Vorbemerkung JR 13.01.2021: Laut anderer E-Mail von Dr. Herbert Beck ist dies sein nach aktuellem Supplementband-Bearbeitungsstand „[…] ganzer Text zu den Omiini […] allerdings ohne Omia cymbalariae und cyclopea (das könnte noch nachgeholt werden)“.

**Dr. Herbert Beck, Typoskript (Stand 12. Januar 2021) des Omiini-Kapitel seines Supplementbandes „Die Larven der europäischen Noctuidae“**

**Notes to the identity of the larvae** of B234 *Cleonymia (Cleonymia) baetica* (Rambur, [1837]), B235a, *Cleonymia (Serryvania) yvanii* (Duponchel, 1833), B235c *Cleonymia (Serryvania) diffluens* (Staudinger, 1870); B236, B237c *Omia cyclopea* (Graslin, [1837]), and some further species of the Omiini. Beck 1999/2000 transferred *Apaustis rupicola* ([Dennis & Schiffermüller], 1775) from the Heliothinae to the Cuculliinae Omiini because of the bisected Dorsale of the larva, which as then was unknown. The day-light (sunshine)-active-moth got observed by coworker Bobits laying eggs on *Thymus*-spec. Similar it seems to be with further Omiini-spec. (from the genus Cleonymia, Amephana, Omia and relatives. I never got eggs by ‘usual’ conditions (keeping the jars or boxes in the room without direct sunshine). Therefore knowledge of the larvae as yet depended on random-findings by control of the known host-plants (*Helianthemum*-spp. and allied genera, see *Omia cyclopea*); these larvae to bring to the imago is the only way to get the identity. This happened by the difficulties during a long-time-trip only seldom. Therefore of some of the following species the larvae as yet are not definitely determined and there is need by engaged amateurs (lepidopterists) to do this task.

**Two ways for future sure determination are possible**: Either trying to get eggs under the conditions of daylight (similar to daylight-active Rhopalocera) or to rear the found larvae to the adult for determination (of course on this way the larvae have to be photographed). Because the larvae are during the day hidden in the blossoms or fruits (in the last intars also in the detritus below the host-plants, see *diffluens*, one is either forced to collect in the (early) night (beating the plants to an underlayed catcher or a strong flat-framed tin or a bucket; also cutting and collect twigs with blossoms/buds into a cotton-bag (or plastic-bag for to avoid soon drying) and then controlling in the following days/week(s); to have more success, the bag should be heavy shaked or beaten (for to get larvae out of the buds) and then discharged on a flat-framed tin or a tray (one can do this also into the bassin of a shower).- I did so with *Silene inflata* for to get larvae of *Hadena nevadae*, lateron to get larvae of *Hadena luteocincta* from *Dianthus* and also with a white-flowering *Helianthemum-*species (like *Helianthemum apenninum*) but with still larger blossoms; of these I got two times one large grown-up larvae, which I now think to be ‘*Cleonymia*’ *pectinicornis* Staudinger.

The larvae of these species as yet not have been figured by photographs in the past; in Beck, 2000, vol. III, *baetica, yvanii* and *aurita* were taken from the figs. of Spuler and thus very unsatisfactory. *Diffluens* and *korbi* hitherto have not been figured and also the larva of *Omia cyclopea* is figured for the first time. Some of the figured larvae are not definitely determined (the reasons and difficulties for this are outlined above).

**Taxonomic notes**: In Noctuidae Europaeae, vol. 5 (Ronkay & Ronkay, 1995), the genera are included in the Oncocnemidini (now a subfamily of its own, Fibiger & Hacker, 2005), but the larvae and also the imagines and the genitalic structure of these are quite different from *Oncocnemis* Lederer; Ronkay 1995 does not remark the relatively very small genitalia (esp. the short valvae, e.g. of *Harpagophana hilaris* and *Stenoecia dos* as compared with the length of the segments of the abdomen). Larvally this group (Omiini) is well characterised by the bisected Dorsale, a feature which unites *Apaustis* Hübner with this group (an affinity which also Ronkay notes[HB1] but without consequences for a new combination). The larger, robust species of the Omiini form a separate group, the Metopocerina Beck, 1996. *Recoropha* Nye forms a special lineage, together with *Harpagophana* Staudinger – the Recorophina, Beck, 1996 - the exact position of which within the Cuculliinae is not yet clear.

Common features of the group: **Dorsale bisected with two marginal bright lines (the true Dorsale) and a dark central stripe. The pale yellow to white Stigmatale continuously runs to the lat border of As! Stigmatale present only in the ve half of the distance L1-L2; there fore all St above from it.**

**Methods for to find the larvae**, B234-B237c.

As the hints below betray: there are some incertainities about the identity of the larvae: because the females lay no eggs by normal conditions, to get the larvae one has to search for them. The method is either to control the flowering Helianthemum-plants, a rather unproductive operation, only with Cl. diffluens I was successful, there I accidentally found grown-up-larvae below low Cistus-shrubs, hidden in the detritus; early instars live in the buds and blossoms and so are hard to be seen; only once I found the unidentified larva of ?opposita, see below. The collecting of the blossoms in a sack (or plastic bag) and the control of its content in the next days yielded only single larvae, e.g. two supposed larvae of Omia oberthueri (which not could be confirmed by rearing to the imago); the identification of single larvae of baetica was no problem by the typical pattern of the larva (due to the fig. in Spuler).- Therefore further research is necessary and collecting of larvae should be practiced similar to collecting larvae of Hadena-spp. the females of which also lay nearly no eggs in captivity. Therefore during the flight-period or better at the end of it collect the blosssoms and fruits of Helianthemum-spp., put these in an some open linen-bag or in a some open plastic-bag (to prevent from too quick drying and moult) and examine in the next (ten) days the inside of the bag; take care not to press the blossoms/fruits when collecting these and put the bag not into direct sun! Also to push or beat the bag (its content) and to discharge its content can bring larvae to sight.

B234 (HH393) *Cleonymia (Cleonymia) baetica* (Rambur, [1837])

Material: One LL-larva, leg. Beck, E IV(AV) 2005 (from the fruits of a white flowering Helianthemum-shrub: E – Almeria . Tabernas. 5 VL/LL-larvae, leg. Beck, 15.5.2006: E - Madrid – vic Aranjuez.

HI as in B234. Strong contrasts between the pale plain yellowish primary lines (Dorsale, Epistigmatale and Stigmatale) and the dark red-brown to violet (occasionally greenish tinged) zones; of the primary lines **the bisected Dorsale forms, most striking, cd open ‚V‘-marks from S1 to S7 (one ‚V‘/S).** Body: Distance of the ve edges of the two marginal (yellowish) lines of the bisected Dorsale on SII, SIII-Cer 4/5, on Transv/D1 1, on the S-Cdr 1 1/5 D1-D1,SII; width of the marginal lines each 1/3-2/5, their ve edge pale yellow, sharp-edged, greyish-beige, fading towards the dark violet centre of the Dorsale. Measures of the ‚V‘-marks (S1-S7): Distance of the ve edges of the two marginal (yellowish) lines of the bisected Dorsale at S-Cer ½, towards the midst of fold-6 to 1 ½ D1-D1 and there extinguished; width of the ‚V‘-arm 1/5; Doz transv divided in three (nearly equal broad) parts: ce blackish, then reddish and cd violet. Subdorsale pale yellow, dor sharp-edged, ve +/- blurred-edged, continuous drizzled, width 1/8. **Epistigmatale pale yellow, ve straight, sharp-edged, dor from S-Cer to SD1 arched to 1/3-2/5 width, cd SD1 reduced to ¼**; dor Sdoz medium greyish-beige; ve Sdoz margined dark red-violet, the center paler. **The pale yellow, continuous (to the lat border of As!) Stigmatale present only in the ve half of the distance L1-L2; therefore all St above from it.-** Head beige-brownish, netfields (of RGs) indistinct some darker.

**Methods for to find the larvae:** see above, under the group, B234-B237c.

Subgenus *Cleonymia (Serryvania)*

Common characters of the larvae *yvanii*, *diffluens* and *korbi:* with exception of *diffluens* the whitish Dorsale is bisected to two marginal lines and between these ground-colored. The spiracles are in the red-violet ve Sdoz, which is margined by the equally large white Epistigmatale and Stigmatale.

B235a (HH398a) *Cleonymia (Serryvania) yvanii* (Duponchel, 1833)

Material: 3 LL(?VL-)-larvae, leg. Beck, 15.-25.06.2006 (ex fructus *Helianthemum nummularia* or related species): F – Var – Col de Vence, 900m; photo of a LL-larva leg?, phot. Bodi: E- Katal.-Prut, M VI 2008.- There are some differences between the larvae of both localitys, possibly due to subspec. character.

HI as in B235a. Head: Gc pale beige, RGs-fields medium to dark grey-brown; Oc-zone dark, Frons with dark points (?F1). Body: **From SI to SIII Doz and Sdoz homogeneously pale whitish-greyish, with the pale to dark red-violet Doz**. **Pattern from A1 to A8: All lines and zones are longit straight and each of continuous width.** Dorsale bisected, central stripe medium to dark grey-brown, width 2/5; **the two whitish marginal lines (the true Dorsale) each 1/6 to 1/5 (from IF6 to Transv/D1 of the cd following S, tapered from 1/5 to 1/10). D1-Bp-base-spot distinct, whitish-greyish, sharp-edged, Dm 1/12-1/10; D2 similar but +/- touching and merging the dor bulged Subdorsale**. **Subdorsale white(whitish), width 1/3** (towards S8 tapered to 1/6), sharp-edged, **from IS docd towards Bp-base-spot-D2 enlarged, this touching or, S1-S3, including**. **Cd from S5 the whole Doz (symmetrically to the Dorsale and with this) conspicuously darker**. Dor Sdoz inconspicuous, pale reddish-violet, blurred-edged, as broad as the white **Epistigmatale (this 1/6); the ve rim of the latter excluding Bp-base-spot SD1 by a ve inlet; Epistigmatale from SD1 to the midst of S-Cer-SD1 of the cd following S, ve enlarged to 3 to 4 times the width at SD1 (1/10-1/8)**; therefore the dark red-brown ve Sdoz dor indented. **Stigmatale white, width 3/5 L1-L2,** **continuous (to the lat border of As!),** dor margin 1 SD1-L1 ve L1, all St dor of it, the margin nearly touching. The Dm of the Bp-base-spots SD1, L1 1 ½ - twice as wide as of those of D1 and D2. Early last instar: zones dark red-brown (also the Pz); Doz in the cd half of the S pale red-brown, also the dor Sdoz.

Joint characters between both ?ssp: Subdorsale and Epistigmatale on T1 to T3 +/- united, from A1 to A6 well separated by the do Sdoz; ve Sdoz throughout intensively d red-violett, and very large, from the white Stigmatale (dor margin ½ SD1-L1 below L1, therefore all St above the Stigmatale.

Main differences of the Spanish larva to the French one. The French one: zones intensively d red-violet, the bisected whitish Dorsale cd A6 more and more indistinct, Subdorsale dor not bulged. The Spanish one: zones beige-brownish, Subdorsale very large, dor bulged; Dorsale throughout distinct

**Methods for to find the larvae:** see above, under the group, B234-B236.

B235b (HH398b) *Cleonymia (Serrivania) korbi* (Staudinger, 1894)

Determination by genus-characters and being different from *yvanii* and *diffluens*.

Larva leg. Beck, M VI 2008: E – Arranjuez vic Madrid.

Doz and ve Sdoz equally d red-violet, the former with thin and darker ve edge, dor touching (to include) Bp-base-spot D1. Subdorsale whtish, continuous, width ¼ D1-D1,A1, D2 1/3 of its dor edge.The inner of the split white Dorsale (each side ¼ ) greyish-greenish, width ½ D1-D1. Dor Sdoz very large, ve including the large /1/2D1-D1), white, ve sharp-edged Epistigmatale (its ve edge at SD1). Ve d red-violet Sdoz inluding all spiracula. Ve of it the white Stigmatale, width as Epistigmatale, sharp-edged on both sides.

**Methods for to find the larvae:** see above, under the group, B234-B236

B235c (HH392) *Cleonymia (Serryvania) diffluens* (Staudinger, 1870)

Material: one LL-larva, two VL-larva; leg. Beck, EVI-MV 2005, 2006: E – Huelva – Mazagon [pine-wood: from the fruit of a yellowish flowering *Helianthemum*-shrub (to 1/2m high) or the adult larvae below the shrub]: Last instar. HI as in B235c. General remarks: the larvae are extremely variable, from sharpedged patterned to nearly patternless formae; in any case, most distinct and dominant is the rosy-lalic to dark red-violett ve Sdoz in contrast to the pure white Stigmatale.

Most characteristic is the sharp-edged medium to dark red-violet, red-brown or pinkish ve Sdoz, from A1 to A9, ve bordered by the plain white Stigmatale (see above under general remarks). **The remnant Doreg either completely green (occasionally pinkish tinged in the Doz) or pale to medium reddish-brown with +/- indistinct primary lines (Subdorsale)**. Former instars (up to the penultimate instar) with +/-\* distinct primary lines and zones: The **bisected Dorsale with two straight marginal, blurred-edged, dull pale greyish lines** (the true Dorsale), width of each 1/5, the dark inner medium grey-brown, width ¼ D1-D1,S1. Doz medium reddish-brown. **Subdorsale indistinct, blurred-edged, straight, pale whitish-greyish, on SII, SIII directly ve of D2 touching the Bp-D2), width 1/8 (to ¼), ve merging in the pale beige do Sdoz.** Head with negative pattern (Gc pale beige, RG1-fields d grey-brown, RG2-fields from dor to ve paler, up to pale brown).

**Methods for to find the larvae:** see above, under the group, B234-B236

Subgnenus *Cleonymia (****Pectcleonymia****)* type *pectinicornis* (Staudinger, 1859) **sgen. n.**

Note: Fibiger & Hacker 1991 proposed for *opposita* Lederer 1870 the subgenus *Cleonymia* (*Ronkayiana*) without characterization, thus nomen nudum and invalide. But it is clear, that this species and *pectinicornis* (Staudinger, 1859) allone by the +/- pectinated male antennae and especially by the pattern of the fore-wings (and hindwings) and the larger size as compared with nearly all Cleonymia-ssp. have at least a subspecific rank, which is also expressed by Ronkay & \_Ronkay 1995 (p. 93).

Diff.-Diagnose: As compared with the spp. of *Cleonymia* (*Serrivania*).

The adults (male) of *pectinicornis* and *opposita* Lederer have short pectinated antennae as compared with the filiform antennae of the other ‘Cleonymia’-spp.; the fore-wings have a d median field, basal margined by the antemedian crossline, distad by a transv line through the reniform spot, distad of this line the wing is contrasting pale (greyish) with the postmedian line, the croslines are not ziczac-like as at the *Cleonymia*-spp. s.str.The seize is distinctly (1 ½) larger than that of the *Serrivania*-spp.-

B235d (HH394) *Cleonymia (Pectcleonymia)**pectinicornis* (Staudinger, 1859)

Tax. note: as well by the larger size, the pattern of the fore-wings, the pectinated antennae and the genitalic structures (e.g. the heavy enlarged uncus towards its tip) *pectinicornis* surely is not a *Cleonymia*.- Therefore for Spain the here presented larva can represent *pectinicornis*; further research for definite determination is necessary.

Habitual appearance as in B235b: Gc of the body, the zones: inner Doz between the split Dorsale, dor Sdoz and Vereg medium green to greyish-green, in bold contrast to the pink-red ventral Sdoz and outer Doz. In the outer Doz as semicircular segments, 1/S (radius half the length of the S), dor of and at the white, continuous and straight Subdorsale (width 1/10-1/8), wrinkly sharp-edged. The ve Sdoz is dor exactly limited by the **straight and continuous Epistigmatale** (also wrinkly and sharp-edged), width 1/6 (to *Amephana* ¼). Dorsale bisected, its whitish lines (width each 1/20) dor bordering the pink-red semicircular flecks of the outer Doz. Stigmatale plain white, width 1/3 L1-L2, L2 on the midst, St all dor of it; running on the side of As, there fusing with the Subdorsale at As-Cdr). Head brownish.

**Methods for to find the larvae:** see above, under the group, B234-B236

Subgenus *Amephana* (*Trigonephra*)

B236 (HH401) *Amephana* (*Trigonephra*) *aurita* (Fabrisius, 1787)

 or *Amephana* (*Amephana*) *anarhini* (Duponchel, [1840])

Material: 1 VL-Larve, leg. Beck, 15.5.2006: E - Madrid – vic Aranjuez. Determination not sure, but as compared with *baetica, diffluens, yvanii* (by figs. in Spuler, reprod. in Beck 2000, plate 23, fig. B236) and now ?*pectinicornis*, *aurita* is possible.

Note: inspite being undetermined, this by the pattern very interesting larva is introduced for further research.

HI as in B236. Larva in the 4th or penultimate instar. The bisected white Dorsale with two marginal, plain whitish lines, which cd of A1 get more and more indistinct, the space between these lines, the inner of the ‘Dorsale’ violet-brown; **a series of white larger spots, each one on the Transv/D2 and on the Longit/D1, Dm each 1/3 D1-D1 (Dm of the white base-spot D1 1/10, of D2 1/8 to 1/6). The blurred edged, dull dark violet-brown central-stripe (of the Dorsale) at the S-Cer 1/8, cd towards suture-do3 enlarged to 3/5 and so up to suture-do4 (near Transv/D2).** The outer Doz homogeneously unicolourous dark violet-brown. **Subdorsale yellowish-white**, from T2 to A2 on both sides sharp-edged, then, ve, +/- reduced, blurred-edged, edges wrinkled, from S-Cer, 1/20 (1/15), towards D2 dor enlarged to 1/10 (1/8), **from the midst of A8 cd to A10 with the similarly formed Epistigmatale united to a homogeneously yellowish-white dor ‚Sdoz‘.** Epistigmatale from TI to T3 dull greyish, +/- blurred-edged, **from A1 plain yellowish-white, ve sharp-edged, continuously wrinkled, including the SD1-base-spot! Its width from S-Cer to SD1 1/3! (esp. on A4-A7), cd SD1 +/- reduced to 1/6.** Dor Sdoz medium red-violet-brown; ve Sdoz dark red-violet, from Transv/SD2 (in front of St) ve enlarged into the Stigmatale (up to S-Cdr). Stigmatale plain yellowish-white, continuous (in the lat As), on both sides sharp-edged, ½ L1-L2 wide and dor edge 2/3 L1-L2 ve of L1, thus all St dor of it.**- Bp-base-spots plain white, sharp-edged, L1 isolated, behind the black St, Dm 1/5 (L1 on A7 in the same position as on A6).** Pz medium reddish-violet. Head unicolourous pale reddish-brownish, RGs undifferentiated, some darker. Ns, As chitin., Dorsale absent, Subdorsale indistinct. Spats of the prolegs chitin.

**Methods for to find the larvae:** see above, under the group B234-B236.