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IUHAN VILBASTE

# **REVISION OF THE COLLECTION OF G. FLOR\***

## 11 HOMOPTERA: CICADINEA: CICADELLOIDEA

In the second part of the revision, as in first part (Вильбасте, 1960), species are given in the order and in the transcription used by G. Flor in his monograph (1861). After the contemporary name of a species there follow the names of localities (according to the specimens present in the collection), separately for the Estonian SSR (Est.) and for the Latvian SSR (Latv.). In brackets are added the remaining collecting localities according to the work of G. Flor, but only in case there is no doubt about the uniformity of the whole material. In the localities, given in brackets, were apparently found also specimens with vellow and green labels.\*\* which were used in the monograph. For species described by G. Flor I have selected (and accordingly labelled) lectotypes only for those species that are later not declared to be synonyms. In remarks about the lectotypes the colour of the label and the number of the specimen are indicated; in brackets is enclosed the finding place, according to the catalogue in the transcription used by Flor.\*\*\*

The location of finding places is given in Fig. 1.

## Fam. Membracidae

Centrotus cornutus Linn. (p. 104-105) = Centrotus cornutus (L., 1758). (Est.: Vilsandi); Latv.: Lode.

# Fam. Cercopidae

(Cercopis sanguinolenta Linn. (p. 117). Recorded by Fischer (1778). However, this record is probably erroneous, as the nearest finding place known lies in Poland.)

\* The collection is preserved at the Institute of Zoology and Botany of the Academy of Sciences of the Estonian SSR, Tartu.

\*\* As noted in the first part, the specimens presented in the collection are provided with numbers on blue, white, yellow and green labels. Unfortunately, only the catalogues for white labels (specimens collected in 1851) and blue labels (those of 1852—1856) have been preserved.

\* Lectotypes were also selected in the first part of the revision. But as there were

Delphax adela: § f. brachyptera, blue label 4934 (Lodenhof, 17. Juni /1852/).
Delphax distincta: § f. brachyptera, blue label 2974 (locality unknown).
Delphax paryphasma: § f. brachyptera, blue label 5893 (Lodenhof, 29-31. Mai /1855/).
Delphax leptosoma: § f. brachyptera, blue label 6367 (Meyershof bei Wenden, 15. Juli /1855/).

Delphax paludosa: & f. brachyptera, green label 9595 (locality unknown).



# Fig. 1. Sampling localities of G. Flor:

Estonian SSR

			I DOIL		
Haanja (Haanhof)	-	14	Muhumaa (Moon)	_	21
Haaslava (Haselau)	-	6	Moniste (Menzen)	-	15
Imukvere (Immofer)	_	4	Ontika (Ontika)	_	34
Jaani (St. Johannis)	_	22	Orajõe (Orrenhof)	_	20
Järveküla (Jerwekülla)	_	23	Pikasilla (Langenbrücke)		10
Kaarma (Karmel)	_	25	Poltsamaa (Obernahlen)		5
Kahala (Kahal)	_	33	Pubtulaid (Ducht)		10
Kaisma (Kaisma)	20	17	Piiha (Pyha)		24
Kambia (Kamby)		7	Dihajärva (Hailigansaa)	_	11
Karilatei (Karialatz)	-	8	Pullajarve (Heiligensee)	-	11
Karia (Karris)		24	Sorve (Sworbe)	-	32
Kibalkonna (Kialkond)	-	20	Tartu (Dorpat)	-	01
Kinerkonna (Kierkond)	-	19	Hirimetsa (Tirimetz)	-	31
Kultulinne (Kultulin)	-	20	Uderna (Uddern)	-	9
Kukuinna (Kukuin)	-	0	Valjala (Wolde)	-	26
Karla (Kergel)	-	28	Vlariku (Friedrichshof)	-	12
Luunja (Lunia)	-	2	Vilsandi (Filsand)	-	30
MINKII (Michaelis)	-	18	Vandra (Fennern)	-	16
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a tutorna mus titornay iti	1	atvian	SSR		
Adaží (Aahof)	-	61	Lilaste (Lilast)	-	59
Ainaži (Hainasch)	-	35	Lobergi (Blumbergshof)	-	39
Alaukste ez. (Allokste See)	-	51	Lode (Lodenhof)	-	48
Araiši (Arrasch)	-	44	Meijeri (Mayershof)	-	43
Banuži (Kudling)	-	47	Nitaure (Nitau)	-	52
Brieki (Palmhof)	-	54	Piebalga (Pebalg)	-	49
Bukulti (Bellenhof)	-	62	Raiskums (Raiskum)	_	41
Carnikava (Zarnikau)	-	60	Rauna (Ronneburg)	-	45
Cesis (Wenden)	-	42	Ropaži (Rodenpois)	-	67
Dole (Dahlen)	-	64	Salaca (Salis)	_	36
Dubulti (Dubbeln)	-	65	Sauli (Saulhof)	_	38
Englarte (Engelhardshof)	-	57	Sermukši (Sermus)	-	50
Ergli (Erlaa)	-	71	Sidgunda (Siggunt)	1	69
Inčukalns (Hinzenberg)	_	66	Sigulda (Segewold)	_	55
Karli (Karlsruhe)	_	46	Stukmani (Stockmannshof)		72
Kirbiži (Kürbis)		37	Suntaži (Sunzel)		70
Koknese (Kokenhusen)	1	72	Turaida (Traidan)		53
Krimulda (Kremon)				the second se	47.13
	_	56	Illbroka (Stubbonsoo)		62
Lielkangari (Gr. Kangern)	-	56 68	Ulbroka (Stubbensee)	-	63

## Fam. Aphrophoridae

*Ptyelus (Ptyelus) lineatus* Linn. (p. 123—124) = *Neophilaenus lineatus* (L., 1758). Est.: Tartu, Pühajärve; Latv.: Lode, Ergli, (Liel-kangari, Nitaure, Koknese, Salaca).

*Ptyelus (Ptyelus) exclamationis* Thunberg, Fall. (p. 124-125) = Neophilaenus exclamationis (Tb., 1782). Est.: Muhumaa, Latv.: Lode, Banuži, (Inčukalns, Kirbiži).

*Ptyelus (Ptyelus) campestris* Fall. (p. 125—126) = *Neophilaenus campestris* (Fn. 1805). Latv.: Krimulda, Stukmani, (Englarte, Inčukalns).

Ptyelus (Ptyelus) spumarius Linn. Fall. (p. 126—130) = Philaenus spumarius (L., 1758). Est.: Tartu, Kukulinna, Kambja, Kaisma, Kihelkonna, Jaani, Püha; Latv.: Lode, Banuži, Koknese, Lobergi, Rauna, Salaca.

The varieties given by Flor are, according to modern nomenclature, (cf. Halkka, 1964) as follows:

var.	1.	maculata Zett.	=f.	typica
var.	2.	fasciata Schr.	=i.	flavicollis (Schr.)
var.	3.	leucocephala Lin.	=f.	leucocephala (L.)
		mountaile ar or call	f.	gibba (F.)
var.	4.	gibba Zett.	=f.	albomaculata (Schr
var.	5.	<i>leucophthalma</i> Lin.	=f.	leucophthalma (L.)
var.	6.	pallida Zett.	=f.	populi (F.)
var.	7.	lateralis Lin.	=f.	lateralis (L.)
var.	8.	praeusta Fabr.	=f.	praeusta (F.)
var	9	lineata Fabr	=f	trilineata (Schr.)

Ptyelus (Lepyronia) angulatus Fabr. (p. 130-132) = Lepyronia coleoptrata (L., 1758). Est.: Tartu; Latv.: Lode, Lobergi, (Salaca).

Aphrophora Alni Linn. Fall. (p. 135—136) = Aphrophora alni (Fn., 1805). Latv.: Lode, Salaca.

Aphrophora Salicis De G. (p. 136-137):

Aphrophora salicina (Gz., 1778). Est.: Pühajärve; Latv.: Lode, Krimulda, Koknese.

Aphrophora costalis (Mm., 1903). Latv.: Krimulda.

Aphrophora coriacea Sahlb. Fall. (p. 137-138) = Peuceptyelus coriaceus (Fn., 1829). (Latv.: Lode).

# Fam: Cicadellidae

*Ulopa obtecta* Fall. (p. 140—141) = *Ulopa reticulata* (Fn., 1794). Est.: Mõniste; Latv.: Lode, Banuži, (Sigulda, Koknese, Salaca).

*Penthimia atra* Fabr. (p. 143—144). According to Flor, he saw one female in the collection of Gimmerthal without locality label. This record is nevertheless døubtful, as the nearest finding place lies in Central Poland.

*Tettigonia viridis* Linn. (p. 145—146) = *Cicadella viridis* (L., 1758). (Est.: Tartu, Pühajärve, Saaremaa); Latv.: Lode, Kuldiga, Rauna, (Salaca).

*Euacanthus interruptus* Linn. (p. 149–151) = *Evacanthus interruptus* (L., 1758). Latv.: Lode, Salaca, (Nitaure).

*Euacanthus acuminatus* Fabr. Germ. (p. 152-153) = *Evacanthus acuminatus* (F., 1794). Est.: Tiirimetsa, Sõrve; Latv.: Lode, Banuži, (Cesis, Sigulda, Inčukalns, Koknese, Salaca). Macropsis Lanio Linn. (p. 155-157) = Jassus lanio (L., 1758). (Latv.: Lielupe, Nitaure, Sigulda).

Idiocerus salicicola m. (p. 163—164) = Sahlbergotettix salicicola (Fl., 1861). Est.: Uderna.

Lectotype; ¿, blue label 8278 (auf 1. moorigen Wiese bei Uddern, 6. Septbr. /1855/ auf Weidengebüsch sehr zahlreich).

*I diocerus discolor* m. (p. 164—166) = *Idiocerus poecilus* (H.-S., 1836). Latv.: Krimulda. The synonymy was already established by Lindberg (1937).

Idiocerus varius Germ. (in Mus. Berolin) (p. 166—167). In the collection there is only one male, which is *Idiocerus stigmaticalis* (Lew., 1834). Latv.: Rauna.

Idiocerus lituratus Fall. (p. 168-176):

*Idiocerus lituratus* (Fn., 1806). Est.: Tartu, Kambja, Uderna; Latv.: Lode, Koknese, Krimulda, (Sigulda).

Idiocerus stigmaticalis (Lew., 1834). Est.: Tartu; Latv.: Koknese. Idiocerus laminatus m. (p. 171—172) = Idiocerus laminatus (Fl., 1861). Latv.: Lode, Rauna.

Lectotype: 3; white label 8026 (Lodenhof, 3. August /1851/)

One female in the series belongs to I. stigmaticalis (Lew., 1834). Latv.: Rauna.

Idiocerus Tremulae Estlund, Zett. (p. 172—173). No specimens in the collection. According to the description, it can be only *Idiocerus tremulae* (El., 1796). (Latv.: Lode). *Idiocerus elegans* Burm. (in Mus. Berolin) (p. 174—175) =

Idiocerus elegans Burm. (in Mus. Berolin) (p. 174—175) = Idiocerus elegans (Fl., 1861). Est.: Tartu; Latv.: Lode, (Rauna, Sigulda).

Lectotype: 9, blue label 8177 (Lodenhof, 30. Aug. /1855/).

Idiocerus populi Linn. (p. 176—179) = Idiocerus populi (L., 1758). Est.: Uderna, Järveküla, (Tartu); Latv.: Lode, Banuži, (Rauna, Sigulda).

Idiocerus confusus m. (p. 179—180) = Idiocerus confusus (Fl., 1861). (Est.: Tartu); Latv.: Lode, Krimulda, (Sigulda).

Lectotype: &, blue label 6976 (Kremon in Aathal, 26. Juli /1855/, von 1 Wiese geschöpft).

*Pediopsis Tiliae* Germ. (p. 183—184) = *Pediopsis tiliae* (Germ., 1831). Latv.: Koknese, (Liepupe).

Pediopsis fruticola Fall. (p. 184-188):

Oncopsis flavicollis (L., 1758). Est.: Tartu, Muhumaa; Latv.: Lode, Salaca, Kirbiži.

Oncopsis tristis (Zs., 1838). Est.: Püha, Tiirimetsa; Latv.: Lode, Lobergi.

Oncopsis alni (Schr., 1801). L a t v.: Lode, Ainaži.

Pediopsis fruticola var. 1 Rosae Fabr.=Oncopsis flavicollis (L.) var. dubia (Fb. 1868). Latv.: Lode, Lobergi.

Pediopsis flavicollis var. 2 pallens Zett.=Oncopsis flavicollis (L.) var. hyalina (Wg. 1944). Latv.: Lode.

Pediopsis fruticola var. 3 flavicollis Linn.=Oncopsis flavicollis (L.) f. typica. E s t.: Mõniste, Vidriku, Järveküla, Muhumaa; L a t v.: Lode, Adaži, Suntaži, Salaca, Kirbiži.

Pediopsis fruticola var. 4 triangularis Fabr.=Oncopsis flavicollis (L.) var. triangularis (F., 1798). Est.: Muhumaa; Latv.: Lode, Aluksne Lake. Pediopsis fruticola var. 5 nigritulus Zett.=Oncopsis flavicollis (L.) var. nigritula (Zs., 1828). Est.: Haanja, Järveküla; Latv.: Lode, Kirbiži, Lobergi, Salaca.

Pediopsis fruticola var. 6 obscurus Zett.:

Oncopsis flavicollis (L., 1758). L a t v.: Lode.

Oncopsis alni (Schr., 1801), Est.: Pühajärve.

Oncopsis subangulatus (J. Sb., 1871). Latv.: Lode, Lobergi, Salaca.

Oncopsis tristis (Zs., 1838). Est.: Kambja, Tiirimetsa; Latv.: Adaži.

Pediopsis fruticola var. 7 frontalis m.:

Oncopsis alni (Schr., 1801). Est.: Muhumaa; Latv.: Lode, Ainaži, Ulbroka.

Oncopsis tristis (Zs., 1838). Latv.: Lode, Adaži.

Pediopsis virescens Fabr. (p. 188-189) = Macropsis marginata (H.-S., 1836). Latv.: Lode, Krimulda, Salaca, Adaži.

Pediopsis nassatus Germ. (p. 189-190):

Macropsis infuscata (J. Sb., 1871). Est.: Tartu, Sõrve, Tiirimetsa; Latv.: Lode, Banuži, Ramuli, Zaku, Salaca.

Macropsis cerea (Germ., 1834). Est.: Mõniste; Latv.: Lode, Sermukši.

*Macropsis impura* (Bh., 1847). Est., Püha, Vilsandi, Kärla; Latv.: Lode, Lobergi.

Pediopsis scutellatus Bohem. (p. 191—192) = Macropsis fuscula (Zs., 1828). Latv.: Lode, Banuži.

Pediopsis nanus H. Sch. (p. 192–193) = Hephathus nanus (H.-S., 1836). Est.: Tartu, Muhumaa; Latv.: Lode, Banuži, Nitaure.

Pediopsis Sahlbergi m. (p. 194—196) = Macropsidius sahlbergi (Fl., 1861). Latv.: Lode, Banuži, Raiskums, (Ulbroka, Cesis).

Lectotype: 8, blue label 5028 (Raiskum Krug bei Wenden, auf den Aaheuschlägen, 20. Juni /1854/).

Acocephalus (Acocephalus) rusticus Fabr. (p. 199—201):

Aphrodes bicinctus (Schr., 1776). Est.: Muhumaa, Jaani; Latv.: Lode, Banuži, Krimulda.

Aphrodes costatus (Pz., 1799). Latv.: Lode, Sermukši.

Acocephalus (Ac.) bifasciatus Linn. (p. 201-203):

Aphrodes bifasciatus (L., 1758). Est.: Karja, Vilsandi; Latv.: Lode, Banuži.

Aphrodes trijasciatus (Gz., 1785). Est.: Sõrve, Kihelkonna.

Acocephalus (Ac.) albifrons Linn. (p. 203-205):

Aphrodes albifrons (L., 1758). Latv.: Lode, Ramuli, Englarte. Aphrodes fuscofasciatus (Gz., 1778). Latv.: Krimulda.

Acocephalus (Ac.) rivularis Germ. (p. 205-208) = Aphrodes flavostriatus (Don., 1799). Est.: Tartu; Latv.: Lode, (Ligatne, Krimulda).

Acocephalus (Ac.) histrionicus Fabr. (p. 208-210) = Aphrodes histrionicus (F., 1794). Est.: Püha, Muhumaa; Latv.: Lode.

Acocephalus (Stroggylocephalus) agrestis Fall. (p. 210—211) = Stroggylocephalus agrestis (Fn., 1806). Latv.: Lode, Krimulda, Bukulti.

*Eupelix producta* Germ. (p. 213—216) = *Eupelix cuspidata* (F., 1775). Latv.: Lode, Banuži, Lielkangari, Allaži, Aluksne, (Sigulda, Piebalga, Dubulti).

Jassus (Platymetopius) undatus De G. (p. 221-223) = Platymetopius undatus (DG., 1773). Est.: Muhumaa, Kihelkonna; Latv.: Lode, Banuži, Suntaži, Cesis, Adaži, Salaca, (Ramuli).

Jassus (Deltocephalus) calceolatus Bohem. (p. 231-234) = Diplocolenus bohemani (Zs., 1839). Laty.: Lode, Banuži, Englarte, Salaca, (Ramuli).

Jassus (Deltoc.) for mosus Bohem. (p. 234-236) = Metalimnus formosus (Bh., 1845), Est.: Tartu,

Jassus (Deltoc.) formosus var. marmorata Zett. (p. 236-237) = Metalimnus marmoratus (Fl., 1861). Est.: Tartu; Latv.: Lode, Banuži, Rauna, Sermukši,

Lectotype: 3, blue label 6182 (Lodenhof, 3. Juli /1855/ f. 1 Wiese rechts vom Wege nach Lohjen).

Jassus (Deltoc.) ocellaris Fall. (p. 237-239) = Errastunus ocellaris (Fn., 1806). Latv.: Lode, Banuži, Brieki, Krimulda, Salaca, Ainaži.

Jassus (Deltoc.) distinguendus m. (p. 240-242). Males: Jassargus pseudocellaris (Fl., 1861, p. 547, nom. nov. for J. (D) distinguendus Fl. nec. Kb. 1858). L a t v.: Lode, Banuži.

Lectotype: 3, blue label 3992 (Lodenhof, 3-8 Juli /1853/)

Jassargus neglectus (Th., 1895). Est.: Vilsandi; Latv.: Lode, Banuži, Ramuli.

Jassargus flori (Fb., 1869). Latv.: Lode.

Jassargus repletus (Fb., 1869). Latv.: Lilaste.

Jassus (Deltoc.) socialis m. (p. 242-244) = Turrutus socialis (Fl., 1861). Est.: Tartu, Poltsamaa; Latv.: Banuži, Krimulda, Bukulti, Koknese, Salaca, (Nitaure).

Lectotype: 3. blue label 6981 (Kremon in Aathal, 26, Juli /1855/)

Jassus (Deltoc.) frigidus Bohem. (p. 244-246) = Psammotettix pallidinervis (Db., 1850). (Latv.: Lode, Banuži).

Jassus (Deltoc.) languidus m. (p. 246-247). No specimen in the collection, but there is no doubt that this species has been rightly interpreted by all later workers. = Arocephalus languidus (Fl., 1861).

Jassus (Deltoc.) Punctum m. (p. 247-249) = Arocephalus punctum (Fl., 1861). Numerous specimens with green and yellow labels (Latv.: Lode, Banuži).

Lectotype: &, green label 9186 (locality unknown):

Jassus (Deltoc.) abdominalis Fabr. (p. 249-251) = Verdanus abdominalis (F., 1803). Est.: Tartu, Kambja, Muhumaa; Latv.: Lode, Banuži, Lobergi, Koknese.

Jassus (Deltoc.) pascuellus Fall. (p. 251-253):

Arthaldeus pascuellus (Fn., 1826). Est.: Tartu; Latv.: Lode, Banuži, Bukulti, Koknese.

Arthaldeus striifrons (Kb., 1868). Latv.: Lode, Bukulti.

Jassus (Deltoc.) assimilis Fall. (p. 253-255) = Sorhoanus

assimilis (Fn., 1806). Est.: Tartu; Latv.: Lode, Banuži. Jassus (Deltoc.) vitripennis m. (p. 255-257)=Paluda vitripennis (Fl., 1861). In the collection there is only one male with yellow label. (Latv.: Nitaure, Banuži).

Lectotype: 8, yellow label 1434 (locality unknown) (damaged specimen, genitalia preserved). Jassus (Deltoc.) striatus Linn. (p. 259-261):

Psammotettix confinis (Db., 1850). Est.: Kihelkonna; Latv.: Lode, Ramuli, Allaži, Kirbiži.

Psammotettix alienus (Db., 1851). Latv.: Banuži.

Jassus (D.) striatus var. 1. poecilus m. (p. 261-262) = Psammotettix poecilus (Fl., 1861). Latv.: Lode, Banuži, Krimulda.

Lectotype: 8, blue label 8083 (Lodenhof, 25. Aug. /1855/)

Jassus (D.) striatus var. 2. pallidus m. = Psammotettix cephalotes (H.-S., 1834). Est.: Tartu; Latv.: Lode, (Banuži).

Jassus (Deltoc.) bipunctipennis Bohem. (p. 263-264) = Palus costalis (Fn., 1806). Latv.: Lode.

Jassus (Deltoc.) metrius m. (p. 264—265) = Erzaleus metrius (Fl., 1861). In the collection only one female with yellow label, probably from? (Est.: Tartu).

Lectotype: 9, green label 8441 (locality unknown, probably Tartu)

Jassus (Deltoc.) Panzeri m. (p. 265-266) = Palus panzeri (Fl., 1961). In the collection one male and one female with yellow labels. (Latv.: Lode).

Lectotype: 3, yellow label 1135 (locality unknown, probably Lode).

Jassus (Deltoc.) pulicaris Fall. (p. 266—267) = Deltocephalus pulicaris (Fn., 1806). Latv.: Lode, Banuži, Salaca, (Inčukalns, Kirbiži).

*Jassus (Athysanus) stylatus* Bohem. (p. 273—276) = Doratura stylata (Bh., 1847). Est.: Tartu, Kambja; Latv.: Lode, Banuži, Krimulda, (Bukulti, Ulbroka).

Jassus (Athysanus) homophylus m. (p. 276—277) = Doratura homophyla (Fl., 1861). (Est.: Tartu); Latv.: Lode, Banuži, Ulbroka.

Lectotype: 3, blue label 5157 (Kudling, 2. Juli /1854/ f. 1 mit Heidekraut bewachsenen Hügel).

Jassus (Athysanus) ventralis Fall. (p. 277—279) = Graphocraerus ventralis (Fn., 1805). Latv.: Lode, Banuži, Kirbiži, Krimulda, (Nitaure).

Jassus (Athysanus) flavovarius H. Sch. (p. 279—282) = Handianus flavovarius (H.-S., 1834). (Latv.: Krimulda).

Jassus (Athysanus) Quadrum Zett. (p. 282—284) = Athysanus quadrum (Bh., 1845). Est.: Tartu, Sõrve; Latv.: Lode, Nitaure, Allaži, (Adaži, Koknese).

Jassus (Athysanus) sulphureus Krschbm. (p. 284—286) = Laburrus impictifrons (Bh., 1851). Latv.: Lode, Banuži, Suntaži, Krimulda, (Koknese).

Jassus (Athysanus) lineatus (Fabr. Germ. (p. 286-288) = Stictocoris lineatus (F., 1787). Est.: Kihelkonna; Latv.: Koknese, (Salaca).

Jassus (Athysanus) Preyssleri Fieb. (p. 288-290). Males: Paluda preyssleri (H.-S., 1839). Est.: Tartu, Muhumaa. Paluda adumbrata (C. Sb., 1842). With yellow labels.

Jassus (Athysanus) flaveolus Bohem. (p. 291). No specimen in the collection. After the description, it is Paluda flaveola (Bh., 1845). (Latv.: Lode).

Jassus (Athysanus) plebejus Fall. (p. 291—294). The males are Euscelis distinguendus (Kb., 1858). Est.: Saaremaa.

Jassus (Athysanus) pauperculus m. (p. 295-296). The collection contains only one specimen without abdomen, designated by Flor as a female. This specimen bears a blue label with number 3326. This means that it was collected in Est. Tartu near Annemõisa. But the monograph notes that the only female was collected in Lode (Latv.).

The coloration and especially the spinulation of the legs (I - 4.5; II - 5.5) of this specimen resemble those of *Allygus mixtus* (F., 1794).

Only the measurements are somewhat smaller, especially the length of the fore wings. Apparently it is a brachypterous specimen of the latter species.

Jassus (Athysanus) sordidus Zett. (p. 296-300). Males: Streptanus sordidus (Zs., 1828). Est.: Tartu; Latv.: Krimulda. Streptanus confinis (Rt., 1880). Latv.: Bukulti.

Jassus (Athysanus) grisescens Zett. (p. 300—303) = Macustus grisescens (Zs., 1828). (Est.: Tartu); Latv.: Lode, Banuži.

Jassus (Athysanus) pallens Zett. (p. 303-305) = Doliotettix pallens (Zs., 1828). Est.: Pühajärve, Mõniste; Latv.: Lode, Koknese, (Lobergi, Salaca).

Jassus (Athysanus) brevipennis Krschbm. (p. 305—307) = Streptanus marginatus (Kb., 1858). (Est.: Tartu); Latv.: Lode, Banuži, (Inčukalns, Krimulda, Zarnikava, Koknese).

Jassus (Jassus) Striola Fall. (p. 315-318). Males:

Limotettix sphagneticus Em., 1966. Latv.: Lode, Banuži.

Limotettix ochrifrons Vb. in litt. Latv.: Lode.

Jassus (J.) puncticollis H. Sch. (p. 318-320) = Grypotes puncticollis (H.-S., 1832). Est.: Uderna, (Tartu); Latv.: Lode, Lielkangari, Koknese, (Krimulda, Zarnikava).

Jassus (J.) Punctatus Fall. (p. 320-321)=Balclutha punctata (F., 1775). Est.: Tartu, Kambja, Kaisma, Muhumaa, Vidriku, Põltsamaa; Latv.: Lode, Koknese, Lobergi, Ulbroka, Adaži, Krimulda, Sauli, Salaca.

Jassus (J.) mixtus Fabr. Germ. (p. 322-325) = Allygus mixtus (F., 1794). Latv.: Lode, Koknese, (Meijeri, Nitaure, Krimulda, Ramuli).

Jassus (J.) atomarius Fabr. (p. 326—328) = Allygidius commutatus (Fb., 1872). Est.: Vilsandi, Kärla, Kaali; Latv.: Lode, Banuži, Koknese, Lielkangari, (Inčukalns).

Jassus (J.) punctifrons Fall. (p. 328—330) = Sagatus punctifrons (Fn., 1826). Est.: Püha; Latv.: Lode, Banuži, Salaca, Krimulda, Koknese.

Jassus (J.) cruentatus Fall. (p. 330—331) = Idiodonus cruentatus (Pz., 1799). Est.: Tartu, Vändra; Latv.: Lode, Koknese.

Jassus (J.) pinetellus Bohem. (in Mus. Berolin) (p. 331-333) = Ophiolix paludosus (Bh., 1845). Est.: Muhumaa; Latv. Krimulda.

Jassus (J.) virescens Fall. (p. 333—335) = Elymana sulphurella (Zs.; 1828). Est.: Tartu, Muhumaa; Latv.: Lode, Banuži, Nitaure, Salaca.

Jassus (J.) antennatus Bohem. (p. 335-336) = Cicadula frontalis (H.-S., 1835). Seven females with yellow labels, probably from Lode (Latv.).

Sahlberg (1871) incorrectly connected this species with a new species described by him — *Limotettix flori*, although in the original description of Flor it is clearly said that the ground colour of the fore wings is brownish.

Jassus (J.) 4-notatus Fabr. (p. 336-339):

*Cicadula quadrinotata* (Fr., 1794). Est.: Tartu, Luunja, Põltsamaa, Muhumaa, Kaisma; Latv.: Lode, Banuži.

Cicadula longiventris (J. Sb., 1871). Est.: Tartu; Latv.: Lode.

*Cicadula persimilis* (Edw., 1920). Est.: Tartu, Kambja; Latv.: Lode, Banuži, Koknese.

Cicadula saturata (Edw., 1915). Est.: Tartu.

Cicadula nigricornis (J. Sb., 1871). Est.: Tartu; Latv.: Lode.

The last-named species was placed in the collection under a special label "Jassus (Jassus) 4-notatus var. brevivertex". At it has never been described, it must be considered as nomen nudum.

Jassus (J.) 7-notatus Fall. (p. 339—341) = Macrosteles septemnotatus (Fn., 1806). Est.: Kaisma, Pühajärve; Latv.: Lode, Banuži. Jassus (J.) 6-notatus Fall. (p. 341—344). Males:

Macrosteles sexnotatus (Fn., 1806). Est.: Kambja; Latv.: Zaku, Bukulti, Krimulda.

Macrosteles ossiannilssoni (Lb., 1954). Est.: Kaisma; Latv.: Lode, Sermukši, Koknese.

Macrosteles cristatus (Rb., 1927). Est.: Kambja; Latv.: Lode.

Macrosteles viridigriseus (Edw., 1924). Est.: Ťartu; Latv.: Lode. Macrosteles frontalis (Sc., 1875). Latv.: Lode.

Macrosteles horvathi (Wg., 1935). Est.: Kambja.

Macrosteles variatus (Fn., 1806). L a t v .: Lode.

Macrosteles septemnotatus (Fn., 1806). Latv.: Lielkangari.

Two last-named species were in the collection under the label "Jassus (Jassus) 6-notatus var. variatus Fall".

Sonronius dahlbomi (Zs., 1839). L a t v.: Banuži.

Jassus (J.) maculipes Zett. (p. 344-345) = Sonronius dahlbomi (Zs., 1839). Latv.: Banuži.

Jassus (J.) Dahlbomi Zett. (p. 345-347) = Sonronius dahlbomi (Zs., 1839). Latv.: Banuži.

Jassus (J.) biguttatus Fall. (p. 347-348) = Hesium biguttatum (Fn., 1806). Latv.: Lode, Banuži, (Ligatne, Nitaure).

Jassus (J.) abietinus Fall. (p. 348-350) = Pithyotettix abietinus (Fn., 1806). Est.: Kärla, (Tartu); Latv.: Lode.

Jassus (J.) torneellus Zett. (p. 350-351) = Colladonus torneellus (Zs., 1839). Est.: Pühajärve.

Jassus (J.) caudatus m. (p. 351-352). No specimen in the collection. After the description, it is *Palus caudatus* (Fl., 1861). (Latv.: Lode).

Jassus (J.) prasinus Fall. (p. 352-353) = Thamnotettix confinis (Zs., 1828). Latv.: Lode, Sidgunda, Ainaži, (Nitaure, Sigulda).

Jassus (J.) subfusculus Fall. (p. 354—356) = Speudotettix subfusculus (Fn., 1806). (Est.: Pühajärve); Latv.: Lode, Banuži, Meijeri, Kirbiži, (Krimulda, Koknese).

Jassus (J.) splendidulus Fabr. Fall. (p. 356-359) = Lamprotettix octopunctatus (Schr., 1796). Latv.: Koknese, Stukmani, (Krimulda).

Jassus (J.) transversus Fall. (p. 359—361) = Scleroracus transversus (Fn., 1826). Est.: Muhumaa, Püha, Anseküla; Latv.: Lode, Banuži, Nitaure, (Salaca).

Jassus (J.) striatulus Fall. (p. 361-363):

Scleroracus decumanus (Kk., 1948). Est.: Pühajärve; Latv.: Lode, Banuži, Raiskums, Ramuli.

Scleroracus corniculus (Ms., 1866). Latv.: Lode, Ramuli.

Scleroracus russeolus (Fn., 1826). Latv.: Koknese, Bukulti, Englarte.

One part of the last-mentioned species was in the collection under the label "Jassus (Jassus) striatulus Fall. var. a" (cf. p. 632-633).

Jassus (J.) fenestratus H. Sch. (p. 363-365). The only male (with yellow label), probably from Sigulda (Latv.:), belongs to Neoaliturus guttulatus (Kb., 1868). Agallia venosa Fall. Germ. (p. 366-367). Males:

Anacertagallia venosa (Fn., 1806). L a t v.: Lode.

Anacertagallia ribauti (Oss., 1938). Latv.: Krimulda, Ulbroka. Anacertagallia estonica Vb., 1959. Est.: Vilsandi.

Agallia brachyptera Boh. (p. 554-555) = Anacertagallia brachuptera (Bh., 1847). Est.: Tartu: Latv.: Lode.

Typhlocyba albostriella Fall. (p. 382-384):

Alebra albostriella (Fn., 1826), Est.: Karja: Latv.: Krimulda, Stukmani.

Alebra wahlbergi (Bh., 1845), Latv.: Koknese,

T y p h l o c y b a f a cialis m. (p. 385-386) = Emelyanoviana molli-cula (Bh., 1845). (E s t.: Muhumaa); L a t v.: Lode, Koknese, (Meijeri).

Typhlocyba citrinella Zett. (p. 386-388) = Wagneriala minima (J. Sb., 1871). Latv.: Lode, Lielkangari, (Inčukalns).

Typhlocyba flavipennis Zett. (p. 388-389) = Notus flavipennis (Zs., 1828). Est.: Tartu, Pühajärve; Latv.: Lode, Englarte, Koknese, Salaca.

Typhlocyba forcipata m. (p. 389-390):

Forcipata forcipata (Fl., 1861), Laty.: Lode, Koknese.

Lectotype: 3, blue label 3972 (Lodenhof, 9.-13. Juli/1853/).

Forcipata citrinella (Zs., 1828). Latv.: Lode, Koknese.

Typhlocyba aureola Fall. (p. 391-392) = Erythria aureola (Fn., 1826). L a t v.: Lode, (Banuži).

Typhlocyba viridula Fall. (p. 392-393). All males belong to Chlorita paolii (Oss., 1939). Est.: Kambja, Pühajärve, Muhumaa; Latv.: Lode, Banuži, Koknese.

Typhlocyba smaragdula Fall. (p. 393-394). Males:

Kybos smaragdulus (Fn., 1806). Est.: Tartu; Latv.: Ainaži.

Kybos lindbergi (Lv., 1951). L a t v.: Lobergi.

Kybos virgator (Rb., 1933). Latv.: Lode, Salaca.

Kubos butleri (Edw., 1908). Latv.: Lode.

Typhlocyba flavescens Fabr. (p. 394-396). All males belong to Empoasca flavescens (F., 1794). Est.: Luunia: Laty.: Lode, Krimulda, Koknese, Lilaste.

Typhlocyba apicalis m. (p. 396) = Empoasca apicalis (Fl., 1861). Latv.: Koknese, (Turaida).

Lectotype: &, blue label 7395 (Kokenhusen, 7. Aug. /1855/).

Typhlocyba parvula Bohem. (p. 397-398). Males:

Arboridia parvula (Bh., 1845). Latv.: Krimulda.

Arboridia ribauti (Oss., 1937). Latv.: Lode, Koknese.

Arboridia erecta (Rb., 1931). L a t v.: Krimulda.

Typhlocyba Hyperici H. Sch. (p. 398-400) = Hypericiella hyperici (H.-S., 1836) (Latv.: Lode, Sigulda).

Typhlocyba blandula Rossi (p. 400-403):

Flammigeroidia flammigera (G., 1785). Est.: Tartu, Luunja, Muhumaa; Latv.: Koknese.

Flammigeroidia tiliae (G., 1785). Latv.: Koknese.

Flammigeroidia ordinaria (Rb., 1936). E s t.: Tartu; L a t v.: Koknese.

Flammigeroidia rhamnicola (Hv., 1903). Est.: Tartu.

Flammigeroidia rubrovittata (Lt., 1869). Latv.: Lilaste.

Flammigeroidia roseipennis (Tl., 1851). Yellow label.

Typhlocyba rosea m. (p. 403—404) = Flammigeroidia roseipennis (Tl., 1851). (Est.: Tartu; Latv.: Lode, Sigulda, Lielkangari).

Tuphlocyba Coruli Tollin (p. 404-405) = Alnetoidia alneti (Db., 1850). Est.: Haanja, Muhumaa, Valjala, Järveküla; Latv.: Lode, Ramuli, Krimulda, Koknese.

Typhlocyba scutellaris H. Sch. (p. 405-406) = Zyginidia moczarui (Hy., 1910), Est.; Kihelkonna,

Typhlocyba Rosae Linn. (p. 407). Males:

Edwardsiana rosae (L., 1759). Latv.: Koknese.

Edwardsiana avellanae (Edw., 1888). Latv.: Koknese.

Edwardsiana alnicola (Edw., 1924). L a tv.: Lode.

Fagocyba douglasi (Edw., 1878). Est.: Kaali; Latv.: Koknese.

Tuphlocuba nitidula Fabr. (p. 407-408) = Edwardsiana bifasciata (Bh., 1852). Latv.: Krimulda, (Sigulda).

Typhlocyba geometrica Sch. (p. 408-409) = Edwardsiana geometrica (Schr., 1801). Est.: Tartu, Kambja, Muhumaa, (Põltsamaa); Latv.: Lode, Sermukši, Koknese, (Sigulda).

Tuphlocyba 10-punctata Fall. (p. 409-411):

*Linnavuoriana decempunctata* (Fn., 1806). Est.: Tartu, Kambja, Luunja, Põltsamaa, Kaisma; Latv.: Lode, Koknese.

Linnavuoriana sexpunctata (Fn., 1826) — vellow labels.

Typhlocyba Ulmi Linn, Fall. (p. 411-412) = Ribautiana ulmi (L., 1758). Est.: Tartu, Pühajärve; Latv.: Lode, Koknese.

T y phlocyba Quercus Linn. (p. 412–414) = Typhlocyba quercus (L., 1758). Est.: Kambja, Karja, Kärla; Latv.: Koknese, Adaži, Salaca, (Nitaure, Krimulda, Cesis).

Typhlocyba stellulata Burm. (p. 414-416) = Aguriahana stellulata (Bm., 1841). Latv.: Lode, Koknese, (Meijeri, Sigulda, Stukmani).

Typhlocyba pictilis Stal (p. 416-418) = Aguriahana pictilis (St., 1853). (Latv.: Lode).

Typhlocyba pulchella Fall. (p. 418-420):

Eurhadina pulchella (Fn., 1806). Est.: Kambja; Latv.: Lode, Salaca, Koknese, Nitaure.

Eurhadina saageri Wg., 1937. Latv.: Salaca, Krimulda. Eurhadina kirschbaumi Wg., 1937. Latv.: Krimulda.

Eurhadina concinna (Grm., 1831). Est.: Puhtulaid.

Typhlocyba Germari Zett. (p. 420-421) = Aguriahana germari (Zs., 1839). Est.: Tartu; Latv.: Lode, Banuži, Allaži, Lilaste, Lielkangari, (Inčukalns, Carnikava). Typhlocyba tenella Fall. (p. 421—423) = Eupteryx tenella

(Fn., 1806). Est.: Pühajärve; Latv.: Lode, Koknese, (Sigulda, Nitaure).

Typhlocyba aurata Linn. (p. 423–424) = Eupteryx aurata (L., 1758). Latv.: Koknese.

Typhlocyba picta Fabr. (p. 425-426):

Eupteryx atropunctata (Gz., 1778). Latv.: Salaca. Eupteryx origani Zv., 1948. Latv. Banuži, Koknese.

Typhlocyba vittata Linn. (p. 426-428):

Eupteryx vittata (L., 1758). Est.: Luunja, Pühajärve; Latv.: Lode, Ramuli, Koknese.

Eupteryx notata Ct. 1837. Est.: Pühajärve; Latv.: Lode, Banuži, Koknese.

Typhlocyba urticae Linn. (p. 428-431):

Eupteryx cyclops (Mm., 1906). Est.: Muhumaa; Latv.: Krimulda, Koknese, Lobergi.

Eupteryx calcarata Oss., 1936. Latv.: Koknese.

Typhlocyba Curtisii m. (p. 431-432). There is no specimen of that species in the collection. But on the basis of the material collected in several places in Latvia, situated very near to the *locus typicus* of this species, it can be decided that it is the species hitherto known under the name *Eupteryx stachydearum* (Hdy., 1848-50). It must be noted that it is not conspecific with the one described by Ribaut (1936). The genitalia of this species, after a specimen from Latvia, are given in Fig. 2.



Fig. 2. Eupteryx stachydearum (Hdy.) nec Rb. Male genitalia: A — genital segment, lateral view (enlargement  $82 \times$ ); B — same, ventral view ( $82 \times$ ); C — aedeagus, lateral view ( $150 \times$ ); D — same, caudal view ( $150 \times$ ); E — tip of aedeagus, dorsal view ( $250 \times$ ); F — stylus, lateral view ( $150 \times$ ); G — connective ( $112 \times$ ); H — pygofer lobe, median view ( $150 \times$ ); I — apodemes ( $32 \times$ ).

*Typhlocyba collina* m. (p. 433—436) = *Eupteryx collina* (Fl., 1861). Latv.: Banuži.

This species has been misinterpreted hitherto. Ribaut (1936), relying on the fact that, according to Flor (p. 436), the species had been also found by him in South France, has incorrectly described as *collina* a southern species whose range extends to southern Poland, only. It is considerably south of the *locus typicus* of the species. As the collection contains one male and several females, I have investigated the genitalia of the male (which was selected as lectotype). They are given in Fig. 3. As it can be seen, the genitalia are similar to those of *Eupteryx alticola* Rb., 1936, which thus is a younger synonym of *collina*. Since *collina* Rb. nec Fl. remains without a name, the variety name *E. florida* Rb., 1936 is valid for it. Revision of the Collection of G. Flor



Fig. 3. Eupteryx collina (Fl.) nec Rb. Male genitalia: A — genital segment, lateral view  $(82\times)$ ; B — same, ventral view  $(82\times)$ ; C — aedeagus, lateral view  $(169\times)$ ; D — same, caudal view  $(169\times)$ ; E — tip of aedeagus, caudal and dorsal view  $(169\times)$ ; F — stylus  $(150\times)$ ; G — connective  $(150\times)$ ; H — pygofer lobe, median view  $(150\times)$ ; I — appendages of pygofer lobe, caudal view  $(150\times)$ ; J — apodemes  $(52\times)$ .

Lectotype: 3, blue label 5988 (Kudling, 8 Juni /1855/, auf trockenen hin und wieder mit Heidekraut bewachsenen Bergwiese).

It must be noted that the specimens from southern France do not belong to the species described from Livonia. This can be concluded from the short descriptions given in footnotes on pages 333 and 334. The specimens from Gemenos should have "statt dieses mittlern Fleckens 2 am Hinterrande des Scheitels die von einander eben so entfernt sind stehen wie die Flecken der 2 vorderen Paare". This is a feature characteristic of *E. zelleri* (Kb., 1868). In another, unfortunately mostly unlabelled, collection gathered by G. Flor in various European countries I found a female with the name label "*Typhlocyba livonica* var. *Gemenoviana* m." which apparently is one of the specimens mentioned by Flor (p. 333). Judging by the coloration, it is really *E. zelleri* (Kb.).

I could also find all the specimens (4 s, 5 p) taken in Montpellier in the above-mentioned collection under the name "*Typhlocyba livonica* var. *Monspesoulana* m.". They very well agree with the description in the footnote p. 334 and belong to *E. melissae* Ct., 1837.

Typhlocyba jucunda H. Sch. (p. 632—634) = Euppterocyba jucunda (H.-S., 1836). (Est.: Pühajärve).

*Typhlocyba suturalis* m. (p. 634—635) = Edwardsiana gratiosa (Bh., 1851). Est.: Pühajärve).

27

## REFERENCES

Fischer J. B., 1791. Versuch einer Naturgeschichte von Livland, 2. Aufl. Königsberg, Flor G., 1861. Die Rhynchoten Livlands. Zweiter Teil. Rhynchota gulaerostria Zett. (Homoptera Aut.) Cicadina und Psylloidea. Arch. Naturk. Liv-, Est-Kurlands (2. Ser.) 4 : 1-638.

Halkka O., 1964. Geographical, spatial and temporal variability in the balanced polymorphism of *Philaenus spumarius*. Heredity 19 (3) : 383-400.

Ribaut H., 1936: Homoptères auchénorhynques. I. (*Typhlocybidae*). Faune de France, 31: 1-229.
Sahlberg J., 1871. Öfversigt af Finlands och den Skandinaviska halföns Cicadariae, Not. Soc. F. Fl. Fennica (N. S.) 9 (12): 1-506.
Вильбасте Ю., 1960. Ревизия коллекции Г. Флора. I. Homoptera: Cicadina: Fulgo-

roidea. Изв. АН ЭССР, Биология, 9 (12) : 135-142.

Academy of Sciences of the Estonian SSR, Institute of Zoology and Botany

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#### IUHAN VILBASTE

## G. FLORI KOGU REVISION

#### II. Homoptera: Cicadinea: Cicadelloidea

#### Resümee

Vaadati läbi kõnesolevas kogus (kogutud aastail 1851—1860) asuvad isendid. Leiukohad on antud kaasaegsete nimetuste järgi eraldi Eesti ja Läti NSV kohta. On esitatud kahe liigi isaste genitaalide joonised.

Eesti NSV Teaduste Akadeemia Zooloogia ja Botaanika Instituut

Toimetusse saabunud 26. VI 1972

## ЮХАН ВИЛЬБАСТЕ

# РЕВИЗИЯ КОЛЛЕКЦИИ Г. ФЛОРА II. Homoptera: Cicadinea: Cicadelloidea

#### Резюме

Во второй части, как и в первой (Вильбасте, 1960), виды приведены в порядке и транскрипции, употребляемых Г. Флором в своей монографии. Кроме использованных Г. Флором названий, даны современные названия видов, а также местонахождения особей отдельно для Эстонской (Est.) и Латвийской ССР (Latv.). В скобках приведены остальные места находок по монографии, но только в случаях, если нет сомнений, что весь материал однообразен. В этих местах найдены, по всей вероятности, и особи, имеющие желтые и зеленые этикетки (каталог которых потерян). Для видов, описанных Г. Флором и не выясненных позднее как синонимы, выбраны лектотипы. На рис. 1 отмечены места находок Г. Флора, на рис. 2 и 3 — гениталии самцов видов Eupteryx stachydearum (Hdy.) пес. Rb. (=E. curtisii (Fl.)) и E. collina (Fl.) пес. Rb. (=E, alticola Rb.).

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