

Fig. 13. *Geothelphusa tali*, new species. Holotype male, 14.9 by 11.3 mm. a: dorsal view; b: frontal view; c: ventral view of right G1; d: dorsal view of right G1; e: terminal segment of G1; f: ventral view of right G2. Scale = 1.0 mm.

Size. - Largest male 14.9 by 11.3 mm (NTOU F10187); largest female 20.6 by 15.6 mm (NTOU F10187); smallest mature female 13.3 by 10.2 mm (NTOU F10187).

Distribution. - Northeastern Taiwan.

Remarks. - This species is allied to *G. eucrinodonta* and *G. gracilipes*, but it distinguished by the following aspects: 1. the carapace is flatter than *G. eucrinodonta* and *G. gracilipes*; 2. there is no epibranchial tooth (present in *G. eucrinodonta*); and 3. the ambulatory legs of this species and *G. eucrinodonta* are wider than *G. gracilipes*.

Etymology. - The species is named after the type locality, and the name is used as a noun in apposition.

***Geothelphusa dolichopodes*, new species**
(Fig. 14)

Material examined. - Holotype - Male, 30.1 by 23.2 mm (NTOU F10194), HWALIEN HSIEN: Hsiulin, Chingshui, coll. J.Y. Shy & K. Lee, 8.xi.1992.

Paratypes - HWALIEN HSIEN: Hsiulin, Chingshui - 4 males, 2 females (NTOU F10070), coll. J.Y. Shy & K. Lee, 8.xi.1992. — Hsiulin, Shiaochingshui - 4 males, 8 females (TMCD 2852), coll. P.K.L. Ng & C.H. Wang, 3.vi.1993.

Others - HWALIEN HSIEN: Hsiulin, Chungte - 1 male, 1 female (TMCD 2851), coll. P.K.L. Ng & C.H. Wang, 3.vi.1993. — Hsiulin, Shakatang Hsi - 8 males, 5 females (CHCD 111), coll. H.C. Liu.

Diagnosis. - Carapace smooth, frontal margin divide into 2 lobes, (especially in large specimens). Anterolateral region with fine lateral striae. Anterolateral crista distinct, smooth, without epibranchial tooth. Ambulatory legs long, thin, total length of second ambulatory legs about 2.3 times carapace length, length of merus about 4.4 times width, width about 2.0 times height. Male abdominal segment 7 slightly bell-shaped. G1 subterminal segment straight, outer proximal margin with a tooth, inner proximal margin dilated; terminal segment almost straight, spinules on distal one-third (Fig. 14c-e).

Coloration. - Not known.

Habitat. - Lives under stones and boulders of small streams.

Size. - Largest male 31.6 by 23.6 mm (TMCD 2852); largest female 36.6 by 26.8 mm (TMCD 2851); smallest mature female 25.8 by 19.4 mm (TMCD 2852).

Distribution. - Eastern Taiwan.

Remarks. - This species is allied to *G. nanao*, but it distinguished by the following aspects: 1. the distance between the tip of the male abdomen and anterior margin of sternite 4 is about 1.2 times the length of sternites 1-3 (about 1.5 times in *G. nanao*); 2. the total length of the second ambulatory leg is about 2.3 times that of the carapace length (about 2.1 times in *G. nanao*); and 3. the total length of the G1 is about 6.2 times that of the terminal segment (about 8.0 times in *G. nanao*).

Etymology. - The name is derived from the Greek “dolichos” (for long) and “podes” (for legs), alluding to the very long legs of this species.

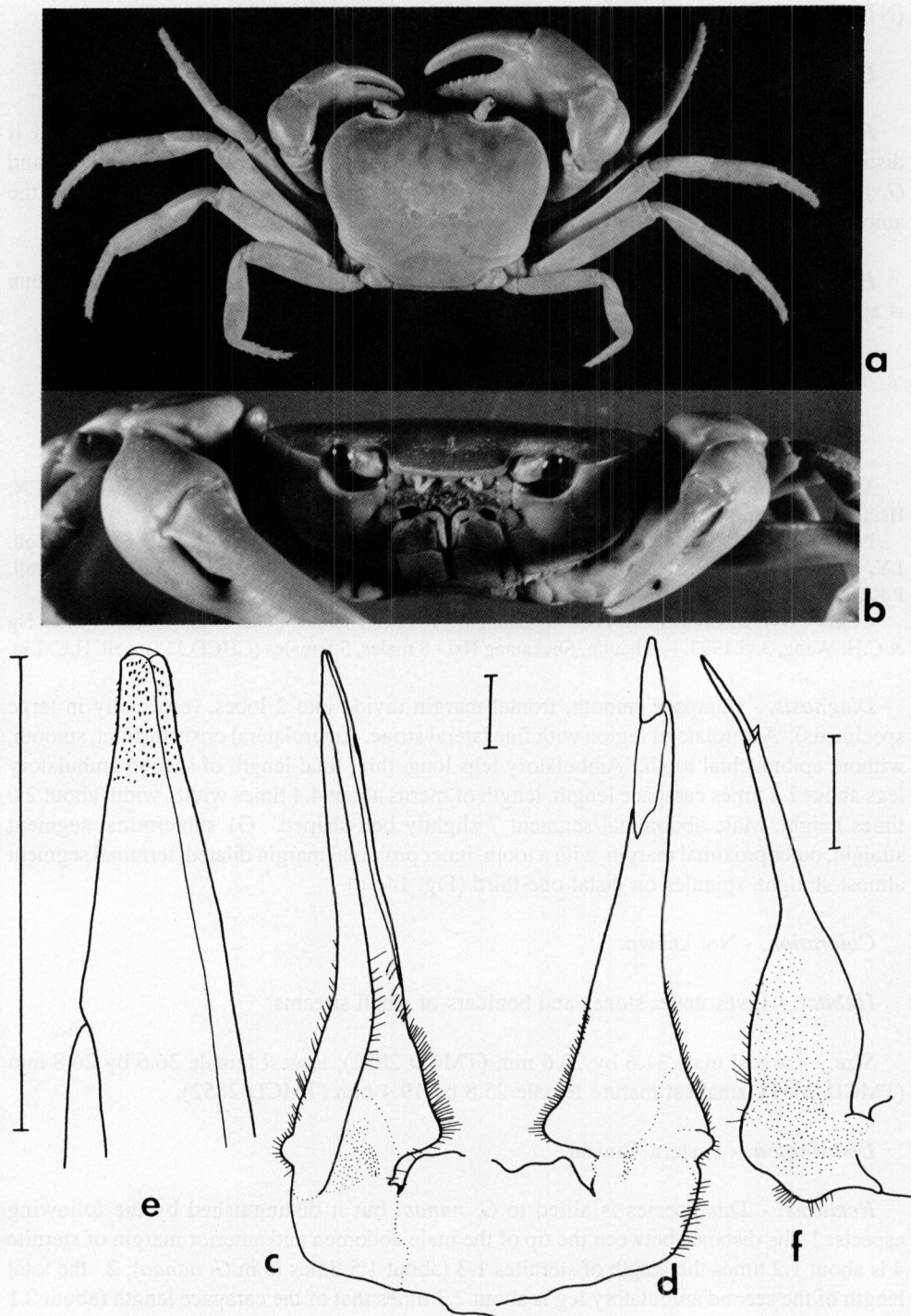


Fig. 14. *Geothelphusa dolichopodes*, new species. Holotype male, 30.1 by 23.2 mm. a: dorsal view; b: frontal view; c: ventral view of right G1; d: dorsal view of right G1; e: terminal segment of G1; f: ventral view of right G2. Scale = 1.0 mm.

***Geothelphusa taroko*, new species**

(Fig. 15)

Material examined. - Holotype - Male, 21.3 by 16.2 mm (NTOU F10192), HWALIEN HSIEN: Taroko, coll. J.Y. Shy & K. Lee, 5.xi.1992.

Paratypes - HWALIEN HSIEN: Taroko - 2 males (NTOU F10066), coll. J.Y. Shy & K. Lee, 5.xi.1992. — Hsiulin, Loshao - 2 males (NTOU F10067), coll. J.Y. Shy & K. Lee, 6.xi.1992.

Others - HWALIEN HSIEN: Hsiulin, Chankuang Temple - 19 males, 7 females (TMCD 2853), 1 male, 1 female (ZRC *****), P.K.L. Ng & C.H. Wang, 3.vi.1993.

Diagnosis. - Carapace smooth, with fine concave pits; frontal margin gently sinuous, appears to be divided into 2 broad lobes. External orbital angle stout. Anterolateral region slightly rough, with fine concave pits and small, low granules. Anterolateral crista distinct, lined with small, low granules, epibranchial tooth small. Total length of second ambulatory legs about 2.4 times carapace length. G1 subterminal segment sinuous, outer proximal margin with a tooth, inner proximal margin almost straight; terminal segment short, distal part slightly curved inwards (Fig. 15c-e).

Coloration. - Carapace orangish-red. Chelae orangish-yellow. Ambulatory legs with fine brown spots.

Habitat. - Lives under stones and boulders of streams.

Size. - Largest male 21.9 by 17.1 mm (TMCD 2853); largest female 27.7 by 21.7 mm (TMCD 2853); smallest mature female 17.7 by 13.9 mm (TMCD 2853).

Distribution. - Eastern Taiwan.

Remarks. - This species is allied to *G. gracilipes*, but it distinguished by the following aspects: 1. the anterolateral region of the carapace is slightly rough but is without striae and has a small epibranchial tooth; 2. the total length of the second ambulatory leg is about 2.4 times that of the carapace length (about 2.1 times and has more setae in *G. gracilipes*); and 3. the G1 subterminal segment is slightly sinuous and the length of the synovial membrane is about 4.2 times that of the width (straight and about 3.3 times in *G. gracilipes*).

Etymology. - The species name is derived from the type locality, Taroko National Park, and is used as a noun in apposition.

***Geothelphusa monticola*, new species**

(Fig. 16)

Material examined. - Holotype - Male, 21.9 by 16.5 mm (NTOU F10204), TAICHUNG HSIEN: Hoping, Sheauyeakow, coll. J.Y. Shy & W.L. Tsay, 28.vi.1993.

Paratypes - TAICHUNG HSIEN: Hoping, Sheauyeakow - 1 male, 2 females (NTOU F10112), coll. J.Y. Shy & W.L. Tsay, 28.vi.1993. — Lishan - 1 male, 1 female (NTOU F101130), coll. J.Y. Shy & W.L. Tsay, 28.vi.1993.

Others - TAICHUNG HSIEN: Hoping, Shengguang - 1 male (TMCD 2843), coll. S.K. Chan, 5.vii.1977. — Hoping, Songbor - 1 female (NTOU F10114), coll. J.Y. Shy & K. Lee, 30.xi. 1992.

Diagnosis. - Carapace with concave pits, frontal margin divided into 2 lobes. Gastric region smooth, anterolateral region rough, concave pits present slightly larger than those on