

Studies on Flies in Korea

5. On the Hitherto Unreported Fly Species in Korea

Soung Ho PARK

(Department of Biology, Kunkuk University)

韓國產 파리의 研究

韓國未記錄 파리類에 關하여 (第 5 報)

朴 星 湖

(建國大·理工大·生物學科)

(Received March 3, 1967)

摘 要

1966年 4月부터 8月 까지 大邱 八公山 等地의 파리類를 採集 整理한 結果, 다음과 같은 未記錄四種이 밝혀 졌기에 發表한다.

Hydrophoria ruralis MEIGEN, 1826

Sepedon spehegeus FABRICIUS, 1781

Anisia towadensis MATSUMURA, 1916

Crossocosmia zebina WALKER, 1849

INTRODUCTION

During the period from April to September 1966, the author had made collection of flies at Mt. Paigong, Taegu district.

A close examination of the specimens reveals that *Hydrophoria ruralis* MEIGEN, 1826, *Anisia towadensis* MATSUMURA, 1916, *Sepedon spehegeus* FABRICIUS, 1781 and *Crossocosmia zebina* WALKER, 1849 were hitherto unreported from Korea. The author describes the above four species in detail.

The author wishes to express his deepest appreciation to Dr. Rokuro Kano, Professor of Tokyo Medical and Dental University, Tokyo, Japan and Dr. Narao Hukuhara, Entomology Museum, National Institute of Agricultural Sciences, Tokyo, Japan, for the identification of the said four species.

DESCRIPTIONS

Hydrophoria ruralis MEIGEN, 1826

(Syst. Besch., V, p. 101)

Male

Body length: 4—5 mm.

Head: Eyes contiguous; frontal vitta black; parafrontals, parafacials and face covered with silvery pollen; frontal bristles 6 pairs; antennae dark brown, 3rd segment about 2 times that of 2nd segment; bucca black with grayish pollen and several short bristles; one row of bristles on the postocular part; palpi dark brown.

Thorax: Scutum black with yellowish pollen, two stripes on marginal part distinct and three stripes on central part

of scutum; acrostichal bristles 3+1; dorsocentral bristles 2+3; intra alar bristles 1+2; posthumeral bristles 2; supra-alar bristles 2; humeral bristles 2.

Wings: Hyaline; r1 bare; setion III of costa almost same length as section V of costa; basicostal scale light brown; squamae yellow; halter yellowish white.

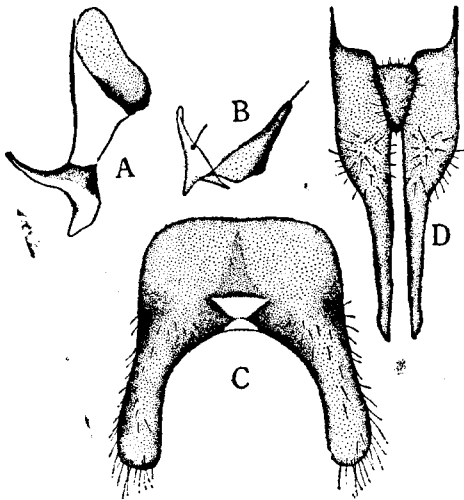


Fig. 1. *Hydrophoria ruralis*

A: Phallosome. B: Parameres. C: 5th sternite of male. D: Forceps.

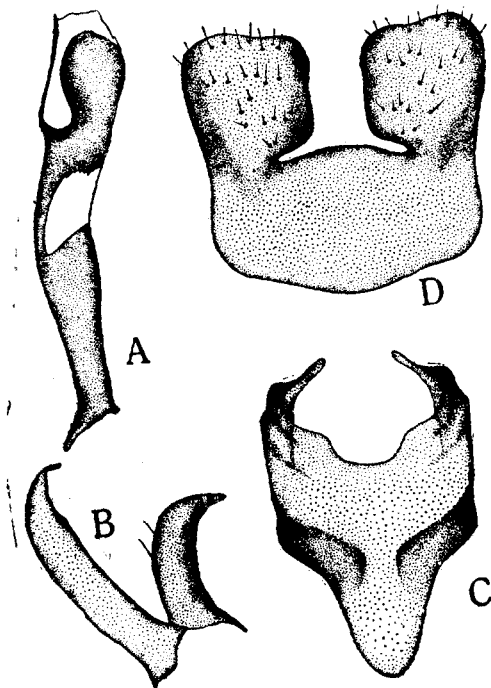


Fig. 2. *Anisia towadensis*

A: Phallosome. B: Parameres C: Vinculum. D: 5th sternite of male.

Legs: Femur dark brown; fore femur and mi femur with whitish pollen; tibia light brown; fore femur with a row of bristles on ventral and dorsal surfaces, respectively; hind femur with a pair of rows of bristles each on ventral and dorsal surfaces; tibia with several bristles.

Abdomen: Dark brown; 4th and 5th tergites dark brown; 2nd and 3rd tergites brown on central part and between each tergites; marginal bristles on all tergites; genitalia as shown in Fig. 1.

Localities: Mt. Hwangak, Mt. Kaya and Mt. Palgong.

***Anisia towadensis* MATSUMURA, 1916**

(Thous. Ins. Jap., Addit., II, p. 389)

Male

Body length: 12—13 mm.

Head: Frons about 1/2 the width of one eye; frontal vitta black; parafrontals and parafacials grayish pruinescence; frontal bristles 10 pairs; face comparatively wide; antennae orange but 3rd segment brown, and about 2/5 (1 : 2.5) that of the 2nd segment; bucca with whitish pollen; metacephalon with numerous whitish hairs; one row of bristles on the postocular part; palpi orange.

Thorax: Scutum black with white pollen; acrostichal bristles 2 or 3+1; dorsocentral bristles 3+3; intra-alar bristles 1+3; supra-alar bristles 3; notopleural bristles 2; humeral bristles 4; outer posthumeral bristles 3; basal scutellar bristles and subapical bristles very long; squamae white; halter yellowish white.

Wings: Hyaline, r1 bare; r4+5 with a row of 12 setae on dorsal surface more than half the distance from the basal node to r-m, ventral surface with 6 setae on basal node; section III of costa same length as section V of costa; basicostal scale yellow.

Legs: Black; fore femur with a row of bristles on ventral and a pair of rows of bristles on dorsal surface; mid femur with a row of bristles on lateral surface.

Abdomen: Genitalia as shown in Fig. 2.

Localities: Mt. Palgong and Mt. Hwangak.

Remarks: It is said that this species is synonym of *Atylostoma tricolor* MIK 1883 (Verh. Zool. Bot. Ges. Wien, xxxiii, p. 257).

Sepedon spehegeus FABRICIUS, 1781

(Spec. Ins., II, p. 429)

Male

Body length: 8—10 mm.

Head: Frons about 2 times the width of one eye; frontal vitta shining black with white pollen; no difference between parafacials and face, and they projected antennae dark brown, fairly long; 2nd segment rather longer than 3rd(18 : 12) and 3rd segment looks like arrowhead; frontal bristles and buccal bristles absent; palpi black.

Thorax: Black with some grayish pollen; acrostichal bristles and dorsocentral bristles absent; supra-alar bristles 2; intra-alar bristles 0+2; apical scutellar bristles 1 pair; transverse suture indistinct.

Wings: Light brown (Fig. 3, D.).

Legs: All femur light brown; fore femur without bristles on ventral and dorsal surfaces; tibia black; hind femur with a row of bristles on posterior ventral surface.

Abdomen: Lateral and median marginal bristles absent; genitalia shown in Fig. 3.

Localities: Sangiuk-Dong, Taegu city.

Crossocosmia zebina WALKER, 1849

(List Dipt. Ins. Coll. Brit. Mus., IV, p. 772)

Male

Body length: 12—15 mm.

Head: Frons about 2 times width of one eye; frontal vitta black, parafrontals and parafacials golden pruinescence; frontal bristles about 14 pairs; antennae dark brown, 3rd segment about 2 times as long as 2nd; bucca black with numerous black hairs; a row of black setae present on postocular part; occiput with numerous yellowish long hairs; palpi black, upward sharp and bent.

Thorax: Dark brown but posterior part light orange with white pollen; acrostichal bristles 3+3; dorsocentral bristles 3+4.

Wings: Hyaline; costal vein, subcostal vein and stem vein brown; r4+5 with 4 short setae located dorsally more than half way from basal node to r-m; ventral side with 5 short setae on the basal node of 4r+5.

Legs: Black; fore femur with a pair of rows of long bristles on ventral surface; mid femur with a row of short bristles on ventral surface; hind femur with a pair of rows of bristles on dorsal surface, anterior part distinctly long; hind tibia with numerous comb-like setae.

Abdomen: Dark brown; 1st and 2nd tergites black and central part shining black; genitalia as shown in Fig. 4.

Localities: Mt. Palgong, Mt. Kaya and Mt. Hwangak.

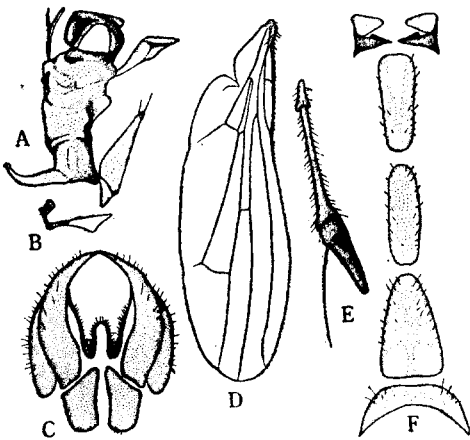


Fig. 3. *Sepedon spehegeus*

A: Phallosome. B: Ejaculatory apodeme. C: Forceps. D: Wing. E: Antennae. F: Male sternites.

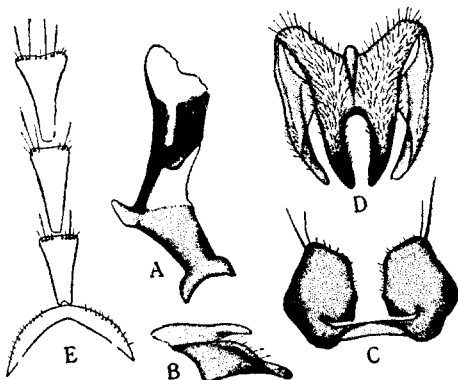


Fig. 4. *Crossocosmia zebina*

A: Phallosome. B: Parameres C: 5th sternite of male. D: Forceps.

REFERENCES

- Parker, R.R., 1914. Sarcophagidae of new England; Males of the genera *Ravina* and *Boettcheria*, xxxv, 1, pl. 1 & 2.
- Kobayashi, H., 1916. Studies of Flies (in Jap.). 9—23.
- Rohdendorf, B.B., 1937. Faune de l' URSS, xix, 1, 1—21.
- Senior-White, R., 1940. The Fauna of British India, vi, 2—15.
- Wu, Catalogus Insectorum Sinensium, v. (1939) : 430—523.
- Iconographia Insectorum Japonicorum (1957) : 1647—1720.
- Kano, R., 1959. Medical Zoology (in Jap). Seki-Bun-Dou, Tokyo, Japan. 233—263.
- Shiraki, T., 1962. Sanitary Insects. Hokuryu-Kan, Tokyo, Japan. 971—974.
- Gordon, R.M., Entomology. Blackwell Scientific Publications, Oxford. 189—207.
- Park, S.H., 1964. The Studies of Flies in Korea. *Kor. Jour. Zool.* 7 : 1, 9—14.
- _____, 1966. Studies on Flies in Korea. *Kor. Jour. Zool.* 9 : 1, 21—25.