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A new species of Ceratoxanthis Razowski, 1960 from Greece (Lepidoptera: Tortricidae, Tortricinae, Cochylini)
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Abstract

*Ceratoxanthis giansalottii* Bassi, sp. n. is described from Mount Kyllini, Northern Peloponnesus, Greece. Differences with closely related congeners are discussed.

KEY WORDS: Lepidoptera, Tortricidae, Tortricinae, Cochylini, new species, Greece.

Introduction

*Ceratoxanthis* Razowski, 1960, is a West-Palaearctic genus known from six species distributed from Spain to Kazakhstan. *Ceratoxanthis externana* (Eversmann, 1844: 490) from Southern Urals in Russia, Caucasus and Turkmenia and *C. adriatica* Elsner & Jaros, 2003: 221 from Montenegro have a short processus supporting the juxta on the valva. *Ceratoxanthis argentomixtana* (Staudinger, 1871: 277) from SE Russia, Kazakhstan and N Syria, *C. iberica* Baixeras, 1992: 294 from Spain and Iran (see Discussion), *C. rakosyella* Wieser & Huemer, 2000: 5, from Romania, and *C. saratovica* Trematerra, 2010: 20, from S. Russia, have a strong processus supporting the juxta on the valva, often extending beyond the margin of the valva. Females appear to be very shy and rarely attracted to light and as far as I know only the female of *C. externana* is known (RAZOWSKI, 2009, Baixeras pers. comm.). Among Cochylini specimens that I collected in 2003 on Mt. Kyllini in Peloponnesus I found both sexes of a new species of this interesting genus.

Material and methods

The specimens were collected by night, with a 80-W mercury vapor lamp set next to a white sheet, switched on between the coniferous tree line and mountain grassland.

Genitalia terminology follows KLOTS (in TUXEN, 1970). Dissection technique follows ROBINSON (1976). Imaging of specimens was accomplished with a Canon S100 digital camera mounted to a Wild M3C and a Leitz Laborlux 12 microscopes. All images were then processed in Photoshop to highlight morphological characters.
Abbreviations:

CB = Bassi collection, Avigliana, Italy.
GS...GB = Genitalia slide.... G. Bassi.
ISEZ = Institute of Systematic and Evolution of Animals, Kraków, Poland.

Systematic part

*Ceratoxanthis giansalottii* Bassi, sp. n.


Description (Fig. 1, 2): Male. Head: Labial palpi reddish brown sprinkled with yellow, total length 3 times maximum diameter of compound eye; antenna pale yellow, with thin sensilla as long as flagellomeres; vertex yellow, with raised scales slightly darker; frons yellow. Thorax, notum and tegulae yellow, suffused reddish brown anteriorly; legs reddish brown mottled with yellow and dark brown. Forewing length 7.5 – 8.5 mm (average = 8.15, N = 3); upperside ground colour yellow; dorsal dot silvery white and ochre brown; median fascia mainly ochre brown at tornus, mainly silvery white medially, and equally mixed brown and silvery white at costa; sub terminal patch large, brown sprinkled with silvery white scales; some additional small brown dots along costa and termen; fringes yellow at apex, otherwise greyish brown. Underside brown suffused yellow distally. Hindwing upperside grey suffused yellow and brown; fringe basally yellow, medially grey, and distally pale grey. Underside brown with yellow suffusion distally; terminal line pale yellow; vein M2 marked with yellow distally. Abdomen concolorous with hindwing. Female. Forewing length 7.5. Essentially as described for male, except antenna without long sensilla, paler fringes in forewing and paler underside.

Male genitalia (Fig. 3, 5, 6): Uncus slightly pronounced; socii stout, with rounded tip and ventral lobe expanded and setous; transtilla laterally bulged, with median part without distinct spines. Valva broad, sclerotized on inner side, slightly tapering distally, with posterior margin slightly concave; basal costal process armed by three to six strong apical spines; basal process supporting juxta slightly longer than phallus, upturned, bearing ventrally a row of small spines becoming stronger around rounded apex. Juxta sclerotized, bifurcate, 0.5 as long as phallus. Phallus basally enlarged, tapering at 0.7 in slender apex; vesica with one small cornutus (N=1) or without cornuti (N=1).

Female genitalia (Fig. 4): Papillae anales narrow throughout; apophyses posteriores basally bulged, twice as long as apophyses anteriores; abdominal segment VIII ventrobasally folded with small membranous area medially; sterigma with lamella antevaginalis produced and triangular and lamella postvaginalis small and lightly sclerotized; antrum membranous; ductus bursae narrow, 0.75 length of corpus bursae, distally enlarged; accessory bursa well developed, suboval, originating at beginning of corpus bursae; corpus bursae rounded, with one proximal, lightly sclerotized ring-like sclerite, with several minute spines inside sclerite and some others sparse spines; ductus seminalis opening medially in corpus bursae, opposite to the sclerite.

Diagnosis: This species is similar in size and wing markings to *C. rakosyella* and similar in wing markings but slightly smaller than *C. iberica*. It differs from both in the forewing ground color appearing pale yellow and in the diagonal streak and dorsal and subapical dots intensely suffused reddish brown. In male genitalia the sclerotized and bifurcate juxta, the medial part of the transtilla without spines, and the upcurved processus supporting the juxta with a blunt apex are diagnostic. The female genitalia are distinguished from *C. externana* by the long apophyses posteriores, shape of sterigma, narrow ductus bursae, and well developed accessory bursa. Differences in male and female genitalia between *Ceratoxanthis* Razowski and related genus *Agapeta* Hübner were diffusely treated by RAZOWSKI (2002, 2009).

Distribution: So far this species is known only from the type locality in Greece.

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Etymology: The species is named in honour of the late Dr. Ing. Gianfranco Salotti, who died suddenly in 2012, in memory of his eco-environmental teaching.

Discussion

The discovery of *C. giansalottii* Bassi, sp. n. on Greek mountains raises to seven the known species of this genus. The number could raise to eight soon, as the report of *C. iberica* Baixeras from Iran (ALIPANAH, 2009: 18) seems doubtful: these specimens have male genitalia with peculiar characteristics and need further investigation. As *Ceratoxanthis* Razowski shows a good degree of speciation in Southern Europe eastwards up to Kazakhstan and *C. iberica* seems to be a Spanish endemic, the presence of *Ceratoxanthis* in Southern Italy is highly expected.

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BIBLIOGRAPHY


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Figs. 1-6.– *Ceratoxanthis giansalottii* Bassi, sp. n.: 1. Male holotype; 2. Male holotype, head; 3. Male genitalia, paratype GS 4923 GB; 4. Female genitalia, paratype GS 5550 GB; 5. Male genitalia pressed, paratype GS 5533 GB, phallus extracted; 6. Male genitalia, phallus, paratype GS 5553 GB. af = fold of abdominal segment VII; bp = basal costal process of valva; un = uncus; tr = median part of transtilla; jx = juxta; sc = socii; st = sterigma.