

## **Micro-moths 2021**

*Andy & Melissa Banthorpe*

### **Introduction**

During the year ten species were added to the county list: *Caloptilia cuculipennella*, *Caloptilia honoratella*, *Phyllonorycter ulicicolella*, *Phyllonorycter scopariella*, *Scrobipalpa obsoletella*, *Epinotia sordidana*, *Pammene suspectana*, *Pammene albuginana*, *Pammene populana* and *Mecyna flavalis*. In addition, *Cydia amplana* was new to the county in 2020; the record got missed in the 2020 report. Full details of all the above species can be found in the accounts below.

### **Review**

The following list includes species of interest recorded in VC30 during 2021. Most of the species analysis is based on the 10,729 records for 2021 that had been uploaded to the county database by late April 2021. This also includes only easily identifiable species from the Eaton Bray II Rothamsted trap as Andy has not had time to dissect the rest yet. A total of 596 micro-moth species were recorded in the county in 2021, compared with 623 in 2020 and 581 in 2019.

The list is based on that of Agassiz, Beavan & Heckford (2013), which was a revised taxonomic list and numbering system of British Lepidoptera. This list has subsequently been updated and corrected; the updates having since been published in *The Entomologist's Record and Journal of Variation*. The number in square brackets refers to a species' Bradley-Fletcher number (Bradley 2000), which were used in previous reports.

A list of the micro-moths of VC30 with their current status is on the Beds Moth Group website [www.vc30moths.org.uk](http://www.vc30moths.org.uk) or available from the Recorders on request. This is based on a national status list and associated supporting documentation that was produced by the Moths Count team at Butterfly Conservation in early 2016.

### **Bucculatricidae**

#### **14.011 *Bucculatrix ulmifoliae* Hering [274a]**

This species was added to the county list in 2020 and recorded at two sites (Home Wood (Northill) and Fairfield Park). In 2021 leafmines were found in smooth-leaved varieties of Elm *Ulmus minor* ssp *minor* at Wrest Park, Silsoe, on 23rd September; Hill Rise LNR, Bedford, on 8th October; and Eyeworth on 7th November (all AMB & MGB).

### **Gracillariidae**

#### **15.002 *Caloptilia cuculipennella* (Hübner) [Na] [280]**

New to VC30 in 2021. A small micro moth beaten from *Cupressus* × *leylandii* in Potton on 5th November (WG, conf AMB) turned out to be this species. The larvae are leafminers of Ash *Fraxinus excelsior*, and the distinctive silvery early mines have not been found in the county yet despite searching.

#### **15.0131 *Caloptilia honoratella* (Rebel)**

New to VC30 in 2021. There were several records of this species across parts of the UK in 2021, and a male came to a light trap at Upper Caldecote on 25th July (MB, gendet AMB) followed by a female in Biggleswade on 18th August (LRB, gendet AMB). The moths are similar to others in the genus so dissection is necessary to determine the species. The status and identification of this species and other close relatives in the UK was discussed in a recent paper (Plant 2022)

#### **15.047 *Phyllonorycter hostis* Triberti [327]**

The fifth county record was of a male as pheromone trap bycatch at Hook Wood near Staploe on 30th April (RIB, gendet AMB).

#### **15.060 *Phyllonorycter ulicicolella* (Stainton) [Nb] [339]**

New to VC30 in 2021. After much searching in previous years, stem mines were found in common Gorse *Ulex europaeus* at Cooper's Hill NR, Ampthill, on 30th April (AMB & MGB).

**15.061 *Phyllonorycter scopariella* (Zeller) [Nb] [340]**

New to VC30 in 2021. Stem mines were found on Broom *Cytisus scoparius* at The Lodge (RSPB Sandy) on 6th March (RIB, conf R Edmunds & AMB).

**15.076 *Phyllonorycter emberizaepenella* (Bouché) [354]**

The fifth record of this species in the county was of leafmines in Snowberry *Symphoricarpos* sp. at Wrest Park, Silsoe, on 23rd September (AMB & MGB). Care must be taken when identifying the mines of this species due to confusion with the much commoner *Phyllonorycter trifasciella*.

**15.0862 *Phyllonorycter pastorella* (Zeller) [364a]**

This species was new to the county in 2020 at three sites, and leafmines were found just once this year - on Crack Willow *Salix fragilis* at Eaton Ford Riverside Park on 28th September (RIB).

**Yponomeutidae**

**16.004 *Yponomeuta cagnagella* (Hübner) [427]**

The silk webbing of Spindle *Euonymus europaeus* trees and hedges caused by the larvae of this species was very apparent in 2021. So much so, that the sight along Progress Way, Elstow, in early June was much mentioned on social media. AMB visited the site and took photos on the evening of 3rd June and found 1000s of larvae present, which had eaten the vast majority of the leaves that had been present with the webbing extending over adjacent plants of different species as the larvae ran out of food. On the morning of 4th June he was interviewed about this on BBC Three Counties local radio, with the story also appearing on the BBC website. Other significant but smaller counts came from Biddenham, Bromham, Great Denham, Harlington and Priory CP, Bedford.

**16.023 *Ocnerostoma piniariella* Zeller [Nb] [444]**

The third county record of this species was a female to a light trap in Biggleswade on 17th July (LRB, gendet AMB).

**Lyonetiidae**

**21.002 *Lyonetia prunifoliella* (Hübner) [pRDB1] [262]**

This species was new to the county in 2020 and recorded at three sites (Home Wood, Marston Thift and Upper Stondon). In 2021 leafmines were found in Blackthorn *Prunus spinosa* at two different sites in Upper Stondon on 13th and 28th August, near Lower Stondon on 25th August and alongside a footpath between Pegsdon and Knocking Hoe on 3rd September (all AMB & MGB).

**Praydidae**

**22.003 *Prays ruficeps* (Heinemann) [448a]**

This species was new to the county in 2020. In 2021 there were a further four confirmed records: at Ickwell on 4th June, 28th July and 19th August (MD & LK) and Upper Caldecote on 18th July (MB).

**Oecophoridae**

**28.005 *Denisia albimaculea* (Haworth) [pRDB3] [638a]**

The second county record came to actinic light in Bedford on 15th June (I.Barber, det AMB from photos). The only other record was to MV light at Ampthill Park on 28th May 2011 (AMB & MGB).

**Depressariidae**

**32.028 *Agonopterix pallorella* (Zeller) [Nb] [700]**

Following on from records in 2011 and 2020, the third county record was at Pegsdon Hills NR on 8th August where it was photographed (R. Watson).

**32.050 *Telechrysis tripuncta* (Haworth) [Nb] [646]**

The second county record was to a light trap at Ickwell on 28th June (MD&LK). Bizarrely the other record was exactly 20 years previously, at Studham on 28th June 2001.

**Gelechiidae**

**35.116 *Scrobipalpa obsoletella* (Fischer von Röslerstamm) [Nb] [816]**

New to VC30 in 2021. Many species in the genus are extremely similar and require dissection to identify correctly and this is one of these. A male came to actinic light in Lower Stondon on 2nd June (AMB & MGB, gendet AMB).

**35.118 *Scrobipalpa ocellatella* Beet moth (Boyd) [Nb] [814]**

This species was new to the county in 2020 with four records. There were a further four records in 2021: Upper Caldecote on 3rd June (MB), Sandy on 4th August (RAC & AMJS, gendet AMJS) and at two sites in Biggleswade on 18th September (LRB, gendet AMB; SCB, conf AMB).

**35.147 *Carpatolechia decorella* (Haworth) [Nb] [767]**

Following on from two records in 2020, the fifth county record was a male to actinic light at The Lodge (RSPB Sandy) on 22nd July (RIB, gendet AMB).

**Coleophoridae**

**37.090 *Coleophora artemisicolella* Bruand [577]**

An actively feeding larva of this species in its portable case was found by carefully searching the seedheads of Mugwort *Artemisia vulgaris* at Sandy Smith NR on 1st October (MGB). This was the first record of the species in the county since 2009 and the first larval case since 1992. There are 16 previous records.

**Pterophoridae**

**45.009 *Gillmeria ochrodactyla* Tansy Plume ([Denis & Schiffermüller]) [Nb] [1503]**

The second county record was photographed at Sandy Smith NR on 4th August (TM, det AMB). The previous record was at The Lodge (RSPB Sandy) 20 years earlier on 11th July 2011.

**45.026 *Oxyptilus distans* Breckland Plume (Zeller) [Nb] [1491]**

Following the addition of this species to the county's fauna in 2020, a male came to a light trap in Biggleswade on 3rd June (LRB, gendet AMB).

**Tortricidae**

**49.096 *Hysterophora maculosana* (Haworth) [924]**

One found in Potton Wood on 16th May (WG) was the fourth county record, following records at Halsey Wood, Sharnbrook in 2011 and in two locations in Potton Wood in 2011.

**49.228 *Epinotia sordidana* (Hübner) [Nb] [1153]**

New to VC30 in 2021. A female was found at Begwary Brook NR near Wyboston on 3rd September (RIB, gendet AMB). The larvae feed in folded leaves of Common Alder *Alnus glutinosa*, of which there is much at the site.

**49.256 *Epinotia cinereana* (Haworth) [1138a]**

This species was new to the county in 2020. In 2021 a female came to actinic light in West Wood near Souldrop on 24th August (RIB, gendet AMB). As mentioned in the 2020 report it is hard to separate this from *E.nisella* without gendet being required. See Mutanen *et al* 2012.

**49.274 *Eucosma metzneriana* (Treitschke) [pRDB3] [1196]**

One in a light trap in Ickwell on 14th June (MD & LK, conf AMB) was only the second county record, the previous one being in the Cockayne Hatley RIS trap in 2011. It is a fairly recent colonist in Britain having been first found in Cambridgeshire in 1977.

**49.335 *Cydia strobilella* (Linnaeus) [Nb] [1254]**

An adult bred from spruce *Picea* cones collected at Rockham Ditch west of Roxton on 4th April (RIB) emerged on 25th April and was the fifth county record.

**49.343 *Cydia amplana* (Hübner) [Migrant] [1262]**

New to VC30 in 2020 and omitted from that report in error. There have now been four records of this migrant tortrix moth in the county. The first came to a light trap in Barton-le-Clay on 9th August 2020 (ADW & MDW, det AMB). During this period many had been recorded across southern Britain and so this was an expected addition to the county list. In 2021 further singletons were trapped at Kempston on 4th September (MJP), the same Barton-le-Clay site on 5th September (ADW & MD) and at Biggleswade on 11th September (LRB).

**49.364 *Pammene suspectana* (Lienig & Zeller) [pRDB2] [1230]**

New to VC30 in 2021. This species may be more common in the UK than was previously thought due to bycatch from pheromone lures meant for other species. A male came to a pheromone trap using the MOL lure for *Grapholita molesta* at Eaton Ford on 12th May (RIB, gendet BD).

**49.365 *Pammene albuginana* (Guenée) [1229]**

New to VC30 in 2021. Like the previous species this may turn out to be more common too by using pheromone lures. There were three records, all to the FUN lure used for *Grapholita funebrana*. The details are as follows: five males, of which one was gendotted, at Eaton Ford on 4th June; one male identified by gendet at St Deny's churchyard, Little Barford, also on 4th June; and 15 males, of which two were gendotted, at The Lodge (RSPB Sandy) on 5th June (all RIB, gendet AMB).

**49.366 *Pammene obscurana* (Stephens) [Na] [1225]**

A female to actinic light at Stockgrove CP on 9th May (RIB, AG & SRP, gendet AMB) was only the third for the county. This followed previous records at Coppice Wood, Melchbourne, in 1987 and Flitwick Moor in 2011.

**49.372 *Pammene populana* (Fabricius) [Nb] [1232]**

New to VC30 in 2021. A male was potted from Ash *Fraxinus excelsior* at Sandy Smith NR on 29th July (TM, gendet AMB). The larvae actually feed in spun leaves on Sallow *Salix* species.

**Crambidae**

**63.002 *Loxostege sticticalis* (Linnaeus) [Migrant] [1368]**

One to actinic light at Shortstow (SG) on 10th August was the third for the county following previous records in 1995 and 2020.

**63.039 *Mecyna flavalis* ([Denis & Schiffmüller]) [pRDB3] [1396]**

New to VC30 in 2021. A male in a light trap at Ickwell on 14th August (MD & LK, gendet AMB) was a big surprise. The species is usually associated with chalky grassland and sea cliffs but this must have been a wanderer.

**63.054 *Cydalima perspectalis* Box-tree moth (Walker) [1409a]**

The first larval record of the species in the county was in 2020. In 2021 two further larval records came from Dunstable and Lower Stondon. The increase in adult records continued with 223 in 2021, following a total of 159 for all previous years combined.

Migrant records are forwarded to the appropriate editor for inclusion in the Immigration of Lepidoptera to the British Isles Report for the *Entomologist's Record and Journal of Variation*.

All records are held by the Bedfordshire and Luton Biodiversity Recording and Monitoring Centre and updated regularly. In addition the dataset is forwarded to the National Moth Recording Scheme annually.

### References

- Agassiz, D.J.L., Beavan, S.D. & Heckford, R.J. 2013 *Checklist of the Lepidoptera of the British Isles*. Royal Entomological Society
- Arnold, V.W., Baker, C.R.B., Manning, D.V. & Woiwod, I.P. 1997 *The Butterflies and Moths of Bedfordshire*. Bedfordshire Natural History Society
- Bradley, J.D. 2000 *Checklist of Lepidoptera recorded from the British Isles*. Second Edition (revised)
- Davis, A.M. 2012 *A Review of the Status of Microlepidoptera in Britain*. Butterfly Conservation, Wareham. Butterfly Conservation Report No. S12-02
- Mutanen, M., Aarvik, L., Landry, J-F., Segerer, A.H. & Karsholt, O. 2012 *Epinotia cinerea* (Haworth, 1811) bona sp., a Holarctic tortricid distinct from *E.nisella* (Clerck, 1759) (Lepidoptera: Tortricidae: Eucosmini) as evidenced by DNA barcodes, morphology and life history. *Zootaxa* 3318 1-15 [www.mapress.com/zootaxa/](http://www.mapress.com/zootaxa/)
- Plant, C.W. 2022 The status of *Caloptilia honoratella* (Rebel, 1914) and *C. hemidactylella* ([Denis & Schiffermüller], 1775) in Britain with a note on two similar additional *Acer*-feeding *Caloptilia* that might appear in Britain (Lep.: Gracillariidae). *Entomologist's Record and Journal of Variation* 134 21-39

### Acknowledgements

Records and support gratefully acknowledged from the following:

P.Almond, G.Anderson, M.Athorn, P.M.Baker, K.Balmer, I.Barber, F.Barnes, G.Barnes, P.Barnes, S. Barnes, R.I.Bashford (RIB), A.Bates, R.Bellamy, S.C.Blain (SCB), V.Booth, A.Bradbury, D.L.Buckingham, Lionel Burgess (LRB), Louie Burgess, Luke Burgess, M.Burgess (MB), P.Busby, G.Buss, C.Butler, M.Butler, D.Cahill, L.Carman, R.A.Cartwright (RAC), G.Castle, R.Christopher, A.Coates, J.Curd, M.Dawson (MD), A.Day, A.De Winter (ADW), M.De Winter (MDW), B.Dickerson (BD), A.Donnelly, A.Felce, G. Felce, M.Fowlie, A.Garner, W.George (WG), D.Girvan, Greensand Trust, A.J.Green, S.Green (SG), H.J.Griffiths, A.Grimsey (AG), J.Harding-Morris, M.Hawkes, P.Howard, S.Howarth, iNaturalist, D.Inward, L.King (LK), D.V.Manning, M.McClure, K.Mitchell, J.Moore, T.Morgan (TM), R.E.Morrisey, Natural England, D.Oakley-Martin, D.J.Odell, A.R.Outen, M.J.Palmer (MJP), J.Pitts, C.W.Plant, S.R.Plummer (SRP), J.Powell, S.Raven, L.Redmond, K.Sharpe, A.M.J.Skinner (AMJS), R.Southan, S.Thompson, P.Topley, T.Vials, S.Warrington, R.Watson, A.Whitney, The Wildlife Trust for Bedfordshire, Cambridgeshire, and Northamptonshire, I.Williams, N.D.Willits, I.P.Woiwod, A.Wren and P.Young.

***Andy and Melissa Banthorpe are the Society's joint Recorders for all Moths, a position they hold in an honorary capacity, having taken on the macros in autumn 2006 and the micros as well in spring 2016.***