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**Notes on the preimaginal stages and life history of  
*Ancylosis cinnamomella* (DUPONCHEL, 1836)  
(Lepidoptera: Pyralidae)**

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**Abstract:** Notes on the preimaginal stages and life history of *Ancylosis cinnamomella* (DUPONCHEL, 1836) (Lepidoptera: Pyralidae).

**Key words:** Lepidoptera, Pyralidae, *Ancylosis cinnamomella*, preimaginal stages, biology, *Sedum rupestre*.

## INTRODUCTION

*Ancylosis cinnamomella* (DUP.) is widely distributed in southern and central Europe, northern Africa, and western Asia extending eastwards to Mongolia (LERAUT 2014). It is absent from Great Britain but known from the southern parts of Norway, Sweden and Finland (PALM 1986). The species is very variable in wing colouration, which has resulted in the description of several subspecies and colour forms from different regions (LERAUT 2014). In Poland, the species was earlier known from Głogów, Oborniki Śląskie and Wrocław in Lower Silesia (WOCKE 1874). The record from the province of Western Pomerania, included in the Polish Checklist (PAŁKA 2017), is incorrect, in fact coming from the vicinity of Gartz in Germany on the left bank of the River Oder (BÜTTNER 1880). Moreover, the historical records from the provinces of Wielkopolska and Małopolska stated in the Checklist are not supported by literature data or specimens in collections. Current data relate only to the Świętokrzyskie province (PAŁKA 2017) and the Lublin Polesie region (JONKO 2002-2022). In 2020, the species was discovered in Toruń, which provided an excellent opportunity to study its preimaginal stages and life history. Earlier information on its biology and early stages was rather inaccurate. The host plants were stated as being *Sedum acre* L., *Globularia* L., *Artemisia campestris* L. and *Astragalus baionnensis* LOIS. (SCHÜTZE 1931, LERAUT 2017). In the newly discovered locality, the larvae were found feeding only on *Sedum rupestre* L., even though *Sedum acre* L. and *Artemisia campestris* L. were common in this habitat.

## MATERIAL EXAMINED

CD37 Toruń-Podgórz: 5♂♂, 9 VI 2020; 6♂♂, 10 VI 2020; 6♂♂, 3♀♀, 15 VI 2020; 8♂♂, 9 V 2022, J. Buszko leg.

CD37 Toruń-Podgórz: ♂, e.l. 27 VII 2020; ♀ e.l. 13 VII 2020. Larvae 19 VI 2020 on *Sedum rupestre* L., J. Buszko leg.

## EARLY STAGES

Ovum (Fig. 1): oval in outline, strongly convex with a flat base, white at first, then changing colour to yellowish. Chorion surface slightly rough.

Larva: (Fig. 4): body whitish to pale green with longitudinal dark red lines. In older instars red lines more prominent, so larva appears red. Dorsal vessel with indistinct dark marks. Head yellowish-brown with large, irregular, oblique, black spots. Mouthparts brown.



Figs. 1–6. *Ancylosis cinnamomella* (DUP.): 1 – eggs, 2 – feeding traces of the young larva, 3 – larva in a silken tube, 4 – fully-grown larva, 5 – pupa, 6 – imago (photos J. Buszko).

Frons bordered pale. Thoracic shield pale grey, its fore margin with small black spot, posterior part with longitudinal black and red spots. Anal shield with tiny black dots. Pinacula with pale setae up to half the body width in length. Spiracles edged brown. Thoracic legs dark brown, abdominal prolegs same colour as body.

Pupa (Fig 5): rather slim, pale yellow, posterior parts of abdominal segments darker. Spiracles edged brown. Cremaster rather wide with several hooked setae.

## LIFE HISTORY

The moths (Fig. 6) are active in the late afternoon and at night but are easily flushed from grassy vegetation during the day. Eggs are deposited on leaves or on the lower parts of the shoots of *Sedum rupestre* (L.), the only host plant of *A. cinnamomella* in this locality (Fig. 7). The young larva starts feeding at the top of the shoot, hollowing it out almost down to the root. Its presence is betrayed by clumps of blackish frass (Fig. 2). The older larval instar lives close to the ground in a silken tube covered with sand and detritus particles. The end of the tube extends to the green parts of the plant (Fig. 3). Pupation takes place in a dense silken yellowish cocoon at the end of the tube, usually attached to the base of the stem. The species is bivoltine. The first-generation moths are on the wing from early May to late June, while those of the second one appear in August. It hibernates as a fully-grown larva. The habitat is a xerothermic grassland on sandy ground. However, the locality seems unlikely to remain unchanged over a longer time span, as it is being rapidly colonized by false acacia (*Robinia pseudoacacia* L) and black cherry (*Prunus serotina* EHRH.) trees.



Fig. 7. *Sedum rupestre* L. – host plant of *A. cinnamomella* (DUP.) (photo J. Buszko).

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