

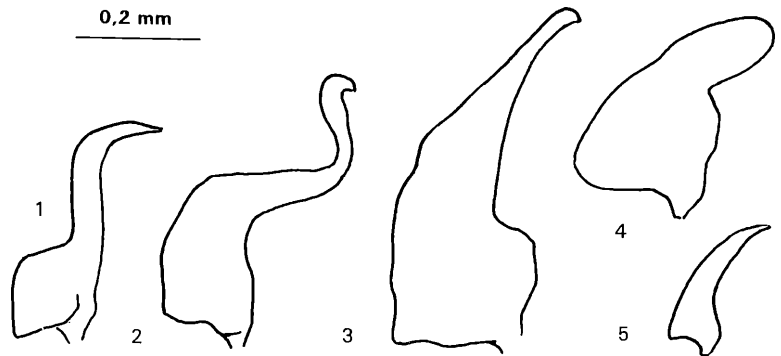
Short Notes:

Addition to the key to the genera of Helotrephidae (Nepomorpha) by ZETTEL (1999, Amemboa 2):

Very recently an undescribed species of the genus *Limnotrephes* ESAKI & CHINA, 1928, was discovered in North Thailand by Dr. Damir Kovac, Senckenberg Museum, Frankfurt am Main, Germany. *Limnotrephes* is externally very similar to *Idiotrephes* and *Tiphotrephes*, both widely distributed and abundant in Thailand. The relatively diverse (polyphyletic?) genus was formerly known only from South Africa and from the Indian subregion (Northwest and South India, Nepal). Its presence in Southeast Asia appeared unlikely, and therefore *Limnotrephes* was not treated in the key to genera by ZETTEL (1998). To include *Limnotrephes*, key couplet 6 has to be changed as follows:

- 6 Lateral margin of cephalonotum not extending onto eye surface, only indistinctly indenting the eye at posterior margin (ZETTEL 1998: fig. 11); male left paramere distally with distinct bent (Fig. 1); subgenital plate of female nearly symmetrical, with two narrow incisions laterally of a middle lobe (ZETTEL 1998: fig. 14); predominately hindwing-macropterous; body in both morphs highly domed ***Tiphotrephes* ESAKI & CHINA**
- Lateral margin of cephalonotum clearly extending onto eye surface, deeply indenting the eye (ZETTEL 1998: fig. 10); male left paramere (Figs. 2 - 5) and female subgenital plate different; brachypterous morph less domed..... 7
- 7 Left paramere similar as in Figure 2; female subgenital plate (often very) asymmetrical, with more (ZETTEL 1998: fig. 13) or less deep dextrocaudal incision and usually with distinct dextrocaudal break..... ***Idiotrephes* LUNDBLAD**
- Left paramere relatively simple, lobe-shaped, narrow triangular, or reduced (Figs. 3 - 5); female subgenital plate subsymmetrical, simple, without incision or break..... ***Limnotrephes* ESAKI & CHINA**

Figs. 1 - 4: Left parameres of (1) *Tiphotrephes indicus* (DISTANT 1910), (2) *Idiotrephes* sp. (undescribed species from Thailand), (3) *Limnotrephes kumaonis* POLHEMUS, 1990 (male from Nepal), (4) *L. campbelli* ESAKI & CHINA, 1928 (from India), and (5) *L. minutissimus* ZETTEL, 1997 (from South India).



References:

ZETTEL, H. 1998: Introduction to the Helotrephidae (Nepomorpha) in Thailand and adjacent countries. - Amemboa 2: 15-18.

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