AGROMYZIDAE NEWSLETTER

LATEST NEWS FROM THE NATIONAL AGROMYZIDAE RECORDING SCHEME

A SUMMARY OF 2019 & 2020

A BRIEF UPDATE

THE THIRD AND FOURTH YEARS…….

It is now four years since the National Agromyzidae Recording Scheme (NRS) was launched and it is hoped that everyone who has and still does contribute to the scheme is benefitting from its existence!

Unfortunately, due to other commitments, the NRS newsletter has been unable to be published as regularly as was once hoped. This edition (Newsletter 14) was compiled by Adam Parker with data sent from Barry Warrington and using his templates (any errors thus belong to AP and not BW). This newsletter serves to provide updates on the recording years 2019 and 2020 from the period December to November.

The species data for these two years of the scheme are presented as separate years, followed by a joint summary of the recording effort of individual recorders and the distribution of records per vice-county.

As of 10th December 2020 there were **44,967** records in the NRS Database, covering 371 (88.7%) of the **418** species known in the UK.

SUMMARY OF IRECORD DATA

MONTHLY BREAKDOWN OF IRECORD RECORDS

During the past two years, the following 'accepted' records were submitted via iRecord. They are presented alongside data from December 2017-November 2018.

Month	**2019-20**	**2018-19**	**2017-18**
December '19	70	98	82
January '20	125	160	132
February	84	77	128
March	60	90	142
April	43	57	111
May	162	156	178
June	301	283	366
July	384	448	277
August	230	328	360
September	295	294	269
October	292	327	284
November	175	124	203
TOTAL	**2105**	**2442**	**2,532**

2019 UPDATE

During the period December 2018 to November 2019, **2442** records were received via iRecord from **140** contributors covering **120** species of Agromyzid. Contributions by individual recorders and the breakdown of species are featured later in this newsletter.

All figures are slightly down on the year 2017-2018, with total records accepted into the recording scheme down by 90 (a modest 3.6%). This reduction in the total may be attributable to the

almost complete exclusion of *P. ilicis* records (see following). In any case, fluctuation in annual recording is to be expected and every record really does help increase our knowledge and understanding of the Agromyzidae.

Some records, unfortunately, continue to be rejected for not being supported by a photo. This stipulation is still met with some resistance at times, however, by having this requirement in place, it has ensured that the NRS Database is as accurate as possible.

A very big thank you to everyone who has contributed to the totals above!

THE SPECIES…….

IRECORD SPECIES RECORDED IN 2019

At present, there are **418** species of *Agromyzidae* which have been recorded in the UK, not all of which are actual leaf-miners. Species new to Britain are frequently added to the British list.

In 2018/19, **120** species were recorded via iRecord (28.7% of the UK species total), a figure which remains relatively consistent with previous years: 125 in 2017/18, and 123 in 2016/17.

Note the absence of *Phytomyza ilicis* from the record totals for this recording year. NRS Newsletter 13 (May 2020) discussed the recent research which has highlighted that the identification of larval mines of *P. ilicis* on *Ilex* sp. (holly) is no longer as simple as it was thought. *P. ilicis* records are now designated as an aggregate species.

SPECIES NAME	TOTAL
Phytomyza ranunculi	183
Phytomyza lappae	133
Phytomyza chaerophylli	112
Agromyza anthracina	101
Chromatomyia aprilina	99
Aulagromyza heringii	93
Cerodontha iridis	80
Phytomyza agromyzina	78
Agromyza nana	75
Chromatomyia scolopendri	71
Phytomyza flavicornis	71
Liriomyza amoena	67
Agromyza alnivora	55
Amauromyza flavifrons	54
Phytomyza minuscula	54
Liriomyza eupatorii	53
Phytomyza glechomae	51
Amauromyza verbasci	47
Phytoliriomyza melampyga	40
Phytomyza aquilegiae	39
Liriomyza strigata	35
Agromyza nigrescens	33
Cerodontha iraeos	33
Amauromyza labiatarum	32
Liriomyza congesta	32
Chromatomyia primulae	30
Phytomyza astrantiae	29
Liriomyza pusilla	25
Agromyza alnibetulae	24
Agromyza flaviceps	23
Chromatomyia lonicerae	22
Phytomyza hellebori	21
Calycomyza artemisiae	19
Melanagromyza lappae	19
Agromyza demeijerei	18
Aulagromyza luteoscutellata	18
Phytomyza angelicae	17
Phytomyza cytisi	17
Phytomyza heracleana	17
Phytomyza plantaginis	17
Aulagromyza populicola	16
Chromatomyia horticola	16
Phytomyza conyzae	15
Aulagromyza tridentata	14
Aulagromyza hendeliana	13
Aulagromyza tremulae	13
Phytomyza ranunculivora	13
Agromyza albitarsis	12
Melanagromyza eupatorii	12
Agromyza filipendulae	11
Melanagromyza aeneoventris	11
Agromyza idaeiana	10

Amauromyza morionella	10
Phytomyza crassiseta	10
Phytomyza marginella	10
Phytomyza tetrasticha	10
Agromyza viciae	9
Chromatomyia ramosa	9
Phytomyza eupatorii	9
Phytomyza tussilaginis	9
Agromyza sulfuriceps	7
Aulagromyza cornigera	7
Aulagromyza populi	7
Cerodontha denticornis	7
Chromatomyia periclymeni	7
Phytomyza leucanthemi	7
Agromyza abiens	6
Agromyza ferruginosa	6
Agromyza igniceps	6
Liriomyza sonchi	6
Phytomyza krygeri	5
Agromyza johannae	4
Agromyza varicornis	4
Chromatomyia centaurii	4
Liriomyza cicerina	4
Liriomyza pascuum	4
Phytomyza origani	4
Agromyza dipsaci	3
Cerodontha fulvipes	3
Liriomyza pisivora	3
Liriomyza puella	3
Melanagromyza tripolii	3
Nemorimyza posticata	3
Ophiomyia cunctata	3
Phytomyza brunnipes	3
Phytomyza fallaciosa	3
Phytomyza scotina	3
Agromyza frontella	2
Agromyza pseudoreptans	2
Agromyza vicifoliae	2
Chromatomyia milii	2
Chromatomyia nigra	2
Chromatomyia syngenesiae	2
Liriomyza flaveola	2
Liriomyza valerianae	2
Phytomyza bipunctata	2
Phytomyza rufipes	2
Phytomyza spinaciae	2
Phytomyza stolonigena	2
Agromyza mobilis	1
Agromyza rondensis	1
Aulagromyza orphana	1
Calycomyza humeralis	1
Cerodontha capitata	1
Cerodontha luctuosa	1
Cerodontha muscina	1
Galiomyza morio	1
Galiomyza violiphaga	1
Liriomyza centaureae	1
Liriomyza taraxaci	1
Melanagromyza aenea	1
Melanagromyza angeliciphaga	1
Melanagromyza galegae	1
Ophiomyia melandricaulis	1
Phytomyza angelicastri	1
Phytomyza autumnalis	1
Phytomyza heringiana	1
Phytomyza pastinacae	1
Phytomyza petoei	1

WINNER & LOSERS

CHANGES IN SPECIES RECORDED IN 2019

Fluctuation in recording effort for individual species is to be expected. It is hard to be sure if these fluctuations are due to genuine rises (or falls) in population or whether an increase in awareness is the cause, or indeed a combination of the two.

SPECIES NAME	2018-19	2017-18
Phytomyza ranunculi	183	151
Agromyza anthracina	101	98
Phytomyza agromyzina	78	91
Phytomyza chaerophylli	112	82
Agromyza alnivora	55	72
Liriomyza amoena	67	60
Phytomyza lappae	133	57
Phytomyza glechomae	51	50

Phytomyza minuscula	54	48
Phytoliriomyza melampyga	40	47

The above table compares the total records for the top 10 most frequently recorded species from 2017-18 against the totals of the same species in 2018-19. It shows that there is a consistent level of recording amongst the 'commonest' species. All records of the species are, of course, valuable.

The 2018-19 winners in particular, absent from this table, are *Chromatomyia aprilina* for which the scheme received 99 records (up from 19 in 2017/18), *Aulagromyza heringii* (93, up from 13), *Cerodontha iridis* (80, up from 19), *Agromyza nana* (78, up from 44), *Chromatomyia scolopendri* (71, up from 25), and *Phytomyza flavicornis* (71, up from 1). 20 species were recorded from single records.

Several species were added to the British and Irish lists. These species are at various stages of being recorded in the scientific literature. The focus here is on iRecord data and regular contributor Graham Moates in 2019 found *Melanagromyza* puparia in the stems of *Eupatorium* at Lackford Lakes Nature Reserve in Suffolk which did not agree to any of the known species which utilise that plant as a host. Reared adults were confirmed to be an undescribed species and was subsequently described as *Melanagromyza moatesi* sp. n.

Aideen O'Doherty found two species in 2019 which were new to Ireland: *Phytomyza brunnipes* (as a larval mine on *Sanicula europeana*) and *Phytomyza stolonigena* as a mine on creeping buttercup (*Ranunculus repens*).

2020 UPDATE

During the period December 2019 to November 2020 records on iRecord were received from **184** contributors supplying **2105** records of **137** species (32.3% of species) of Agromyzid. Contributions by individual recorders and the breakdown of species follow on from here.

All figures are, again down on the previous year, with total records accepted into the recording scheme down 337 but the total number of recorders was significantly increased (184, up from 140). This large reduction in overall numbers, but increase in recorders, is most likely attributable to the social changes which 2020 has presented to us all. Undoubtedly this has been a difficult year for many people, with new and differing concerns added into our daily lives from 2019.

For over two thousand records to have still been received by the scheme is testament to the dedication of our recorders, and we must again thank you for your work. It is gratifying to find that more people than ever were able to engage with recording Agromyzidae.

Many recorders found time during lockdown restrictions to focus on gardens and parks in their locality. Domestic gardens, of course, host many species of Agromyzidae such as those found on garden aquilegia (*Phytomyza aquilegiae*, *Phytomyza minuscula*, *Phytomyza krygeri* and *Ophiomyia aquilegiana*) – all of which were recorded in 2019-20.

A very big thank you to everyone who has contributed to the above totals!

THE SPECIES…….

IRECORD SPECIES RECORDED IN 2020

SPECIES NAME	TOTAL
Phytomyza chaerophylli	150
Phytomyza ranunculi	118
Phytomyza agromyzina	111
Chromatomyia primulae	91
Phytomyza lappae	81
Chromatomyia aprilina	77
Chromatomyia scolopendri	69
Aulagromyza heringii	62
Phytoliriomyza melampyga	62
Cerodontha iridis	59
Agromyza nana	58
Amauromyza verbasci	57
Agromyza alnivora	56
Amauromyza labiatarum	56

Phytomyza minuscula	54
Liriomyza eupatorii	53
Phytomyza glechomae	49
Liriomyza amoena	47
Amauromyza flavifrons	41
Liriomyza strigata	37
Agromyza anthracina	31
Chromatomyia horticola	29
Cerodontha iraeos	28
Agromyza alnibetulae	27
Phytomyza hellebori	27
Chromatomyia lonicerae	25
Aulagromyza tridentata	24
Liriomyza congesta	24
Melanagromyza moatesi	24
Agromyza idaeiana	23
Phytomyza conyzae	23
Phytomyza aquilegiae	21
Phytomyza angelicae	20
Agromyza flaviceps	19
Aulagromyza tremulae	19
Phytomyza cytisi	19
Liriomyza pusilla	18
Aulagromyza populicola	16
Chromatomyia nigra	16
Phytomyza astrantiae	14
Chromatomyia milii	13
Phytomyza bipunctata	13
Phytomyza marginella	13
Chromatomyia periclymeni	12
Phytomyza ranunculivora	12
Calycomyza artemisiae	11
Phytomyza plantaginis	11
Aulagromyza hendeliana	10
Phytomyza flavicornis	10
Aulagromyza populi	9
Chromatomyia ramosa	9
Phytomyza crassiseta	9
Phytomyza eupatorii	9
Phytomyza heracleana	9
Cerodontha denticornis	8
Liriomyza pascuum	8
Liriomyza valerianae	8
Nemorimyza posticata	8
Agromyza demeijerei	7
Liriomyza flaveola	7
Melanagromyza lappae	7
Phytomyza tussilaginis	7
Agromyza dipsaci	6
Agromyza filipendulae	6
Aulagromyza luteoscutellata	6
Phytomyza tetrasticha	6
Agromyza igniceps	5
Agromyza viciae	5
Amauromyza morionella	5
Aulagromyza cornigera	5
Chromatomyia syngenesiae	5
Melanagromyza eupatorii	5
Phytomyza brunnipes	5
Phytomyza gymnostoma	5
Agromyza abiens	4
Agromyza albitarsis	4
Agromyza johannae	4
Agromyza nigrescens	4
Cerodontha biseta	4
Liriomyza cicerina	4
Phytomyza krygeri	4
Galiomyza morio	3
Liriomyza lutea	3
Liriomyza pisivora	3
Liriomyza puella	3
Liriomyza sonchi	3
Melanagromyza angeliciphaga	3
Agromyza frontella	2
Agromyza mobilis	2
Agromyza sulfuriceps	2
Aulagromyza fulvicornis	2
Aulagromyza orphana	2
Cerodontha fulvipes	2
Cerodontha muscina	2
Chromatomyia asteris	2
Liriomyza richteri	2
Melanagromyza aeneoventris	2
Ophiomyia maura	2
Phytomyza origani	2
Phytomyza petoei	2

Agromyza flavipennis	1
Agromyza nigrociliata	1
Agromyza pseudoreptans	1
Cerodontha atronitens	1
Cerodontha bimaculata	1
Cerodontha lateralis	1
Cerodontha luctuosa	1
Cerodontha phragmitidis	1
Cerodontha pygmaea	1
Cerodontha suturalis	1
Chromatomyia paraciliata	1
Liriomyza bryoniae	1
Liriomyza centaureae	1
Liriomyza latipalpis	1
Liriomyza taraxaci	1
Metopomyza flavonotata	1
Napomyza nigriceps	1
Ophiomyia aquilegiana	1
Ophiomyia melandryi	1
Phytomyza aconiti	1
Phytomyza angelicastri	1
Phytomyza autumnalis	1
Phytomyza calthivora	1
Phytomyza calthophila	1
Phytomyza cirsii	1
Phytomyza leucanthemi	1
Phytomyza orobanchia	1
Phytomyza pastinacae	1
Phytomyza phillyreae	1
Phytomyza pimpinellae	1
Phytomyza pullulan	1
Phytomyza solidaginis	1
Phytomyza stolonigena	1
Phytomyza vitalbae	1
Phytomyza spinaciae	1

WINNER & LOSERS

CHANGES IN SPECIES RECORDED IN 2020

Phytomyza chaerophylli has leapt ahead of its 3rd place position in 2018/19 to take top spot in 2019/20. *Chromatomyia primulae* rose from 30 records in 2018/19 to 91 this year.

Only 31 *Agromyza anthracina* mines were recorded in 2019/20, a large drop from 101 in 2018/19 which placed it in the 4th spot overall. Given the overall drop in records it is not surprising to find that many species had fewer records in 2020 than 2019.

36 species were recorded as a single record in the year.

RECORDING EFFORT: IRECORD RECORDERS

Records submitted to iRecord were received from 140 recorders in 2018/19 and 184 in 2019/20. The individual contributions by recorders are listed here. Thanks go to every recorder for submitting data to the scheme.

If you are new to recording Agromyzidae: Welcome! We hope that you are able to continue to submit any records you come across. Please do ask questions of the scheme. New recorders may find Newsletter 7 (January 2018) particularly valuable as it grades all the species by their difficulty in identification and gives a good indication whether a record can be accepted from an image of a leaf-mine on its own. The *Host Plant Genera of the British Agromyzidae* is another useful resource. Both are available for free – just contact the scheme directly for the checklist. All past newsletters are available to download; see the pinned tweet on the @AgromyzidaeRS account.

79 recorders submitted records in both 2019 and in 2020, many of whom were able to increase their recording effort in 2020.

The scheme organizer answered 512 email enquiries in 2019 and 288 in 2020, in addition to 192 on Twitter in 2019 and 95 in 2020.

RECORDER NAME	RECORDS SUBMITTED	
	2018-19	2019-20
HOMAN, ROBERT	442	167
BANTHORPE, ANDY & MELISSA	382	176
MOATES, GRAHAM	255	210
DAY, JOHN	235	255
EMERSON, JAMES	188	114

O'DOHERTY, AIDEEN	131	69
THOMAS, SAM	64	35
TIMMS, SUE	58	23
ROENISCH, SAHARIMA	42	64
CALOW, GRAHAM	41	116
MONTEIGH, RODNEY	41	50
OGILVY, STUART	38	6
DAVIS, GRAEME	29	40
PARKER, ADAM	21	35
DAVIS, TONY	19	34
WATKEY, GRAHAM	18	28
SMITH, PETER	18	18
TORDOFF, GEORGE	17	12
HALL, PETER	17	1
MCCULLOCH, JAMES	15	16
MITCHELL, RYAN	13	13
HODGE, TIM	12	18
WARRINGTON, LYNN	12	18
BRIGHTON, PHIL	11	3
SOLOMON, JOHN	11	-
BUCKTON, SAM	10	41
PLUMMER, STEPHEN	10	21
WILSON, ELLEN	10	10
MCWILLIAM, STEPHEN JAMES	9	16
ILES, CHRISTOPHER	9	9
SHILLAKER, RICHARD	9	1
WATCHORN, ANDREW	8	6
ANDREWS, IAN	8	2
ELY, BILL	7	42
WILSON, MARK	7	11
FLETCHER, NEIL	7	10
SHURMER, MIKE	7	10
ROLWEY, LISA	7	-
THOMAS, JANE	7	-
CLOUGH, JERRY	6	8
SALTER, ALAN	6	7
WARRINGTON, STUART	6	3
WARD, TIM	6	2
BURKINSHAW, TIM	6	-
NICHOLLS, DAVID	6	-
HAYCOCK, ANNIE & BOB	5	10
FORMSTONE, BRYAN	5	-
JENNINGS, MALCOM	5	-
LEWIS, STEVEN	5	-
RUTHERFORD, HARRY	5	-
BELL, MARTIN	4	17
ROBBINS, C.S.	4	7
HARVEY, MARTIN C.	4	4
WOODS, AARON	4	4
CUNNINGHAM, JILL	4	3
BELL, MELINDA	3	22
GREGORY, NEIL	3	8
LYDEN, JOHN	3	5
COOPER, BARBARA	3	2
PARSONS, PAUL	3	1
BEAUMONT, ANDREAS	3	-
BROWN, ANDY	3	-
MCGINTY, MARCO	3	-
TRUNECKA, DENNIS	3	-
BARRON, PHIL	2	6
MARLEY, SUSAN	2	5
GRACE, ANDREW	2	4
PRIESTLY, STEVE	2	4
KERR, KEITH	2	3
LUSH, MIKE	2	3
HIBBERD, GARY	2	2
MARTIN, JOHN P	2	2
OUTLAW, IAIN	2	2
EVERITT, JACOB	2	1
GATEN, TED	2	1
CANNON, LESLEY	2	-
CHALLINOR, PAUL	2	-
DAVIDSON, RICHARD	2	-
DE BORDES, TEYL	2	-
EDWARD, TOBY	2	-
GLANZ, LYN	2	-
LEE, DEREK	2	-
MATCHAM, HOWARD	2	-
VERGUNST, PETRA	2	-
DEJARDIN, ANDREW	1	8
MOVERLEY, TONY	1	7
BRANNAN, KIRSTY	1	4

SMALL, JULIAN	1	4
HNATIUK, MARTYN	1	3
HUGHES, SIMON	1	3
JOHNSON, LEE	1	3
COMONT, RICHARD	1	2
GARVEY, S.	1	2
HIGGOTT, MIKE	1	2
PITTS, JOHN	1	2
VINCENT, CHRIS	1	2
WHITELY, DEREK	1	2
COTTLE, NIGEL	1	1
CRELLIN, STEVEN	1	1
DAVIES, HAROLD	1	1
SLADE, DAVID	1	1
WOOLLIAMS, JOHN	1	1
WRIGHT, NEVILLE	1	1
BOX, TERRY	1	-
BRYCE, MARION	1	-
CHARTER, ELIZABETH	1	-
DEVEY, REBECCA	1	-
DOMBROSKIE, JASON	1	-
DREPANOSTOMA	1	-
GALPIN, BARRIE	1	-
GARLAND, STEVE	1	-
GROOM, QUENTIN	1	-
HACKSTON, MIKE	1	-
HAMILL, BARRIE	1	-
HARDING-MORRIS, JAMES	1	-
JEWELS, ANDREW	1	-
JONES, CHRIS	1	
JULIAN, DEREK	1	-
LE BOUTILLIER, COLIN	1	-
LING, STUART	1	-
MATHERS, STEVE	1	-
MULHOLLAND, ROSIE	1	-
MULLEN, BEN	1	-
NIXIE, BELINDA	1	-
O'BOYLE, JOHN	1	-
O'NEILL, JAMIE	1	-
PICKENS, DAVID	1	-
PLAYFORD, PHIL	1	-
PRECEY, PHILIP	1	-
RELF, PENNY	1	-
ROBERTSON, ALISON	1	-
WHELPDALE, PHILLIP	1	-
WOOD, JONATHAN	1	-
WRENCH, DAN	1	-
GEORGE, SABINA	0	-
GREGORY, LEE	-	27
GIBSON, SETH	-	21
HIND, STEVE	-	19
THOMAS, JANE	-	17
LAW, ANDREW	-	15
HARROW, MATTHEW	-	14
IRVING, ANNIE	-	14
AMES, MATTHEW	-	11
PASSEY, STEPHEN	-	11
VICKERS, JENNY	-	10
GRAY, MARTIN	-	9
GRIMES, MARTIN	-	9
MOSS, LAURA	-	9
TAYLOR, SUE	-	7
BOWYER, PAUL	-	4
COOPER, LEONARD	-	4
GREENLAND, MARTIN	-	4
MABBETT, CRAIG	-	4
VAUGHAN, HOWARD	-	4
BRANSCOMBE, JULIAN	-	3
CLARK, BUZZ	-	3
HOTCHKISS, ALISTAIR	-	3
LEONARD, PETER	-	3
OGDEN, PETER	-	3
STURGESS, PETER	-	3
YAXLEY, ROBERT	-	3
BAINBRIDGE, ANTHONY	-	2
BASHFORD, RICHARD	-	2
BENTLEY, CHRIS	-	2
CUNNINGHAM, ANDREW J	-	2
FOALE, GEOFFREY	-	2
FRENCH, STEPHEN	-	2
HUTCHINSON, FINLEY	-	2
JONES, DEAN	-	2
KING, TONY	-	2

MCMILLIAN, JAMIE	-	2
MORTIN, JON	-	2
NOTTON, DAVID	-	2
POLLITT, MARK	-	2
SKEVINGTON, MARK	-	2
WENHAM, GRAHAM	-	2
WITTS, HARRY	-	2
BELL, ROBERT	-	1
BENNETT, SIMON	-	1
BOWLES, NICK	-	1
BRYAN, JOHN-PAUL	-	1
BURGESS, LIONLE	-	1
BURTON, VICTORIA J	-	1
CLAY, CAROLINE	-	1
CREMIN, ROSE	-	1
DAVIES, SUE	-	1
DENNIS, DAVID	-	1
DREWITT, ANDREW	-	1
FERGUS, TONY	-	1
GALLIS, STEVE	-	1
GRAHAM, KARL	-	1
GRIFFITHS, CHLOE	-	1
HADDOW, MALCOLM	-	1
HAMPSON, PERRY	-	1
HAYEK, TOM	-	1
HEAL, JAMES	-	1
HEWITT, JOSIE	-	1
IVIN, CHRIS	-	1
JACKSON, BELINDA	-	1
JUSTAMOND, MARIA	-	1
KERNOHAN, JASON	-	1
KNOTT, SIMON	-	1
MILES, CLAIRE	-	1
MILLAR, SHIRLEY	-	1
NAPIER, DI	-	1
NEWTON, SAM	-	1
OUGHTON, JACK	-	1
PETLEY-JONES, ROB	-	1
PHELPS, SIMON	-	1
POCOCK, MICHAEL	-	1
PRYKE, LINDA	-	1
ROBINSON, PETER	-	1
SELIGMAN, PAUL	-	1
SHOWERS, JOHN	-	1
SHUTTLEWORTH, ALI	-	1
SMART, GILL	-	1
STAMP, MICHELLE	-	1
SULLIVAN, PAUL	-	1
THIRWELL, IAN	-	1
TYLER, RICHARD	-	1
WALLACE, JONATHAN	-	1
WELLS, LINDA	-	1
WILLIAMS, FAITH	-	1
WILLIAMS, IAN	-	1
WRIGHT, ELAINE	-	1

Several individuals and recording groups submitted data directly into the scheme. Their contributions are not itemized above, but thanks are due to: Andrew Cunningham, Andrew & Janet Graham, David Biggs, David Gibbs, Professor Sir Charles Godfray, Highlands Biological Recording Group, Ivan Perry, John Coldwell, John Day, Laurence Clemons, Mike Paskin, Paul Cobb, Phil Porter, Roger Morris, and Rob Edmunds.

RECORDING EFFORT: VICE-COUNTIES

Records were received from most of the British and Irish vice-counties. First VC records for Agromyzidae in the NRS received in 2017/2018 were VCs: 78 (Peeblesshire), 98 (Argyllshire), 99 (Dunbartonshire), 102 (South Ebudes), and 105 (West Ross). In 2018/19 a first county record for VC 89 (East Perthshire) was received.

VC	COUNTY	RECORDS SUBMITTED 2018/19	2019/20
1	West Cornwall	12	6
2	East Cornwall	14	11
3	South Devon	208	264
4	North Devon	20	3
5	South Somerset	11	6
6	North Somerset	30	33
7	North Wiltshire	39	12
8	South Wiltshire	6	2

9	Dorset	7	4
10	Isle of Wight	2	3
11	South Hampshire	9	11
12	North Hampshire	35	12
13	West Sussex	13	19
14	East Sussex	5	8
15	East Kent	1	40
16	West Kent	5	9
17	Surrey	33	21
18	South Essex	1	1
19	North Essex	1	-
20	Hertfordshire	17	19
21	Middlesex	16	3
22	Berkshire	25	13
23	Oxfordshire	84	38
24	Buckinghamshire	17	28
25	East Suffolk	19	47
26	West Suffolk	24	25
27	East Norfolk	305	245
28	West Norfolk	94	42
29	Cambridgeshire	11	18
30	Bedfordshire	190	155
31	Huntington	-	5
32	Northamptonshire	8	6
33	East Gloucestershire	175	148
34	West Gloucestershire	67	27
35	Monmouthshire	20	29
36	Herefordshire	127	11
37	Worcestershire	22	9
38	Warwickshire	22	12
40	Shropshire	60	29
41	Glamorganshire	29	62
42	Breconshire	14	35
43	Radnorshire	2	-
44	Carmarthenshire	4	7
45	Pembrokeshire	7	11
46	Cardiganshire	1	4
47	Montgomeryshire	11	5
48	Merionethshire	3	-
49	Caernarvonshire	5	17
50	Denbighshire	8	19
51	Flintshire	1	3
52	Anglesey	1	2
53	South Lincolnshire	4	6
54	North Lincolnshire	11	33
55	Leicestershire	181	285
56	Nottinghamshire	4	5
57	Derbyshire	16	23
58	Cheshire	2	22
59	South Lancashire	23	23
60	West Lancashire	15	4
61	South-east Yorkshire	28	19
62	North-east Yorkshire	40	41
63	South-west Yorkshire	3	13
64	Mid-west Yorkshire	13	5
65	North-west Yorkshire	2	1
66	County Durham	2	4
67	South Northumberland	-	1
68	North Northumberland	1	1
69	Westmorland	14	2
70	Cumberland	20	-
71	Isle of Man	2	1
72	Dumfriesshire	1	1
73	Kirkcudbrightshire	8	7
75	Ayrshire	3	1
77	Lanarkshire	1	-
78	Peeblesshire	1	1
80	Roxburghshire	2	1
82	East Lothian	2	9
83	Midlothian	9	2
85	Fifeshire	-	2
86	Stirlingshire	1	2
89	East Perthshire	-	1
92	South Aberdeenshire	2	-
96	East Inverness-shire	-	2
98	Argyll	1	-
99	Dunbartonshire	2	3
102	South Ebudes	1	-
103	Mid Ebudes	-	6
104	North Ebudes	-	18
105	West Ross	1	-
108	West Sutherland	7	1
111	Orkney	2	3
112	Shetland	-	1
H16	West Galway	1	-
H33	Fermanagh	13	18

H36	Tyrone	2	8
H37	Armagh	9	6
H38	Down	82	40
H39	Antrim	61	48
H40	Londonderry	8	1

The NRS does not hold any records for the following VC's;

VC	County
74	Wigtownshire
79	Selkirkshire
88	Mid Perthshire
93	N. Aberdeenshire
94	Banffshire
95	Moray
97	W. Inverness-shire
101	Kintyre
104	North Ebudes
109	Caithness

THINGS TO LOOK FOR

THERE ARE STILL AGROMYZIDAE TO FIND AND RECORD OVER WINTER.

Melanagromyza lappae

There may be fewer leaf mines active at this time of year, but stem borers are always worth looking out for. *Melanagromyza lappae* can be found by opening Burdock stems and looking for the puparium (as pictured). It is a much under-recorded species: The scheme received 19 records in 2019 and 7 in 2020. These numbers might not seem too small, but compare this to the 133 & 79 records received of the leaf miner *Phytomyza lappae* which may also be found on Burdock (albeit earlier in the year).

Image credit: Barry Warrington

Phytomyza chaerophylli

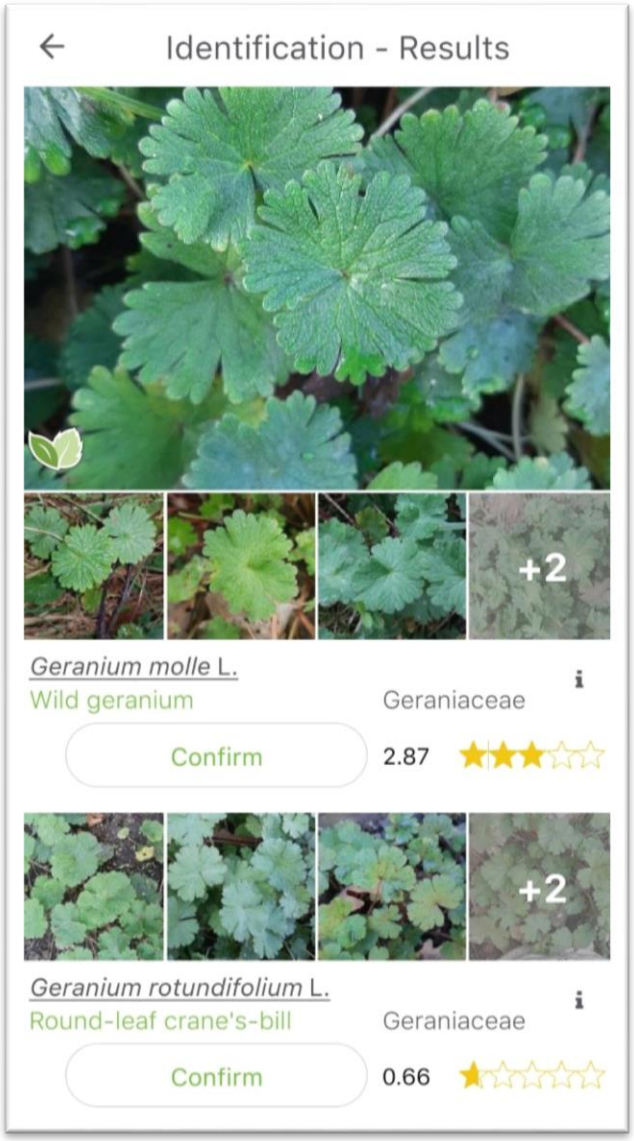
It is one of the most recorded leaf mines (and the most commonly recorded in 2020), but *P. chaerophylli* can be seen regularly in Winter and Spring on the tips of several plants, especially *Anthriscus* sp. (cow parsley) and *Chaerophyllum* sp. (chervils). Mines on new plants low down on recently cut verges, where there isn't a lot else growing, seem to be particularly easy to find.

Image credit: Adam Parker

A USEFUL TOOL?

PLANTNET FOR AGROMYZID ID

If, like me (AP), one of the biggest challenges in finding and recording leaf mining insects is being hampered by poor botanical knowledge I can recommend using the PlantNet app available for smartphones. The app uses machine learning of photographs of plant parts – leaves, fruits etc. in combination with user-generated confirmations of IDs. If there are sufficient examples in the reference database, plants can be quite easily identified.



It comes with some caveats, namely that because it is based on an international dataset it can suggest plant species or genera that are absent from the wild in Britain and Ireland. It scores the likelihood of its identification out of 5 stars, giving an indication of the likelihood of the ID. I take identifications to species level with a serious pinch of salt, but to get a plant to genus level it has proved very useful indeed.

I know iNaturalist does something similar, and have come across people using LeafSnap, PlantSnap, and Google Lens. I'd be interested to know the experiences of users of other similar apps for this purpose.

FEEDBACK AND SUGGESTIONS

GET IN TOUCH!

The NRS would love to hear any suggestions you may have; be that relating to the verification process, newsletter ideas or something else.

Finally, as always, a big thank you to everyone who has and continues to contribute to the NRS – keep up the good work folks!

CONTACT

IF YOU HAVE ANY QUESTIONS OR WOULD LIKE TO KNOW MORE ABOUT THE SCHEME, PLEASE DO GET IN TOUCH WITH US;

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