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MORPHOLOGICAL DIFFERENCES BETWEEN EGG-GUIDES OF *SCAPTOMYZA* (*PARASCAPTOMYZA*) *PALLIDA* AND *S.* (*P.*) *ELMOI*

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コフキヒメショウジョウバエとミナミコフキヒメショウジョウバエの雌における導卵器の形態の違いについて

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Scaptomyza (*Parascaptomyza*) *pallida* and *S.* (*P.*) *elmoi* are closely related species and they were separated as different species by TAKADA in 1968 (TAKADA, 1970) based on the morphological features of male genital organs. Thus, they have been able to be discriminated only in the case of male.

I found, however, that their females can also be discriminated by the morphological features of egg-guides as reported in this paper.

In the vicinity of Tokyo, both species seem to occupy different principal habitats. They principally feed and breed on decaying leaves or stems of herbs (NISHIHARU, 1976; KIMURA, 1976), and they can easily be collected by sweeping with nets on the herbs. Although both species were collected at the same time in most cases, *S. elmoi* predominated *S. pallida* in male number in the rural regions, while the relation was reverse in the forest regions. The females collected in those cases could be devided in two types by the morphological features of their egg-guides, and proportions in number of the two types corresponded to those of male individuals of the two species as shown in Table 1. Consequently, I have drawn a conclusion that one type belongs to *S. pallida* and the other to *S. elmoi*. The morphological differences are as follows and as shown in Figure 1.

Scaptomyza* (*Parascaptomyza*) *pallida (ZETTERSTEDT, 1847)

Japanese name: Kofuki-himeshojobae

Egg-guide: Lobe brown, apically rounded and with a black patch, and with about three discal and eight marginal bristles, two subapical marginal ones being tooth-like, one apical and one subapical marginal ones longest. Basal isthmus very short.

Table 1. Net sweeping records over herbs

Collection Site	Collection Date	*S. pallida*			*S. elmoi*		
		♂	♀	T	♂	♀	T
A	Apr. and May, 1975	19	31	50	2	4	6
A	Apr., 1976	17	7	24	1	2	3
B	June, 1976	4	2	6	120	91	211
C	May, 1976	0	1	1	20	24	44

A: Asakawa Experimental Forest, Nagafusa-machi, Hachioji.
B: National Park for Nature Study, Minato-ku, Tokyo.
C: Campus of Tokyo Metropolitan University, Meguro-ku, Tokyo.
Figures show individual numbers captured by sweepings.

Scaptomyza (*Parascaptomyza*) *elmoi* TAKADA, 1970

Japanese name: Minami-kofuki-himeshojobae.

Egg-guide: Lobe brown, apically pointed and with a black patch, and with about three discal and eight marginal bristles, two subapical marginal ones being tooth-like, one apical and one subapical marginal ones longest. One apical and three subapical marginal bristles more closely arranged than those of *S. pallida*. Basal isthmus very short.

By the way, I had an opportunity to examine a pair of Czechoslovak *S. pallida*, which had kindly been offered to me by Dr. Toyohi OKADA, and found that the features of the egg-guide coincided with those mentioned above.

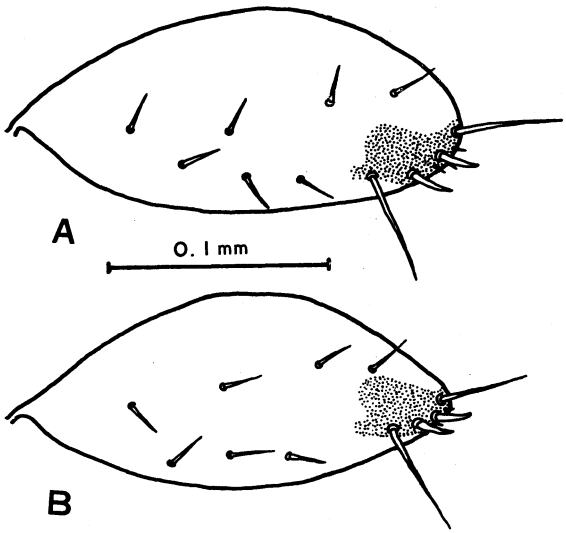

Fig. 1. Egg-guide. A: *Scaptomyza pallida* (ZETTERSTEDT). B: *S. elmoi* TAKADA.

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摘　　要

コフキヒメショウジョウバエ *Scaptomyza* (*Parascaptomyza*) *pallida* と，ミナミコフキヒメショウジョウバエ *S.* (*P.*) *elmoi* は，主に腐った草で摂食，繁殖する。この2種は非常に近縁で，1970年に高田により雄の生殖器の形態の違いから，別種とされた。雌の場合は，これまで区別できなかったが，今回の研究の結果，導卵器 (egg-guide) の形態の違いから，両者の区別が可能である。

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