Tabanus kanoi Murdoch and Takahasi, 1961, a junior synonym of T. yakuensis Ouchi, 1943 (Diptera: Tabanidae)

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Abstract: Tabanus kanoi Murdoch and Takahasi has been guessed to be the same species as Tabanus yakuensis Ouchi, the trace of the holotype of which was lost after World War II. But I got the information that there was a specimen of T. yakuensis in the National Zoological Museum of China in Beijing recently. From its clear color photographs which were provided for me by Dr. Chen of the Museum as well as its original description, I conclude that T. kanoi is a junior synonym of T. yakuensis.

Key words: Tabanus yakuensis, Tabanus kanoi, Synonym, Tabanidae, Japan

Introduction

Tabanus kanoi was first described by Murdoch and Takahasi in 1961, and its holotype was collected in Kagoshima city, Japan. This tabanid species is distributed in the warm climates of southwestern Japan. The larvae of this species inhabit the mud beside a sluggish stream in the forest, and the female flies feed on blood and might have the ability to produce autogenous eggs before taking the first blood meal (Miyagi, 1973).

On the other hand, Tabanus yakuensis was described by Yoshio Ouchi in 1943 as a new species. According to his paper (1943), one female of this species was collected at Miyanoura, Yakushima Isl., Kagoshima Pref., Japan, and it is probable that this one is the holotype of it. At that time, Mr. Ouchi worked as a researcher at the Biology Department of the Shanghai Science Institute, and in the paper he wrote that the type was deposited in it, although he did not designate the female specimen directly as the type. After World War II, most of the insect specimens deposited in this institute were transferred to the Shanghai Entomological Institute, Chinese Academy of Sciences. At a later time, however, Dr. Hirosi Takahasi (1977), who is one of the authors of T. kanoi, mentioned the identity between the above two species as follows:

"Tabanus yakuensis Ouchi (1943) may be the same species with T. kanoi. But now the type specimen of T. yakuensis is not preserved in Shanghai Entomological Institute, and the detailed characters are unknown to the author (by a personal information)."

Recently, from Dr. Zhu of the Entomological Museum of Shanghai, I was informed that a part of the insect specimens in the Shanghai Science Institute had been transferred to the National Zoological Museum of China in Beijing, and, from Dr. Chen of this museum, that a female specimen of T. yakuensis was deposited in it. Moreover, Dr. Chen provided me with its clear color photographs.

Materials and Methods

Both species were exactly compared with each other in their original descriptions, specimens of T. kanoi and the photographs of the specimen of T. yakuensis. Data on the labels of the specimens were checked (in pictures for T. yakuensis).

The following letters are in all written on the labels of the specimen in the pictures of Fig. 2: Tabanus (T.) yakuensis Ouchi 1943; 日本鹿児島 大内 採 (Japan, Kagoshima, Col. Ouchi); 1938, 7, 17.

I consider the specimen in the pictures to be the type of T. yakuensis, because the specific name and Ouchi’s name are written on the labels and there is no specimen of T. yakuensis but this specimen both in the institute and in the museum in China, although I cannot find on the labels any descriptions to designate it as the type and the name of Miyanoura in Yakushima, which should be the type locality, and besides the date of the specimen is not written in the paper.

Specimens examined (T. kanoi): 1 ♀ (Holotype), Yamashita town, Kagoshima city, Japan, August 2, 1958, R. Kano (Fig. 1); 1 ♀, Aiko-dake, Yakushima Isl., Japan, July 22, 2006, T. Yamauchi.

Results

The original descriptions of both species accorded generally with each other, and the photographs showed that T. yakuensis had the same characteristics as T. kanoi had. The following are the taxonomically important characteristics both species have in
common.
The body is olive-yellow for the most part and 15–16 mm in length. The frons is very narrow and widened above; the basal callus is oval and separated from the eye margins; the median callus is relatively long and slender, and joins the basal callus; both calluses are shiny brownish-black. The antennae are comparatively slender and orange except the black apical annulations. The palpi are slender and taper off to a tip, with short black hairs.

**Conclusion**

Based on the results given above, I conclude that *T. kanoi* is a junior synonym of *T. yakuensis*. In addition, I propose that the Japanese name of this species should be “Kano-abu”.

*Tabanus yakuensis* Ouchi, 1943: 489.


**Syn. nov.**

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