# Idaea saleri sp. n. from Spain (Lepidoptera : Geometridae)

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## Summary

Idaea saleri sp. n. is described from the locality "El Saler" in Valencia (Spain). The taxonomic position of the new species is uncertain. Taking into account its external appearance it could be placed in group XX of Sterneck (1940), but according to the male genitalia it belongs to group XVIII.

#### Résumé

Description d'*Idaea saleri* sp. n. de Valence (Espagne). La position taxonomique de cette nouvelle espèce est douteuse. D'après son aspect extérieur, on pourrait la placer dans le groupement XX de Sterneck (1940), mais l'étude des armatures génitales la rapproche plutôt du groupement XVIII.

#### Introduction

The genus *Idaea* Treitschke, includes a great number of species (85 in Spain), mostly small, frequently with a very simple wing pattern and genitalia with few specific characters. The classification of the genus is still probably rather artificial. Sterneck (1940) split the genus into 34 groups.

The material studied in this paper, was collected in the Nature Reserve of "La Albufera", Valencia, Spain. The lake "La Albufera" and the surroundings are known to be one of the most interesting marshy areas of the Iberian Peninsula. The Nature Reserve includes a littoral forest ("El Saler"), which is the natural barrier between the sea and the lake, where some dark specimens belonging to the genus *Idaea* were collected. It was not possible to identify them for certain, but they were provisionally labelled as *I. carvalhoi* HERBULOT, 1980.

## Idaea saleri sp. n.

Type Locality: Spain: Valencia: Nature Reserve Park "La Albufera": El Saler (UTM: 30SYJ35).

HOLOTYPE &: "Spain: Valencia: El Saler, 13-VI-1984", G. S. 1641 in coll. University of Valencia.

Paratypes: same data except different dates —  $1 \, \circlearrowleft$ , "25-VI-1984", G. S. 1651;  $1 \, \circlearrowleft$ , "15-VI-1991" G. S. 1715;  $1 \, \circlearrowleft$ , "15-VI-1991";  $1 \, \circlearrowleft$ , "16-VI-1991";  $1 \, \circlearrowleft$ , "26-VI-1991" in coll. Museo Nacional de Ciencias Naturales (Madrid);  $1 \, \circlearrowleft$ , "26-VI-1991" in coll. Museo Alavés de la Naturaleza (Vitoria).

DESCRIPTION: Wingspan 13-15 mm. Male: Antennae shortly pectinate; base dark, without characteristic white scales of other species of group. Ground colour of forewings grey, with very small clusters of darker scales, pattern poorly defined. Females: Antennae simple. Forewings narrower than in male, without darker scales (Fig. 2).



1



2

Figs 1,2. *Idaea saleri* sp. n. 1 — Male paratype, El Saler (Valencia), 16-VI-91; 2 — Female paratype, El Saler (Valencia), 15-VI-91.

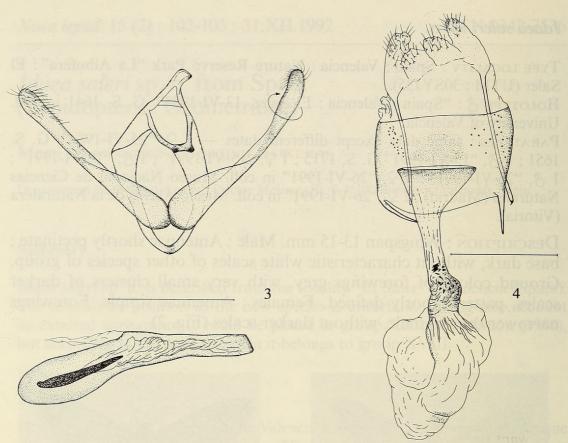
MALE GENITALIA: Valvae long, rather cylindrical. Sacculus with fold: shape of valvae can vary according to preparation technique (Fig. 3). Uncus broad, weakly sclerotised. Transtilla sclerotised, with two distal processes. Saccus short. Aedeagus with single short, broad cornutus.

Female Genitalia: Posterior apophyses rather long, anterior apophyses short. Ductus bursae much folded, with group of spines towards corpus bursae, the latter lightly sclerotised (Figs 4, 5a, 5b).

DISTRIBUTION: Only known from the type locality.

BIOLOGY: Flies in June, otherwise unknown.

ETYMOLOGY: Named after the locality "El Saler".



Figs 3,4. *Idaea saleri* sp. n. 3 — Male genitalia, aedeagus separate; 4 — Female genitalia. Scale bars: 1 mm.

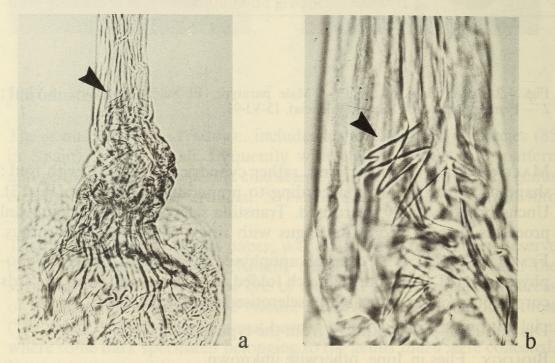


Fig. 5. *Idaea saleri* sp. n., female genitalia, ductus bursae, showing group of spines (a) and detail of three spines (b).

Comments: The dark colouration of the adults suggests a relation with the subgroup of "black species" (von Mentzer, 1990), *I. fathmaria* (Oberthür, 1876) and *I. carvalhoi* Herbulot, belonging to group XX of Sterneck (1940). However, this group is characterised by the presence of an extremely long and thin cornutus, whereas in *I. saleri* this is rather short and broad. *I. saleri* is better placed in group XVIII, which is characterised by a long and relatively thick aedeagus, with or without cornutus. In this group some species have a folded sacculus, as in the new species. Of the other species placed in this group only *I. descitaria* (Christoph, 1893) from South Russia has a rather similar aedeagus, with a broad cornutus, but the valvae and external appearance are different.

The geographical situation of the littoral barrier at "El Saler" (isolated by water, a lake to the west and sea in the east) creates a rather special habitat to which this species may have become adapted. This particular type of biotope was once very widespread, but now "El Saler" is one of the few remaining examples left.

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#### References

Mentzer, E. von, 1990. *Idaea boeklini* sp. n. from South Europe, with notes on the nomenclature and systematics of the *Idaea virgularia* (Hübner) species group (Lepidoptera: Geometridae). *Nota lepid*. 12(4) (1989): 290-302.

Sterneck, J., 1940. Versuch einer Darstellung der Systematischen Beziehungen bei dem palaearktischen Sterrhinae (Acidaliinae). Studien über Acidaliinae (Sterrhinae), VIII, 1, Theil: Die Gattung *Sterrha* und deren nächste Verwandte. *Z. wien. Ent Ver.* 25: 6-218.



Dominguez, Marti and Baixeras, Joaquín. 1992. "Idaea saleri sp. n. from Spain (Lepidoptera: Geometridae)." *Nota lepidopterologica* 15, 102–105.

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