiraea angustata* (Rehd.) Hand.-Mazz. (Rosaceae), Maixiu National Forest Park, Zeku County, Huangnan Tibetan Autonomous Prefecture, Qinghai, China, 35°13'18"N, 101°57'20"E, elev. 3160m, 16 August 2019, coll. Manchao Xie. Paratypes. 9♀8♂, same data as holotype.

Relation to host. The mites are vagrant on the undersurfaces of leaves, with rust damages seen.

Etymology. The specific designation *angustais* is derived from the specific name of the host plant, *angusta*, by adding the postfix, *is*, masculine of the gender.

Remarks. The genus *Phyllocoptes* (Eriophyidae: Phyllocoptinae: Phyllocoptini) was erected by Nalepa (1887). About 165 species are arranged in the genus all over the world (Amrine *et al.*, 2003), of which 49 species are distributed in China (Hong *et al.*, 2010), and 4 species are in Qinghai (Li *et al.*, 2012), namely: *P. asperatae* Song, Xue & Hong, 2006; *P. beishanensis* Li, Xue & Hong, 2012; *P. dangchangi* Song, Xue & Hong, 2006 and *P. gansunensis* Kuang & Luo, 1998.

This is firstly collected eriophyid mites from the leaves of *Sibiraea angustata* (Rehd.) Hand.-Mazz.

Family Eriophyidae Nalepa, 1898

Subfamily Phyllocoptinae Nalepa, 1892

Tribe Anthocoptini Amrine & Stasny, 1994

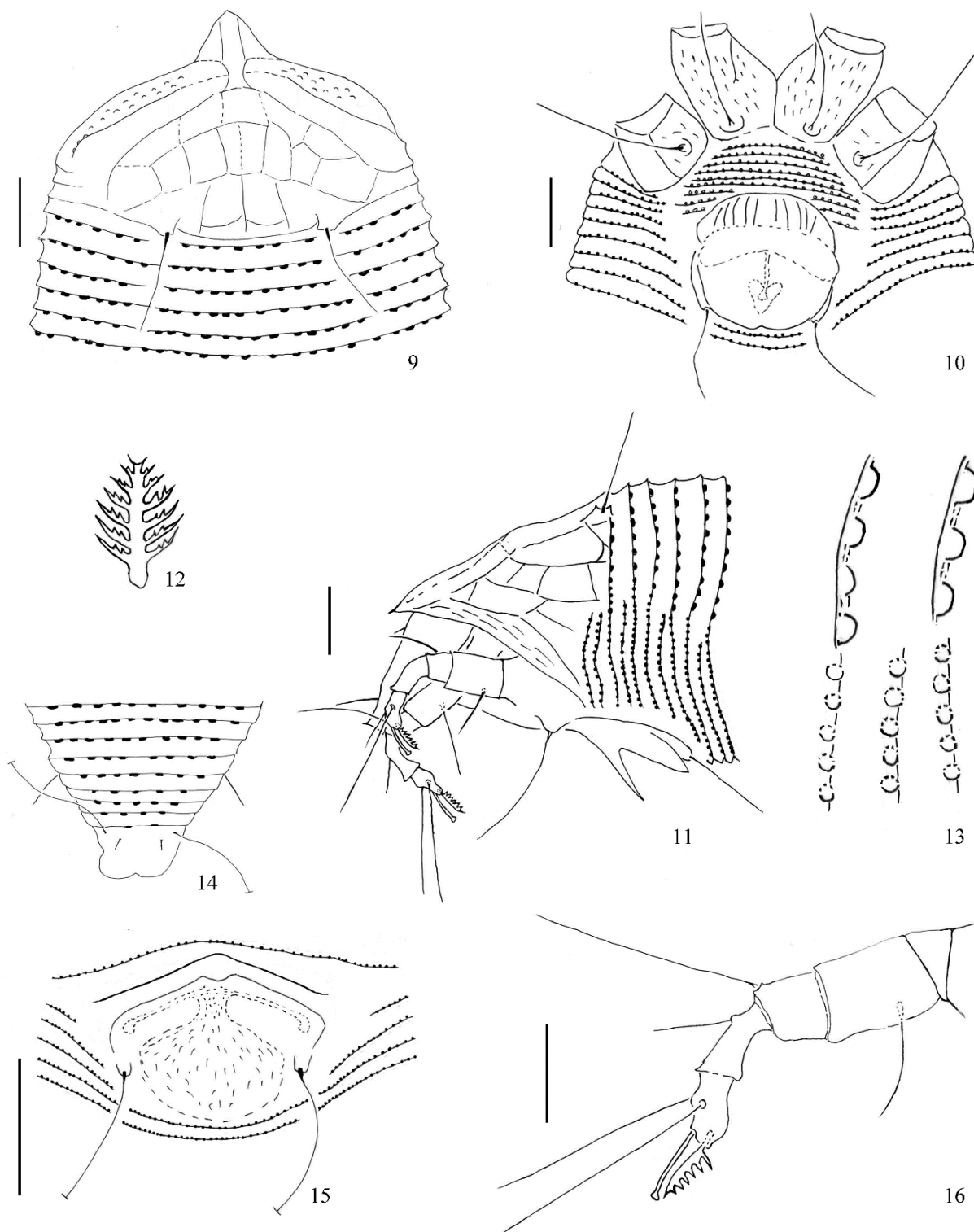
Genus *Aculops* Keifer, 1966

Aculops brevifolis sp. nov. (Figs 9–16)

Diagnosis. The new species is similar to *A. caraganis* Song, Xue & Hong, 2011 with microtubercles on annuli and ribs on female coverflap and host plant from *Caragana* sp., but can be differentiated from the latter by prodorsal shield design pattern with networks (prodorsal shield design pattern without networks in *A. caraganis*), and oval microtubercles sculptured on rear annular margins (round microtubercles on annuli except 13 annuli smooth from rear). Besides this, the species is also characterized by: Body fusiform, color light yellowish; gnathosoma moderate and projecting obliquely down; prodorsal shield with frontal lobe tip pointed, shield design with granules on leading edge, and at least two rows of the networks present on rear shield; scapular tubercles on rear shield margin, scapular setae projecting to rear and divergently; coxal plates I and II sculptured with granules and short lines, prosternal apodeme present; legs with tarsal empodium simple, 7-rayed, tarsal solenidion knob small; opisthosoma dorsally with 42–46 semi-annuli, sculptured with oval microtubercles on rear annular margins, and ventrally with 59–72 semi-annuli, with rounded microtubercles except caudal 8–9 ventral semi-annuli with elongated microtubercles; setae *h1* present; female genitalia coverflap with 10–12 ribs.

Description. Female (*n* = 3). Body fusiform, 230 (140–230), 75 (55–75) wide, 48 thick; light yellowish in color. Gnathosoma 23 (23–25), projecting obliquely down; pedipalp coxal setae (*ep*) 3, dorsal pedipalp genual setae (*d*) 7 (5–7). Prodorsal shield 40 (35–41), 60 (50–60) wide, frontal lobe with broad base and gradually contracting forward and pointed tip. Shield design with granules on frontal edge, and at least two rows of the networks present on rear shield. Scapular tubercles on rear shield margin, 24 (20–25) apart; scapular setae (*sc*) 17 (15–18), projecting to rear and divergently. Coxigenital region with 9–10 semi-annuli between coxae and genitalia. Coxal plates I and II sculptured with granules and short lines, anterolateral setae on coxisternum I (*lb*) 7 (5–7), 10 (9–10) apart; proximal setae on coxisternum I (*la*) 18 (15–18), 8 (8–9) apart; proximal setae on coxisternum II (*2a*) 25 (20–25), 20 (20–25) apart; prosternal apodeme present, 8 (7–8). Leg I 30 (28–33), trochanter 3 (2–3), femur 10 (10–11), basiventral femoral setae (*bv*) 13 (12–13); genu 5 (4–5), antaxial genual setae (*l''*) 23 (20–25); tibia 8 (7–8), paraxial tibial setae (*l'*) 8 (7–8), located at 1/3 from dorsal base; tarsus 6 (5–6), paraxial, fastigial, tarsal setae (*ft'*) 20 (20–25), antaxial, fastigial, tarsal setae (*ft''*) 22 (20–25); tarsal empodium (*em*) 5 (5), simple, 7-rayed; tarsal solenidion (*ω*) 6 (6), with knob small. Leg II 30 (26–31), trochanter 3 (2–3), femur 10 (10–11), basiventral femoral setae (*bv*) 11 (10–11); genu 5 (4–5), antaxial genual setae (*l''*) 8 (8–10); tibia 6 (5–6); tarsus 6 (5–6), paraxial, fastigial, tarsal setae (*ft'*) 5 (5–7), antaxial, fastigial, tarsal setae (*ft''*) 22 (20–25); tarsal empodium (*em*) 5 (5), simple, 7-rayed; tarsal solenidion (*ω*) 6 (6), with knob small. Opisthosoma dorsally with 42 (42–46) semi-annuli, oval microtubercles on rear annular margins; and ventrally with 70 (59–72) semi-annuli, with rounded microtubercles except caudal 8–9 ventral semi-annuli with elongated microtubercles; setae *c2* 25 (22–30) on ventral semi-annulus 14, 60 (43–60) apart; setae *d* 40 (35–45) on ventral semi-annulus 27, 42 (30–42) apart; setae *e* 10 (8–10) on ventral semi-annulus 44, 22 (15–22) apart; setae *f20* (17–20) on 5th ventral semi-annulus from rear, 21 (18–21) apart. Setae *h1* 5 (4–5), 8 (6–8) apart; setae *h2* 50 (40–50), 10 (10) apart. Female genitalia 18 (15–18), 25 (23–25) wide, coverflap with 10–12 ribs, setae *3a* 15 (15–17), 15 (13–15) apart.

Male ($n=8$). Body fusiform, 133–135, 49–53 wide, 50 thick; Gnathosoma 20, projecting obliquely down; pedipalp coxal setae (*ep*) 3, dorsal pedipalp genual setae (*d*) 5. Prodorsal shield design pattern as female, 32–40, 45 wide. Scapular tubercles on rear shield margin, 19–20 apart; scapular setae (*sc*) 15–17, projecting to rear and divergently. Coxal plates with anterolateral setae on coxisternum I (*lb*) 5–7, 8–9 apart; proximal setae on coxisternum I (*la*) 10–15, 7–8 apart; proximal



Figures 9–16. *Aculops brevifolis* **sp. nov.**, female. 9. Antero-dorsal mite. 10. Coxal-genital region (Note: the coverflap of female flipped up). 11. Antero-lateral view. 12. Empodium (enlarged). 13. Lateral opisthosoma (enlarged). 14. Postero-dorsal mite. 15. Genital region of male. 16. Leg I (enlarged). Scale bars: 9–11, 15–16 = 10 μ m.

setae on coxisternum II (*2a*) 20–25, 19–20 apart; prosternal apodeme 5. Leg I 26–27, trochanter 2, femur 8, basiventral femoral setae (*bv*) 7–10; genu 4, antaxial genual setae (*l'*) 22–25; tibia 6–7, paraxial tibial setae (*l'*) 5–6; tarsus 6, paraxial, fastigial, tarsal setae (*ft'*) 18–20, antaxial, fastigial, tarsal setae (*ft''*) 18–20; tarsal empodium (*em*) 5, simple, 7-rayed; tarsal solenidion (*ω*) 6, with knob small. Leg II 24–25, trochanter 2, femur 8, basiventral femoral setae (*bv*) 8–10; genu 4, antaxial genual setae (*l'*) 7–8; tibia 4–5; tarsus 6, paraxial, fastigial, tarsal setae (*ft'*) 5–6, antaxial, fastigial, tarsal setae (*ft''*) 18–20; tarsal empodium (*em*) 5, simple, 7-rayed; tarsal solenidion (*ω*) 6, with knob small. Opisthosoma dorsally with 37–39 semi-annuli, and ventrally with 54–59 semi-annuli; setae *c2* 15–25 on ventral semi-annulus 10, 40 apart; setae *d* 35–40 on ventral semi-annulus 21, 28 apart; setae *e* 8–10 on ventral semi-annulus 35, 14 apart; setae *f* 15–20 on 5th ventral semi-annulus from rear, 15–16 apart. Setae *h1* 3, 5 apart; setae *h2* 30–40, 9–10 apart. Male genitalia 18 wide, setae *3a* 12–13, 12–15 apart.

Type material. Holotype ♀, from *Caragana brevifolia* Kom. (Leguminosae), Maixiu National Forest Park, Zeku County, Huangnan Tibetan Autonomous Prefecture, Qinghai, China, 35°13'11"N, 101°57'29"E, elev. 3200m, 16 August 2019, coll. Manchao Xie. Paratypes. 2♀8♂, same data as holotype.

Relation to host. The mites are vagrant on the undersurfaces of leaves, with no visible symptoms observed.

Etymology. The specific designation *brevifolis* is derived from the specific name of the host plant, *brevifol-*, by adding the postfix, *is*, masculine of the gender.

Remarks. The genus *Aculops* (Eriophyidae: Phyllocoptinae: Anthocoptini) was built by Keifer (1966). About 159 species are included in the genus in the world (Amrine *et al.*, 2003), of which 33 species are distributed in China (Hong *et al.*, 2010), and 2 species are in Qinghai (Li *et al.*, 2012), namely: *A. umli* Hong & Xue, 2005 and *A. xiningensis* Kuang, 2000.

This is firstly collected eriophyid mites from the leaves of *Caragana brevifolia* Kom.

Family Diptilomiopidae Keifer, 1944

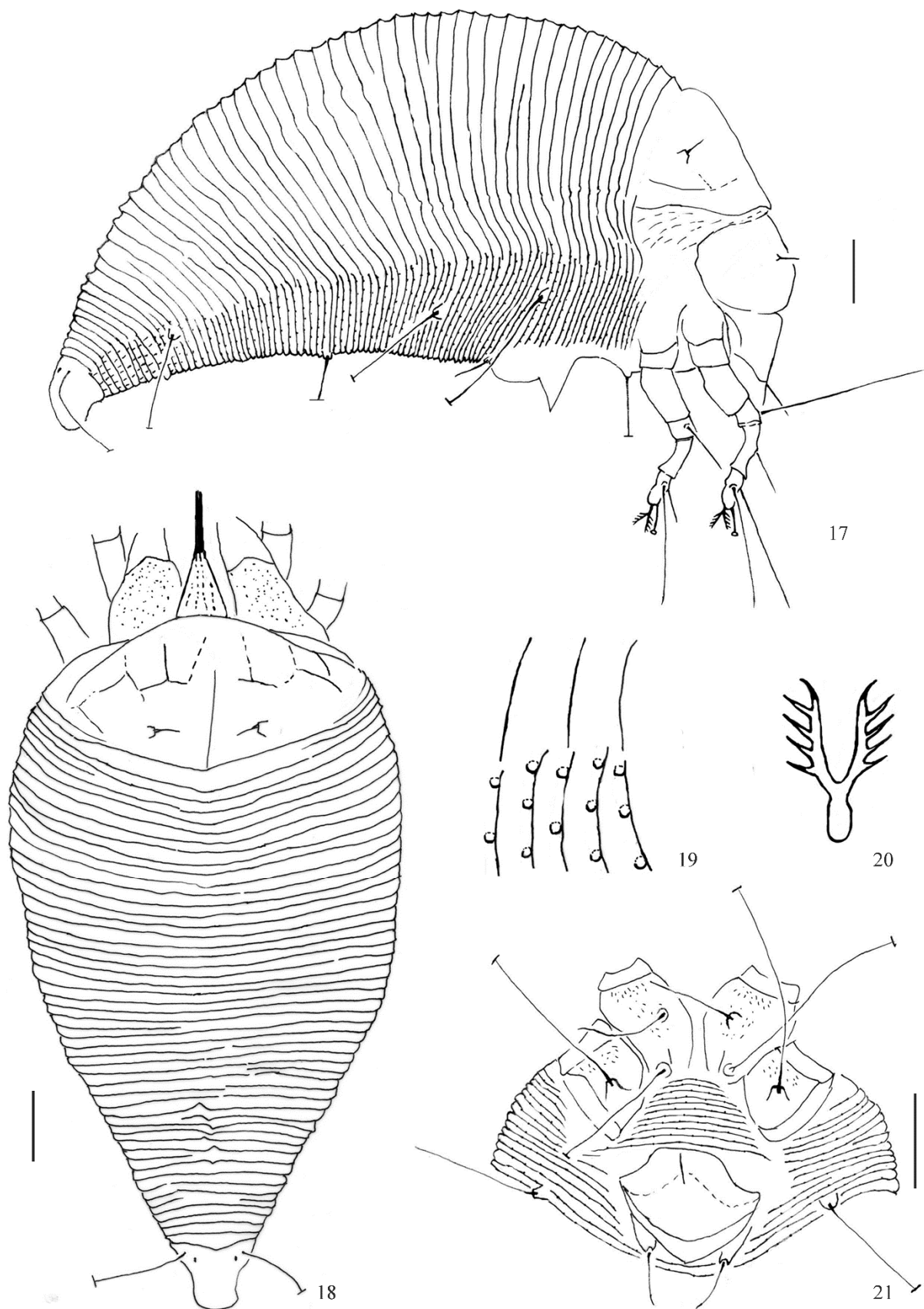
Subfamily Diptilomiopinae Keifer, 1944

Genus *Diptacus* Keifer, 1951

Diptacus acutifolius sp. nov. (Figs 17–21)

Diagnosis. The new species is similar to *D. shangzouensis* Xie, 2013 with 5-rayed tarsal empodium and host plants (from the family Rosaceae) and fauna (the northwestern China), but can be differentiated from the latter by shield design with incomplete networks (shield design with complete networks in *D. shangzouensis*), and dorsal annuli smooth (dorsal annuli sculptured with lines in *D. shangzouensis*). Besides this, the species is also characterized by: Body fusiform, yellowish-brown in color; gnathosoma large and projecting straight down, prodorsal shield with anterior shield lobe present; shield design with median line strong and incomplete networks on frontal edge; scapular tubercles ahead of rear shield margin, scapular setae projecting up and and centrad; coxisternal plates with granules, prosternal apodeme absent; legs with tarsal empodium divided, 5-rayed, tarsal solenidion with large knob; opisthosoma dorsally with 45–53 semi-annuli, smooth; and ventrally with 84–89 semi-annuli, with rounded microtubercles except caudal 12–15 ventral semi-annuli with elongated microtubercles; setae *h1* present; female genitalia coverflap almost smooth besides one line.

Description. Female (*n*=10). Body fusiform, 215 (190–248), 115 (107–115) wide, 110 (95–113) thick; yellowish-brown in color. Gnathosoma 56 (56–60), projecting straight down; pedipalp coxal setae (*ep*) 5 (5), dorsal pedipalp genual setae (*d*) 13 (13–15). Prodorsal shield 41 (40–41), 82 (82–90) wide, frontal lobe feeble. Shield design with median line strong and incomplete networks on frontal edge. Scapular tubercles ahead of rear shield margin, 27 (25–27) apart; scapular setae (*sc*) 6 (5–7), projecting up and centrad. Coxigenital region with 11 (11–13) semi-annuli between coxae and genitalia. Coxal plates I and II with few granules, anterolateral setae on coxisternum I (*lb*) 18 (18–20), 14 (14–15) apart; proximal setae on coxisternum I (*la*) 50 (45–55), 13 (13–14) apart; proximal setae on coxisternum II (*2a*) 60 (55–60), 35 (35–37) apart; prosternal apodeme absent. Leg I 58 (52–61), trochanter 5 (5), femur 17 (17–18), basiventral femoral setae (*bv*) absent; genu 8 (5–8), antaxial genual setae (*l'*) 45 (45–50); tibia 18 (16–18), paraxial tibial setae (*l'*) 12 (10–12), located at 1/2 from dorsal base; tarsus 10 (9–12), paraxial, fastigial, tarsal setae (*ft'*) 30 (30–33), antaxial, fastigial, tarsal setae (*ft''*) 30 (30–33); tarsal empodium (*em*) 5 (5–6), divided, 5-rayed; tarsal solenidion (*ω*) 6 (6–7), knobbed. Leg II 54 (49–57), trochanter 5 (5), femur 17 (17–18), basiventral femoral setae (*bv*) absent; genu 8 (5–8), antaxial genual setae (*l'*) 15 (12–15); tibia 14 (13–14); tarsus 10 (9–12), paraxial, fastigial, tarsal setae (*ft'*) 10 (8–12), antaxial, fastigial, tarsal setae (*ft''*) 30 (30–33); tarsal empodium (*em*) 5 (5–6), divided, 5-rayed; tarsal solenidion (*ω*) 6 (6–7), knobbed. Opisthosoma dorsally with 48 (45–53) semi-annuli, smooth; ventrally with 84 (84–89) semi-annuli, with few round microtubercles except caudal 12–15 ventral semi-annuli with elongated microtubercles; setae *c2* 60 (55–60) on ventral semi-annulus 18–19, 67 (67–85) apart; setae *d* 70 (70–80) on ventral semi-annulus 32–33, 50 (50–57) apart; setae *e* 60 (60–65) on ventral semi-annulus 51–52, 25 (24–25) apart; setae



Figures 17–21. *Diptacus acutifolius* **sp. nov.**, female. 17. Lateral mite. 18. Dorsal mite. 19. Lateral opisthosoma (enlarged). 20. Empodium (enlarged). 21. Coxal-genital region. Scale bars: 17–18, 21 = 20 μ m.

f 55 (50–60) on 13–14 ventral semi-annulus from rear, 37 (37–40) apart. Setae *h*1 1, 10 (9–10) apart; setae *h*2 90 (80–100), 14 (13–14) apart. Female genitalia 25 (22–25), 33 (30–33) wide, coverflap almost smooth besides one line, setae *3a* 12 (12–15), 17 (17–18) apart.

Male. Unknown.

Type material. Holotype ♀, from *Cotoneaster acutifolius* Turcz. (Rosaceae), Maixiu National Forest Park, Zeku County, Huangnan Tibetan Autonomous Prefecture, Qinghai, China, 35°12'56"N, 101°50'20"E, elev. 3080 m, 15 August 2019, coll. Manchao Xie. Paratypes. 9 ♀, same data as holotype.

Relation to host. The mites are vagrant on the undersurfaces of leaves, with no visible symptoms observed.

Etymology. The specific designation *acutifolius* is derived from the specific name of the host plant.

Remarks. The genus *Diptacus* (Diptilomiopidae, Diptilomiopinae) was erected by Keifer in 1951. About 43 species are arranged in the genus in the world (Amrine *et al.*, 2003), of which 41 species are distributed in China (Hong *et al.*, 2010), and 2 species are in Qinghai (Li *et al.*, 2012), namely *D. berberinus* Li, Xue & Hong, 2012 and *D. mengdaensis* Li, Xue & Hong, 2012.

This is the second species of eriophyid mite collected from the leaves of *Cotoneaster acutifolius* Turcz., the first one is *Rhyncaphytoptus acutifoliae* Song, Xue & Hong, 2009.

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