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*Ed. Wagner:***SALDULA VESTITA DLG. Sc. — A GOOD SPECIES.**

In 1874 Douglas and Scott described a new species of *Saldula* from South-England and gave to it the above mentioned name (Lit. 1). PUTON (Lit. 3) and SAUNDERS (Lit. 4) however considered it to be only a variety (f. *macr.*) of *S. c-album* FIEB. This interpretation has been acknowledged by all following authors. In spite of this a careful examination of both species showed that it is a good species. It must be placed between *S. c-album* FIEB. and *S. saltatoria* L., but it is mostly related to the first species. Both, *S. vestita* and *S. saltatoria* occur as well in the f. *macr.* as in the f. *brach.* Therefore it is incorrect to regard all specimen with entirely developed hemelytra to be *S. vestita*. To this species belongs the f. *venedarum* E. WAGN., which I described in 1937 from the banks of the Elbe above Hamburg (Lit. 2) and which I considered then a variety of *S. c-album*. On the other hand the f. *reuteri* STICH. (Lit. 5) belongs to *S. c-album* FIEB.

Description.

I. f. *macr.*: Shape long, oval, much slenderer than all related species. Hemelytra towards posterior part much narrowed (Fig. 1 A). Body densely covered with short, fine, golden pubescence and mixed with sparse black hairs. By this pubescence the species gets a brownish aspect and may be easily distinguished from all other species of *Saldula*.

Head black. Clypeus and face reddish-yellow, sometimes with black spots. Lorae seen from the front distinctly surpassing the clypeus downward (Fig. 2 G, middle). Eyes convex, 1,03 times with the ♂ and 0,88 times with the ♀ as broad as the front at its narrowest point. The shining spot, which is free of facets is always black and bordered by a narrow yellow stripe. The front wears besides this spot a little yellow callus.

Antennae slender, the first two joints as a rule yellowish, the first one with 2 longitudinal black stripes, the 2nd joint slightly curved and towards the apex somewhat incrassated, 1,75 times as long as the 3rd; the apical two joints black, equal in length.

Sides of pronotum much rounded (Fig. 2 A), basal margin sinuated. Scutellum very long, even in the f. *brach.*, much longer than in *S. c-album* (Fig. 1). The transversal furrow is situated near its middle. Hemelytra darkish, with pale drawings of various extent, mostly coloured like Fig. 1, A + B (f. *typica*). Membrane long, surpassing the abdo-

men by far, its posterior margin with a pointed arch, the lateral margin has a black spot in the level of the first cell.

Underside black. Rostrum pitchy-brown with black apex. Legs yellowish; coxae black, except apex. Thighs with black longitudinal stripes. Tibiae with the black paintings characteristic for the *saltatoria*-group: a spot at base, a stripe in the middle of the exterior edge and dark apex. Apex of the 3rd joint of tarsae black.

Genital-segment of ♂ broad, regularly tapered off towards the back, its sides nearly straight (Fig. 2 F, above). Genital-opening small, analconus very long. Parameres extremely long and slender (Fig. 2 D), the protuberance at their inner side little developed and with sparse and short hairs. Hypophysis slender, strongly curved. Penis relatively big, adjoining-plates strong, ductus seminis convolute, apex of theca broadly rounded. Posterior margin of genital-segment with 2 very distant, rounded appendages.

II. f. *brach*. Pronotum somewhat narrower, its sides much rounded too (Fig. 2 A, above). Membrane shortened (Fig. 1 B). Thence the shape appears broader and more rounded towards the back.

Variation.

1. f. *typica*: Coloured as Fig. 1, A + B. The round spot towards the apex of exocorium whitish, all other pale spots yellowish.

2. f. *venedarum* E. WAGN. Hemelytra pale in their greatest part. The pale spot towards the end of clavus very great. Corium pale with less dark paintings: the basal angles, 3 spots in the exocorium, the middlest being the largest, the apical one often confluent with the spot at the apex, the centre of the eye-shaped spot of mesocorium and a group of singular spots at the inner angle of corium. Even the cells of the membrane often without dark spots.

3. f. *obscurior*: f. nov.: Hemelytra darkish, scarcely visible are the reduced C-shaped spot of exocorium, the round spot towards the apex of mesocorium, and a small marginal spot near it. The eyeshaped spot of mesocorium as well as the spot towards the end of clavus sometimes appear indistinctly.

Discussion.

S. vestica DLG. Sc. is distinguished from all species by its large, slender shape and by the dull brownish colour of its surface, due to its dense golden pubescence. *S. c-album* FLEB. in addition has the sides of pronotum straight (Fig. 2 B), bigger eyes, which are 1,55 times with the ♂ and 1,05 times with the ♀ as broad as the front at its narrowest point. The 2nd joint of antennae is only 1,51 times with the ♂ and 1,55 times with the ♀ as long as the 3rd. The lorae by far do not reach the apex of the clypeus when seen from the front (Fig. 2 G, above). The genital-segment of the ♂ has its sides broadly rounded, the genital-opening is wider, the anal-conus shorter and thicker (Fig. 2 F, middle). The parameres are shorter and thicker (Fig. 2 C), the protuberance at the inner side appears more distinctly and is densely covered with long setae, the

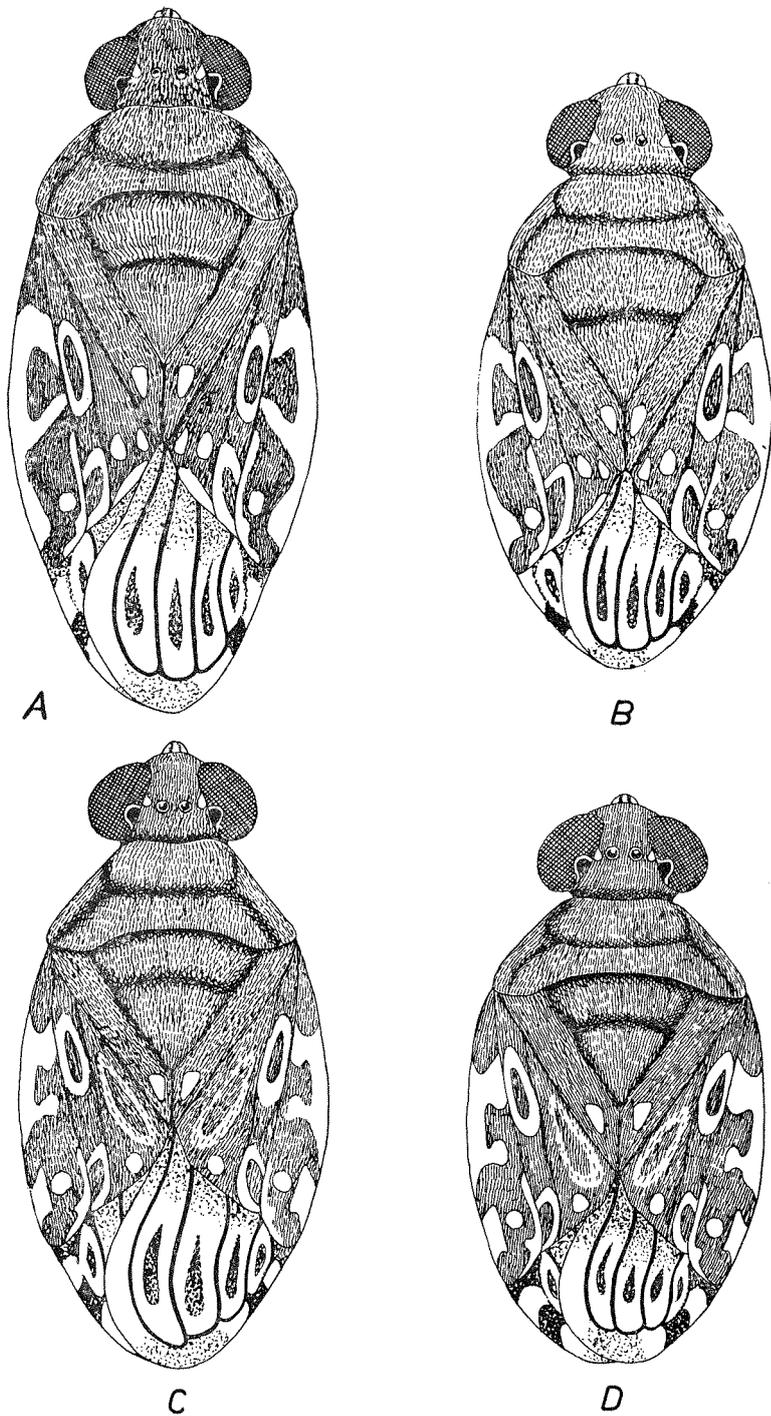


Fig. 1. Shape of the male (10 times enlarged).
A = *S. vestita* DGL. SC., macr. *B* = id. brach. *C* = *S. c-album* FIEB. macr.
D = id. brach.

hypophysis being thicker and less curved. The appendixes of the genital-segment are slenderer and closely together (Fig. 2 H, beneath). The f. *macr.* of *S. c-album* is also distinguished from *S. vestita* by its shorter and broader shape (Fig. 1 C) and the other differences above mentioned.

From *S. saltatoria* L. our species is distinguished by the C-shaped spot of exocorium, which is in *saltatoria* divided into 3 spots by a black longitudinal stripe. *S. saltatoria* has in addition its front still narrower and its eyes bigger, the latter being 1,05 times with the ♂ and 1,05 times

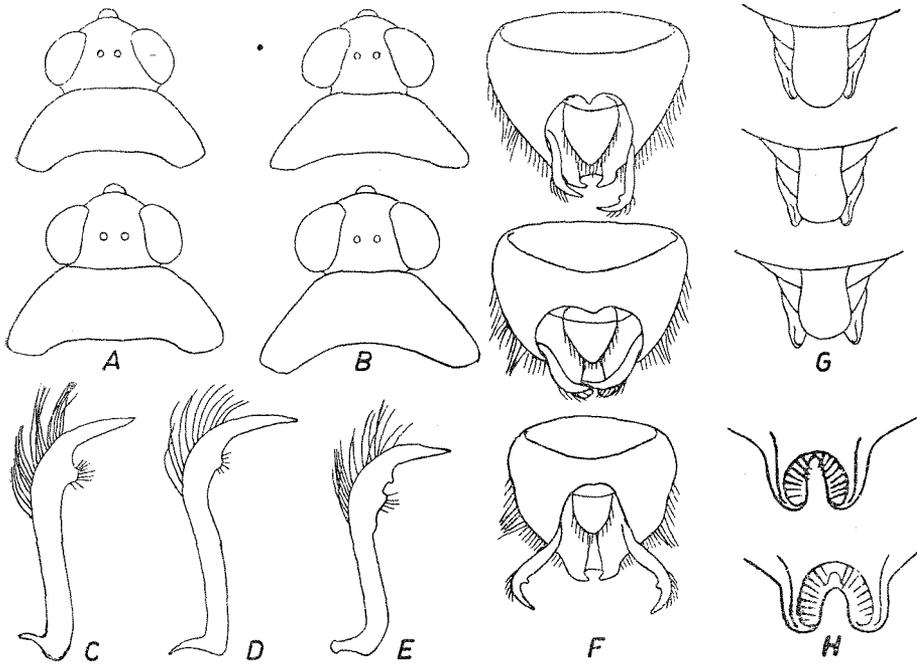


Fig. 2.

A = Head and pronotum of *S. vestita* DGL. Sc. above ♂ brach, beneath ♀ macr. seen from above (13,5 times). B = *S. c-album* FIEB., above ♂ brach, beneath ♀ macr. C = right paramere from the right of *S. c-album* FIEB. (57 times). D = id. of *S. vestita* DGL. Sc. E = id. of *S. saltatoria* L. F = genital-segment of ♂ from above (28,5 times): above = *S. vestita*, middle = *S. c-album*, beneath = *S. saltatoria* L. G = apex of head from the front (27 times): above = *S. c-album*, middle = *S. vestita*, beneath = *S. saltatoria* L. H = appendages of the genital-segment (57 times): above = *S. c-album*, beneath = *S. vestita*.

with the ♀ as broad as the front at its narrowest point. The 2nd joint of antennae being 1,53 times with the ♂ and 1,67 times with the ♀ as long as the 3rd. The genital-segment of ♂ is much smaller, its sides being bent at angles (Fig. 2 F, beneath), the genital-opening and the anal-conus still smaller. The parameres are still shorter and very thick towards their apex (Fig. 2 E), their basal part being however slender, the hypophysis strongly curved, the inner side bearing 2 protuberances, the larger (proximal) one with long setae, the pubescence of the outer edge is shorter and more dense. Shape of pronotum and the appendages of the genital-

segment similar to that of *S. vestita*. The lorae surpass the clypeus still more than in the latter (Fig. 2 G, beneath). Length: f. macr.: ♂ = 4,0–4,5 mm, ♀ = 4,35–5,0 mm; f. brach. ♂ = 3,3–3,5 mm, ♀ = 3,8–4,2 mm. Measurements see the following table!

I examined 62 ♂ and 74 ♀ from the banks of the Elbe above Hamburg. Types of f. *obscurior* f. nov. in authors collection.

S. vestita DLG. SC. seems not to occur in any other part of Germany. Among large numbers of *Saldula* from other places I could not find any example of it. As the species occurs in South-England too, it may be suggested that there will be still more places where it may be found. But they are unknown hitherto. DOUGLAS and SCOTT report their species from the banks of Loch Leven and the Tine-side-district.

Table of measurements.

	Total length	Breadth of			Length of antennal joint				
		heme-lytra	front	eye	1	2	3	4	
<i>C-album</i> FIEB.	♂	360	186	25,2	33,3	27	59	39	43
	♀	423	231	32,5	34	31	68,5	44	45,5
<i>vestita</i> DLG. SC.	♂	422	192	28,7	29,9	31	67	38,5	42
	♀	472	221	34	29,9	34	75	43	44
<i>saltatoria</i> L.	♂	373	171	24,2	30,6	25,5	54,5	35,5	37
	♀	418	197	29,9	31,6	27,5	61	39	40,5

The breadth of the front has been measured at its narrowest point, the breadth of the eye in level of the ocellae. All measurings are given in $1/100$ mm. The numbers given in the table are the average of all specimen measured.

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