## BRAUERIA (Lunz am See, Austria) 23:7-9

(1996)

NOTES AND ILLUSTRATIONS OF SOME HYDROPSYCHE AND HYDROMANICUS TYPES (HYDROPSYCHIDAE)

## Arturs Neboiss\*

\*Department of Entomology, Museum of Victoria, Victoria Crescent, Abbotsford, Victoria 3067, Australia. Museum of Victoria, 71

#### Introduction

The identification of Hydropsychid material from Sunda islands presented some difficulties due to the complex nature of the region and numerous species. The nature of the region and numerous species. The previously published illustrations, prepared from dry mounted specimens were found too sketchy with insufficient details. The search for type material described by Ulmer originally deposited in Stettin Museum was undertaken. The specimens were located in the Zoological Institute of the Polish Academy of ne zoological institute of the Polish Academy of Sciences, Warszawa. Other types were located in Ulmer's collection, now in the Zoological Museum, Hamburg University. Type specimens of six Hydropsyche species - annulata, celebensis, hamifera, irroratella, javanica and saranganica described by Ulmer, as well as the male and female types of Hydromanicus (Lavocutture) female types of Hydromanicus flavoguttatus Albarda from Leiden Museum have been examined, the abdomens cleared and new illustrations prepared. The dissected specimens are identified by the author's notebook number with prefix PT- on a yellow label.

Acknowledgements: I wish to express my sincere thanks to Dr.S.A.Slipinski, Institute of Zoology, Polish Academy of Sciences, Warszawa, to Dr.H.Strümpel of Zoological Institute and Museum, University Hamburg, and to Dr.J.van Tol, Department of Entomology, National Museum of Natural History, Leiden, for providing access to the type specimens.

Hydropsyche annulata (Ulmer), Figs 1-6

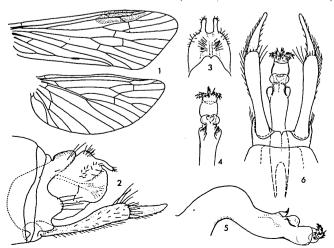
Hydromanicus annulatus Ulmer, 1905a:93, figs. 8-10

Hydropsyche annulata, Ulmer, 1910:56; 1930:438, 486; 1951:231, figs.305-311.

1951:231, figs.305-311.

Type material: "10,19, Buitenzorg, Java, K.Kraepelin leg. 24.11 bis 12.111 1904, Hamburg Museum" (destroyed); NEOTYPE: & Buitenzorg (=Bogor), Jan.1929; in alcohol (Zoological Museum, Hamburg University).

Ulmer (1910) referred to additional 8 specimens of both sexes, some captured in copula, from several localities. On the basis of this study he transferred annulata to the genus Hydropsyche. Further material was referred to this species by Ulmer in 1930. Then, in 1951, Ulmer gave a detailed description of annulata and recorded the loss of the type specimens in World War II recorded the loss of the type specimens in World War II when the Museum of Hamburg was burned. He refers to a specimen from the original locality as a replacement for specimen from the original locality as a replacement for the lost type "...als Type betrachte ich jetzt  $1\sigma^2$  von Buitenzorg, I.1929 (Spiritus)". The specimens from Buitenzorg (= Bogor) collected in January 1929 at light, consisting of  $4\sigma^2$ ,  $2^2$  were located in Ulmer's collection, University of Hamburg. There were  $2\sigma^2$ ,  $2^2$  complete as well as two specimens without abdomens and one losse abdomen which could be matched with one of the incomplete specimens, thus leaving one incomplete specimen. One of the complete male specimens was selected and designated as Neotype, the abdomen cleared (Genitalic prep. PT-1690) and illustrated. The wing venation is drawn from the second male specimen.



Hydropsyche celebensis Ulmer: Figs. 7-10.

Hydropsyche celebensis Ulmer, 1951:240, figs.321-323.

Type material: Type o, Celebes (= Sulawesi), without specific locality or date (Zoological Museum, Hamburg University).

Length of forewing: 8mm, This specimen originally

s one of the <u>Hydropsyche ha</u> 1905b:90) but later recognised was regarded as one hamifera material (Ulmer, 1905b:90) but later recognised as a distinct species (Ulmer, 1951).

The separation of the two closely related species is based on differences in shape of tergite X, which in

celebensis is more depressed, apico-lateral extensions of tergite X more curved than in <a href="https://hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hammirea.com/hamm PT-1688) is figured.

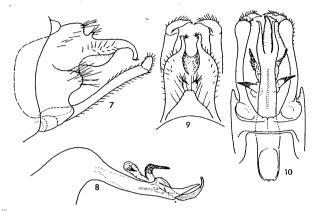


Fig. 7-10: Hydropsyche celebensis Ulmer, Type  ${}^{\circ}$ . 7-male genitalia lateral; 8-phallus lateral; 9-male genitalia dorsal; 10-ventral.

Hydropsyche hamifera Ulmer: Figs. 11-13.

Hydropsyche hamifera Ulmer 1905b:88, pl.4, figs. 115-118; 1951:242, figs. 324-328.

115-118; 1951:242, figs. 324-328. Type material: Type of labelled "Celebes/TYPE of (red label)/st.Z.1905 p.90 N71/Hydropsyche hamifera Ulmer Typen/Mus.Zool.Polonicum Warszawa 12/45", to this now added "Genitalic prep. PT-1686 A.Neboiss, 1987". Approx.2/3 of the right forewing missing. Length of left forewing 10,6mm. - 19 labelled "Celebes/TYPE 9 (red label)/St.Z.1905 p.90 N71". - 1 specimen (sex?) "Celebes/COTYPUS (yellow label)/St.Z.1905 p.90 N71"; hindwings and abdomen missing. This may be another

The type d is here illustrated; it is distinguished by the shape of tergum X, and by the broader apico-lateral lobes of the phallus as compared with H.celebensis.

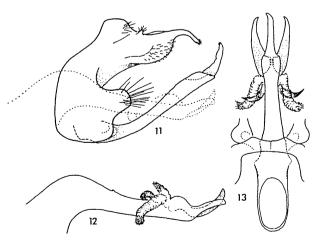


Fig. 11-13: Hydropsyche hamifera Ulmer, Type  $\mathcal{S}$ . 11-male genitalia lateral; 12-phallus lateral; 13-ventral.

Fig. 1-6: Hydropsyche annulata (Ulmer), Neotype  $\mathcal{O}$ . 1-wing venation; 2-male genitalia lateral; 3-tergit X dorsal; 4-tip of phallus dorsal; 5-phallus lateral; 6-male genitalia ventral.

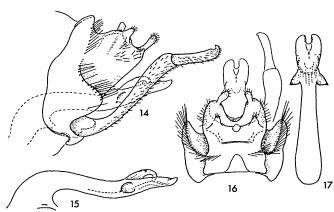
Hydropsyche irroratella Ulmer: Figs. 14-17.

Hydropsyche irroratella Ulmer 1951:235, figs. 315-317.

Type material: Type &, Java (without specific locality), originally deposited in Stettin Museum, now in the Zoological Museum Warszawa. A single specimen o'labelled "Java/TYPE/St.Z. 1905 p.91 N75/ Hydromanicus irroratus Brauer Ulmers type! (handwritten label, author irroratus Brauer Ulmers type! (handwritten label, author unknown)/ Hydropsyche irroratella Ulmer 1940 Type & (in Ulmer's handwriting)". Now added "Genitalic prep. PT-1682 A.Neboiss, 1987".

Left side forewing glued on id.label.. The description Hydromanicus irroratus Brauer, given by Ulmer (1905a:96, figs. 14-16) is based on this specimen

and therefore should be disregarded. Length of forewing 9mm (Ulmer 1951).



Ulmer, Fig. 14-17: Hydropsyche irroratella Type 14-male genitalia lateral; 15-phallus lateral; 16-male genitalia dorsal; 17-phallus dorsal.

Hydropsyche javanica Ulmer: Figs.18,19.

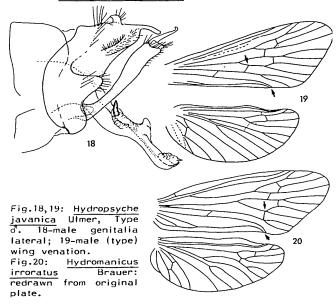
Hydropsyche javanica Ulmer: Figs.18,19.

Hydropsyche javanica Ulmer 1905b:90, pl.4, figs.

119-121; 1930:438, figs.89,90; 1951:245, figs.330-333.

Type material: Type & (originally in Stettin Museum), Java, without specific locality, now in the Zoological Museum Warszawa. - A single specimen labelled "Java/TYPE/St.Z. 1905 p.91 N73/Hydropsyche javanica Ulmer Type!/Mus.Zool.Polonica Warszawa 12/45", to that now added "Genitalic prep. PT-1684, A.Neboiss 1987". Left side forewing missing. 1987". Left side forewing missing.

Ulmer 1930 draw attention that this species may be identified by the distinct anteriorly directed pair of protuberances on dorsal side of tergum X. The wing venation (Fig.19) resembles that of Hydromanicus irroratus Brauer (1865) as published on the original plate (Fig.20). In particular the forewing discoidal cell with broadly sessile fork 2 and the separately terminating Cu2 and A at arculus. There is a fold in wing membrane between the base of forks 4 and 5 which wing membrane between the base of forks 4 and 5 which gives a false impression of a cross vein, which actually is located at about half way along the median cell basally, and being indistinct, may be overlooked. Generally the position of veins in hindwing also show similarities. It is therefore not ruled out the possibility that Hydropsyche javanica Ulmer may prove to be the same as Hydromanicus irroratus Brauer.



Hydropsyche saranganica Ulmer: Fig.21.

Hydropsyche saranganica Ulmer: Fig.21.

Hydropsyche saranganica Ulmer 1951:247, figs.334-336.

Type material: Type d, Sarangan, Central Java, Dec.1928 at light, Thienemann; in collection Ulmer, now in the Zoological Museum, Hamburg University. - Material consists of 1d,2% in alcohol, which are now placed in individual vials; type d labelled "Genitalic prep. PT-1689, A.Neboiss, 1987", illustrated.

The two females appear to represent two different species, their identity has not been established. The species is distinguished by large, distally produced lateral lobe of segment IX; distinctive apices of inferior appendages and phallus.

appendages and phallus.

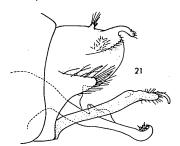


Fig.21: Hydropsyche saranganica Ulmer. genitalia lateral.

Hydromanicus flavoguttatus Albarda: Figs. 22-30.

Hydromanicus flavoguttatus Albarda 1881:19, pl.VI, figs.la-h.

Hydromanicus flavoguttatus: Ulmer figs.94,95; 1951: 284, figs.390-394; 405-415. 1930:440.

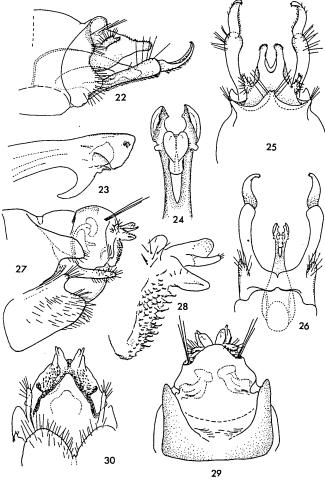


Fig.22-30: Hydromanicus flavoguttatus Albarda, Lectotype &. 22-male genitalia lateral; 23-tip of phallus lateral; 24-ventral; 25-male genitalia dorsal; 26-ventral; 27-female (paralectotype) genitalia lateral; 28-tip of genitalia enlarged; 29-genitalia dorsal; 30-ventral.

Type material: Lectotype ♂ labelled "Palemb.B...?; 5&6/78/Hydromanicus flavoguttatus Albarda d' (unknown handwriting)/Sum. Exp./Type/Cat. N°8/Museum Leiden, Hydromanicus flavoguttatus Alb./Genitalia prep. PT-1623 d', A.Neboiss, 1986". - Paralectotype  $\varphi$ , same locality and date, Cat.N°9, Genitalia prep. PT-1665 \$, A.Neboiss, 1986". - Paralectotype of "Ar.Bk.5.77/Sumatra/Cat.N°10" (Ar.Bk.=Ajer Boesoek). - All three specimens in Leiden Museum. Length of forewing 10,5-11mm.

Described from Palembang and Ajer Boesoek, Sumatra. The males are distinguished by the shape of inferior appendages and the ventro-apical hook-like process of the phallus. In female tergite VIII with broad lateral lobe; tergite IX with slender elongate lateral projection; distally covered with small projections.

## References

Albarda, H., 1881 (1887). Neuroptera, Systematische Lijst met beschrijving der nieuwe of weinig bekande soorten. Pp.1-22, in: P.J.Veth, Midden Sumatra. Fauna I; Leiden, E.J.Brill.

nuer,f., 1865. Zweiter Bericht über die auf der Weltfahrt der kais.Fregatte Novara gesammelten Neuropteren. - Verh.Zool.-Bot.Ges.Wien 15:415-422.

1905a. Trichopteren Mitt.Naturhist.Mus.Hamburg 22:87-100.

 Ulmer,G., 1905b. Zur Kenntniss aussereuropäischer Trichopteren. – Ent.Z.Stettin 66:3~119.
 Ulmer,G., 1910. Über einige von Herrn E.Jacobson auf Java gesammelte Trichopteren. – Notes Leyden Museum 32:47-66.

Ulmer, G., 1930. Trichopteren von den Philippinen und von den Sunda-Inseln. -Treubia 11:373-498.

Ulmer,G., 1951. Köcherfliegen (Trichopteren) von den Sunda-Inseln (Teil I). – Archiv für Hydrobiologie Suppl. 19:1-528.



# TRICH-L Internet Discussion List

## Trichoptera Colleagues:

In response to your enthusiastic encouragement at the Symposium last summer in Minnesota, I am pleased to announce the establishment of an electronic discussion group for Trichoptera: Trich-L.

The purpose of the discussion group list is to allow rapid communication among all Trichoptera colleagues globally who have internet access. Any and all topics that are likely to be of general interest to Trichoptera scientists and that can be expressed in relatively short messages are encouraged. Please note that this service, while we intend it to be permanent, is presently experimental for us. (I thank, especially, Mr. Ken Allen, computer technician in my department, for doing most of the work to help establish our list.)

This is not expected to displace BRAUERIA for communicating among trichopterologists.

BRAUERIA serves the important purpose of providing news of a more lasting nature.

Communication among individual Trichoptera scientists will certainly continue

subscribe Trich-L your name ( for example: subscribe Trich-L john morse )

through the various means already in operation, including E-mail. To subscribe to the discussion group list, send the following message IN THE

## to the following address:

## cuentsubscribe@entoinfo.clemson.edu

If you are using Quickmail (CE Software), you should use the "Plain Memo" form ONLY for sending to cuentsubscribe any commands such as the "subscribe" command above. (This constraint does not apply to any messages you may want to send to the discussion group.) If everything works correctly, you will receive confirmation that you are subscribed to Trich-L. You will also receive Lurher instructions about communicating through this list. I encourage you to save the message you receive and also to ask for the HELP message (instructions provided in the initial response) in order to keep on file a complete set of instructions.

If you have questions about the operation of Trich-L, please ask me directly

John C. Morse, PhD Professor of Entomology and Director of The Clemson University Arthropod Collection (CUAC) Department of Entomology Clemson University Long Hall Box 340365 Clemson, SC 29634-0365 UNITED STATES OF AMERICA office phone = +864.656.5049 (notice the new area code) home phone = +864.646.3580 (notice the new area code) FAX = +864.656.5065 (notice the new area code) E-mail: jmorse@clemson.edu WWW = http://biowww.clems M = http://biowww.clemson.edu/ento/home.html
 "Entomology Information" for searchable databases regarding the CUAC and the Trichoptera World Checklist)

#### OBITHABLES

We learn with sadness of the death of two of our old friends, who were among the first to join as participants in the First International Symposium on Trichoptera in 1974.

## Dr. Janett Florin

of Kronbühl, Switzerland, died on 27 January 1996 at the age of 78 after a long illness. He was a quiet and friendly man, and worked on the faunistics of Trichoptera and Lepidoptera in Switzerland. He published several papers on the caddisflies of Central and Eastern Switzerland and Liechtenstein between 1980 and 1992.



Florin in Lunz, 1974 (centre; Janett M.I.Crichton and O.S.Flint)

## Dr.Sándor Ujhélyi

of Budapest, Hungary, died on 19 May 1996 at the age of 95. He was one of the pioneers in the study of Trichoptera and some smaller insect orders in Hungary, and published several papers on caddisflies between 1971 and 1986. His collection is now in the Hungarian Natural History Museum.

We shall remember these friends.



Sándor Ujhélyi in Lunz, 1974 (with M.Marinković)



# **ZOBODAT - www.zobodat.at**

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Braueria

Jahr/Year: 1996

Band/Volume: 23

Autor(en)/Author(s): Neboiss Artur

Artikel/Article: Notes and illustrations of some Hydropsyche and Hydroman Icus

types (Hydropsychidae) 7-9