

*Caryocolum jaspidella* (CHRÉTIEN, 1908) :  
Male genitalia, distribution and notes on its biology  
(Lepidoptera, Gelechiidae)

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**Summary**

*Caryocolum jaspidella* (CHRÉTIEN, 1908) has been found for the first time since its description. Some notes are given on the biology, which was hitherto unknown (host plant is *Cerastium gibraltarium*) and the male genitalia are described for the first time. The known distribution of *jaspidella* is mapped and the species is recorded as new to Europe.

**Résumé**

*Caryocolum jaspidella* (CHRÉTIEN, 1908) a été retrouvé pour la première fois depuis sa description. Les genitalia mâles sont décrits. Renseignements sur sa biologie, inconnue jusqu'à présent (la plante nourricière est *Cerastium gibraltarium*). Une carte montre la distribution actuellement connue de *C. jaspidella*, espèce nouvelle pour l'Europe.

**Zusammenfassung**

*Caryocolum jaspidella* (CHRÉTIEN, 1908) wird erstmals seit der Urbeschreibung gemeldet und die männlichen Genitalien werden erstmalig beschrieben. Informationen über die bisher unbekannte Biologie (Futterpflanze ist *Cerastium gibraltarium*) werden gegeben. Die bisher bekannte Verbreitung von *jaspidella* wird gezeigt und die Art wird erstmals aus Europa gemeldet.

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During a visit to Morocco in April 1989, I collected larvae of *Caryocolum* in two localities in the cedar forests of the Middle Atlas Mountains. When the adults emerged they proved to belong to *C. jaspidella* (CHRÉTIEN, 1908), a species hitherto known only from the female holotype from Algeria.

***Caryocolum jaspidella* (CHRÉTIEN, 1908)**

ADULT (Fig. 1, 2): The description given by HUEMER (1988) is representative for this species. A study of a series of bred specimens



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Fig. 1-2. *Caryocolum jaspidella* (CHRÉT). 1. ♂, 10 mm. 2. ♀, 9 mm.

shows, however, that specimens of *jaspidella*, like other species of the genus, vary in the density of dark scales on the forewing. *C. jaspidella* is unique within *Caryocolum* in having a black fascia running from the costa at one fifth to the dorsum at one sixth, giving the impression that it is directed towards the base of the wing.

**MALE GENITALIA** (Fig. 3, 4): Tegumen short, distinctly broadened anteriorly; transtilla with narrow spines. Uncus broadly rounded. Valva extremely short, weakly pointed, with setae. Sacculus strongly sclerotized, more than twice as long as valva, triangular, narrowing towards the tip. Posterior margin of vinculum slightly projecting with short medial incision. Saccus slender. Aedeagus with swollen base, strongly pointed toward apex, without cornuti. The short valva and sacculus suggests an affinity with *C. arenbergeri* HUEMER, 1989.

**FEMALE GENITALIA**: Figured by HUEMER (1988: 566).

**BIOLOGY**: The host plant is *Cerastium gibraltarium*. The larva is similar to those of other *Caryocolum* species feeding on *Cerastium* and *Stellaria*, i.e. slender, body light green with head and thoracic plate blackish brown. It is initially a leaf-miner, but later feeds between spun leaves of a shoot of the host plant. It pupates in the soil, in a cocoon covered with grains of sand. Larvae collected during the middle of April pupated within a few days and adults emerged during May (indoors in Denmark).

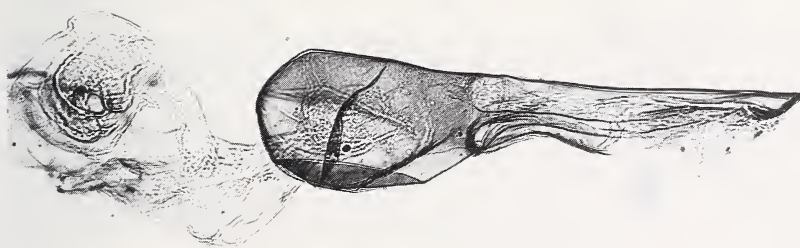
**HABITAT**: I found larvae of *jaspidella* at two sites in the upper part of the cedar forest. Both localities were situated at about 2000 m altitude, and both were warm spots, as they were snow-free at a time when much snow still remained in the surrounding area (Fig. 5). *Cerastium gibraltarium* plants were found among spiny bushes, where they found refuge from the omnipresent goats and sheep.

**DISTRIBUTION**: The holotype came from N.E. Algeria (750 m altitude), and the two above mentioned localities are situated in the Middle Atlas, about 50 km apart. One could therefore expect that *jaspidella* is an endemic of N. Africa. However, in the Zoological Museum of Copenhagen (ZMUC) a female *Caryocolum* from southern Spain, which I had tentatively identified as *C. blandulella* (TUTT, 1887), proved also to belong to *jaspidella*. The species therefore occurs not only in N. Africa, but also in Europe.

**MATERIAL EXAMINED**: **Morocco**: 6 ♂♂, 7 ♀♀ Itzer area, 2100 m, la. 16.iv.1989, *Cerastium* sp., O. KARSHOLT leg.; 4 ♂♂, 6 ♀♀ Azrou/Ifrane area, 35 km S.W. Azrou, 1400-2000 m, la. 17.-19.iv.1989, *Cerastium gibraltarium*, O. KARSHOLT leg., gen. prep. 4502, 4503 O.



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Fig. 3-4. Male genitalia of *Caryocolum jaspidella* (CHRÉT). Gen. prep. 4502 O. KARSHOLT. 3. Genitalia unrolled. 4. Aedeagus.





Fig. 5. Morocco. Middle Atlas, 35 km SW Azrou, 2000 m, clearing in cedar forest. Locality for *Caryocolum jaspidella* (CHRÉT.).

Fig. 6. Distribution of *Caryocolum jaspidella* (CHRÉT.).

KARSHOLT (in coll. ZMUC, and TLM, Innsbruck). **Spain**: 1 ♀ Andalusia, Camino de Istan, 400 m, 28.iv.1972, E. TRAUOGOTT-OLSEN leg., gen. prep. 2652 O. KARSHOLT, coll. ZMUC.

### Acknowledgements

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### References

- HUEMER, P., 1988. A taxonomic revision of *Caryocolum* (Lepidoptera : Gelechiidae). *Bull. Br. Mus. nat. Hist. (Ent.)* 54 : 439-571.
- HUEMER, P., 1989. Two new species of the genus *Caryocolum* from Spain (Lepidoptera : Gelechiidae). *SHILAP* 17 : 197-204.