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**Atlas of the Lepidoptera
of Norway.**

Part 1.

**Gelechioidea: Oecophoridae,
Agonoxenidae, Batrachedridae,
Momphidae, Cosmopterigidae,
Scythridae, Blastobasidae.**

by

**Leif Aarvik, Svein Svendsen,
Yngvar Berg, Kai Berggren
&
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Atlas of the Lepidoptera of Norway. Part 1. Gelechioidea: Oecophoridae, Agonoxenidae, Batrachedridae, Momphidae, Cosmopterigidae, Scythridae, Blastobasidae.

LEIF AARVIK, SVEIN SVENDSEN, YNGVAR BERG, KAI BERGGREN & LARS OVE HANSEN

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The distribution of the 106 species of the families Oecophoridae, Agonoxenidae, Batrachedridae, Momphidae, Cosmopterigidae, Scythridae and Blastobasidae is presented on EIS grid maps and discussed. Additional information on total range and foodplants is given. The following species are recorded for the first time in Norway: *Luquetia lobella* (Denis & Schiffermüller, 1775), *Agonopterix selini* (Heinemann, 1870), *Mompha epilobiella* (Denis & Schiffermüller, 1775) and *Schytris cicadella* (Zeller, 1839).

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INTRODUCTION

The vicar Hans Strøm was the first to study and describe Norwegian Microlepidoptera. He published several papers between 1765 and 1788. Unfortunately all his material is lost. Lauritz Martin Esmark and Johan Heinrich Spalckhauer Siebke were active in the middle of the 19th century. Their collections, presently in the Zoological Museum in Oslo, give a valuable documentation of the apparently rich Microlepidoptera fauna in Oslo some 140 years ago. Wilhelm Maribo Schøyen and Hans Jacob Sparre Schneider were active from about 1860 until after the turn of the century. They made extensive excursions and brought together a large material from almost all parts of Norway. Schneider became curator at Tromsø Museum and was particularly active in N Norway.

Embrik Strand spent most of his lifetime as an entomologist in Germany, but between 1898 and 1903 he collected numerous Microlepidoptera from many places in Norway. The most active microlepidopterists in the first part of this century were Emil Barca, Karl Haanshus, Johan Rygge and Nils Grønlien. Nils Knaben was active during a very long period from the 1920's until the 1960's. Contributions were also given by Ole B. Lundetræ and Arne Nielsen during this period. Emil Barca collected mainly in Østfold and near Oslo and found several species not previously taken in Norway. Karl Haanshus and Johan Rygge both collected mainly in the Oslo district, while Nils Grønlien, Nils Knaben, Ole B. Lundetræ and Arne Nielsen were all active mostly in W Norway. Fortunately, the material collected by all these entomologists is deposited in the zoological museums in Oslo, Bergen and Tromsø.

Magne Opheim studied and revised Norwegian Microlepidoptera from about 1960 until his death in 1987. He was the first to apply genitalia characters in the identification of Norwegian Microlepidoptera, and he made thousands of dissections on specimens in the Zoological Museum in Oslo. He revised the Norwegian species of *Depressaria* (Opheim 1962) and Momphidae s.lat. (Opheim 1971) correcting many mistakes and recording several species new to Norway. Unfortunately his private collection, now in the Zoological Museum in Oslo, is poorly labelled and partly damaged. In addition smaller contributions have been published by several authors in recent years.

In 1986 the «Lepidopterologisk arbeidsgruppe» (Lep-arb) was established. Two of its members, Leif Aarvik and Svein Svendsen, had for several years gathered faunistical information on Norwegian Lepidoptera. The establishment of Lep-arb made this work more efficient, and the information has been gathered in an electronic database. This database contains, with a few exceptions, only information of species examined by the members. Although most of the information

has been retrieved from the collection at Zoological Museum in Oslo, the members of the group have also studied collections in other institutions, as well as private collections.

The present contribution is the first in the atlas series on the distribution of Norwegian Lepidoptera, based on the information in lep-arb's database. We anticipate that two further volumes on Gelechioidea will be published in this series, one on Elachistidae & Coleophoridae, and one on Gelechiidae. It is our hope that this atlas series will not only be useful to the growing group of amateur lepidopterists, but that it also can provide basic information related to conservational issues.

THE FAUNA

There are four previous surveys of the Norwegian species belonging to the families treated here, Table 1.

Table 1. Faunal surveys given in chronological order.

Author	Year	Number of species (misidentifications not corrected)
Schneider	1876	34
Schøyen	1893	57
Haanshus	1933	71
Opheim	1978	85
Present work	1994	106

The number of species known from Norway has increased significantly in recent years. This reflects increased collecting activity, and to a lesser extent, the fact that «new species» have become established in Norway.

Many Microlepidoptera have a highly specialized and cryptic way of living. Today lepidopterists are more conscious about these special requirements, and often search for single «difficult» species. The number of collectors in Norway has also increased.

A comparison of the number of species known from Norway with the figures in our neighbouring countries, indicates that more species can be expected, particularly in Agonoxenidae and Blastobasidae (Table 2). On this basis we believe that the number of species recorded from Norway will continue to increase. How-

ever, habitat destruction might lead to extinction of vulnerable species. This applies in particular to the Oslofjord area, where the human impact is considerable, and the highest number of species occurs. Most parts of our country are only superficially studied with respect to Microlepidoptera, and it is our hope that the numerous "empty" squares in the distribution maps will stimulate further surveys.

Table 2. Number of species in the Nordic countries.

Family	Norway	Sweden	Denmark	Finland
Oecophoridae	75	98	81	74
Agonoxenidae	3	9	6	4
Batrachedridae	2	2	2	2
Momphidae	10	15	14	13
Cosmopterigidae	5	12	10	7
Scythridae	9	15	12	11
Blastobasidae	2	4	3	5
Total	106	155	128	116

IDENTIFICATION

Norwegian Momphidae s. lat. can be identified using Riedl (1969), which covers all European and several N African species. It should be noted that Momphidae in the present sense only refers to the genus *Mompha*, but in the sense of e.g. Riedl (1969) also includes Agonoxenidae, Batrachedridae and Cosmopterigidae.

The N European Scythridae was monographed by Bengtsson (1984) and Oecophoridae by Palm (1989). These are excellent treatments with figures of genitalia and colour plates of the adults, in addition to information on distribution and ecology. Our two species of Blastobasidae are treated by Agassiz (1982) and Jonasson (1985).

SYSTEMATICS

Today, the delimitation of the superfamily Gelechioidea is generally agreed upon, but until recently the classification within the superfamily has been far from stable. An example is the genus *Stathmopoda*, which by some authors is given family rank as Stathmopodidae, by others it is included in the subfamily Oecophorinae of Oecophoridae. It has been pointed out that Oecophoridae s.lat. is not monophyletic (Kristensen 1985, Leraut 1989).

Recently Minet (1990) proposed a new classification of Gelechioidea which was further developed by Leraut (1992). This system is based mainly on immature stages and involves radical changes (Table 3). The classification adopted here essentially follows Meyrick (1922), as we have chosen to follow the recent Swedish catalogue by Svensson et al. (1987). However, there are two exceptions. Firstly, the sequence of the species within *Depressaria* and *Agonopterix* follows Palm (1989), and secondly, we follow Leraut's (1989) revision of *Schiffermuelleria*.

MATERIAL AND METHODS

All records have been retrieved from Lep-arb's database, which contains the following information for each entry:

- Locality
- Capture date
- Number of specimens
- Name of collector (leg.)
- Name of determinator (det.)
- Deposition site
- Eventually genitalia slide no.
- Eventually information on larval foodplant for reared material

In the text to each species information is given under three or four headings:

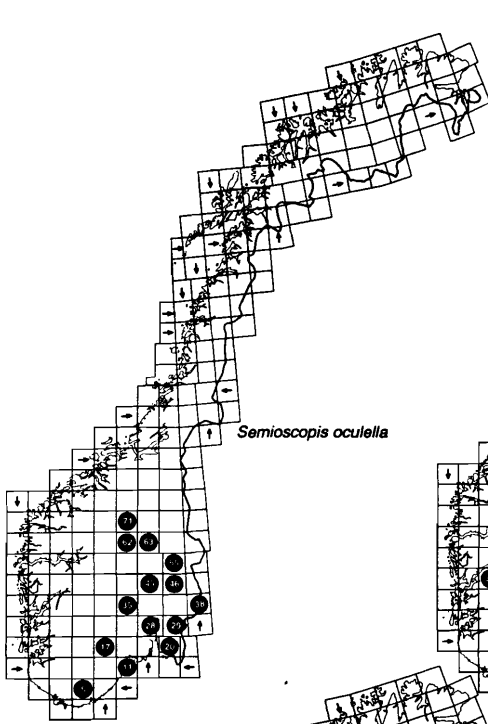
- DISTRIBUTION: Gives the distribution and frequency in Norway. If appropriate, notes on the habitat preferences are also given.
- TOTAL RANGE: Outlines the total range of the species.
- FOODPLANT: Gives the larval foodplant(s) of the species. The heading is also used in cases where the larvae do not feed on green plants.
- NOTE: Is used in a few cases to correct errors found in the literature.

The included records are based on material identified by the authors; in a few cases material identified by others is included. Most literature records which could not be verified by the authors are mentioned in the text as «not verified records» and are excluded from the distribution maps.

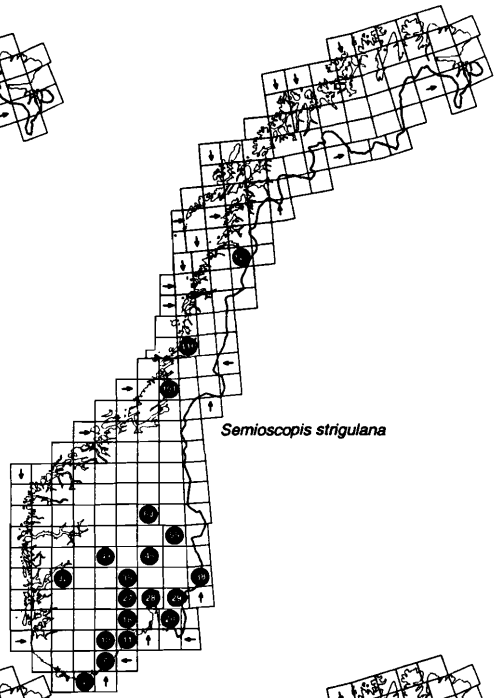
Table 3. Classifications of Gelechioidea

Minet (1990) and Leraut (1992)		Svensson et al. (1987)
Families and subfamilies	Included genera (only those treated here)	
Pterolonchidae		
Coleophoridae Amphisbatinae Coleophorinae	<i>Amphisbatis</i> , <i>Pseudatemelia</i>	Oecophoridae: Depressariinae Coleophoridae
Elachistidae Agonoxeninae Elachistinae Stenomatininae Cryptolechiinae Hypertrophiinae	<i>Chrysoclista</i> , <i>Heinemannia</i> , <i>Blastodacna</i> <i>Cephalispheira</i> <i>Anchinia</i> , <i>Hypercallia</i>	Agonoxenidae Elachistidae Oecophoridae: Depressariinae Oecophoridae: Depressariinae, Oecophorinae
Ethmiinae Depressariinae	<i>Ethmia</i> <i>Semioscopis</i> , <i>Luquetia</i> , <i>Exaeretia</i> , <i>Depressaria</i> , <i>Levipalpus</i> , <i>Agonopterix</i> , <i>Telechrysis</i>	Oecophoridae: Ethmiinae Oecophoridae: Depressariinae Oecophoridae: Oecophorinae
Peleopodidae		
Chimabachidae	<i>Diurnea</i>	Oecophoridae: Chimabachinae
Carcinidae	<i>Carcina</i>	Oecophoridae: Oecophorinae
Xyloryctidae		
Batrachedridae	<i>Batrachedra</i>	Batrachedridae
Oecophoridae	<i>Buvatina</i> , <i>Denisia</i> , <i>Crassa</i> , <i>Batia</i> , <i>Borkhausenia</i> , <i>Metalampra</i> , <i>Decantha</i> , <i>Oecophora</i> , <i>Harpella</i> , <i>Endrosis</i> , <i>Hofmannophila</i> , <i>Aplota</i> , <i>Pleurota</i>	Oecophoridae: Oecophorinae
Symmocidae	<i>Oegoconia</i>	Blastobasidae: Symmocinae
Lecithoceridae		Lecithoceridae
Scythridae	<i>Scythris</i>	Scythridae
Epimarptidae		
Blastobasidae	<i>Hypatopa</i> (<i>Holococera</i> auct.)	Blastobasidae: Blastobasinae
Stathmopodidae	<i>Stathmopoda</i>	Oecophoridae: Oecophorinae
Momphidae	<i>Mompha</i>	Momphidae
Cosmopterigidae Antequerinae Cosmopteriginae Chrysopoleiinae	<i>Panccalia</i> <i>Limnaecia</i> <i>Sorhageria</i>	(no change) (no change) (no change)
Gelechiidae		Gelechiidae

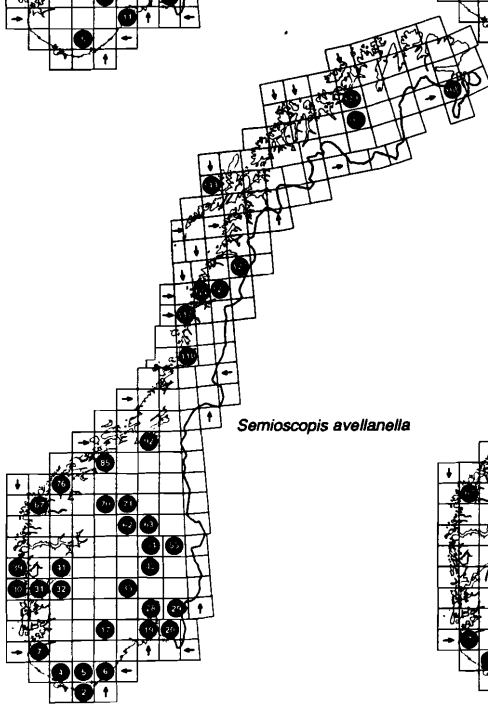
The EIS-grid system used in the maps, consists of 189 modified 50 x 50 km squares (Økland 1977). A black dot indicates at least one reliable record from a certain square. Due to the low number of older records for most species, we have refrained from using different symbols for records made prior to or after a particular year.



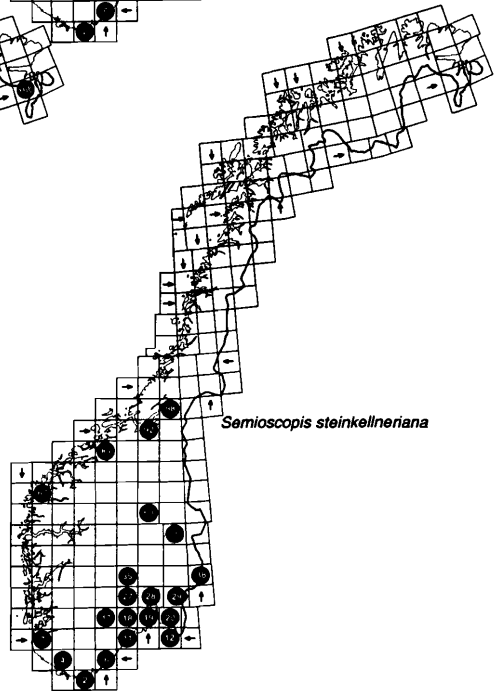
Semioscopis oculella



Semioscopis strigulana



Semioscopis avellanella



Semioscopis steinkellneriana

THE SPECIES

Oecophoridae

***Semioscopis oculella* (Thunberg, 1794)**

DISTRIBUTION: Several records from SE Norway. Rare along the coast.

TOTAL RANGE: N and C Europe; eastwards through European Russia to Siberia (Palm 1989).

FOODPLANT: *Betula* (Palm 1989).

***Semioscopis strigulana* (Fabricius, 1787)**

DISTRIBUTION: Rather rare in most areas, but locally common in S Norway.

Avoids the western coastline, but one record from HOI: Ullensvang 25 April 1963 T. Edland leg. Two records from N Norway: NSI, Saltdal 20–21 April 1883 A.O.C. Hagemann leg.; NSY, Sømna: Vågsfjellet 7 May 1985 W. Hjelmseth leg.

TOTAL RANGE: Eastern parts of N and C Europe; eastwards through European Russia to Siberia (Palm 1989).

FOODPLANT: *Populus tremula* (Palm 1989).

***Semioscopis avellanella* (Hübner, 1793)**

DISTRIBUTION: Common north to Finnmark (FV and FØ). Not verified records: TRy, TRi (Opheim 1978).

TOTAL RANGE: N and C Europe; eastwards through European Russia to Siberia (Palm 1989).

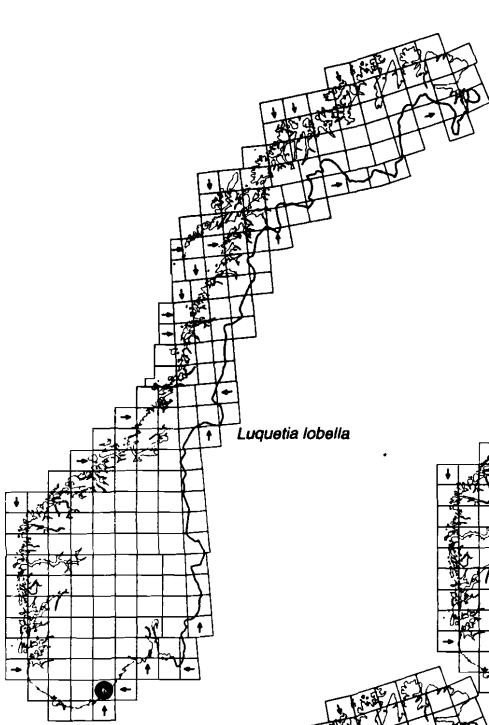
FOODPLANT: *Betula*, outside Norway also found on other deciduous trees (Palm 1989).

***Semioscopis steinkellneriana* (Denis & Schiffermüller, 1775)**

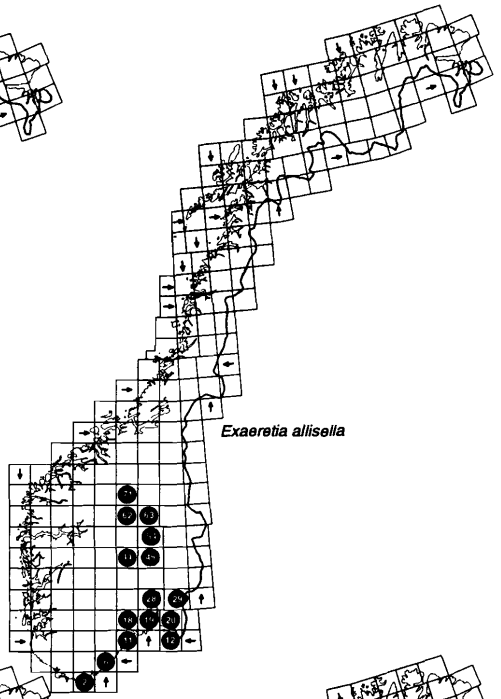
DISTRIBUTION: Rather common north to NTI, Inderøy, but rare in W Norway as we have seen specimens from RY, SFY and MRI only. Not verified records: HOy, HOi (Opheim 1978).

TOTAL RANGE: Almost all over Europe; Caucasus; N America (Palm 1989).

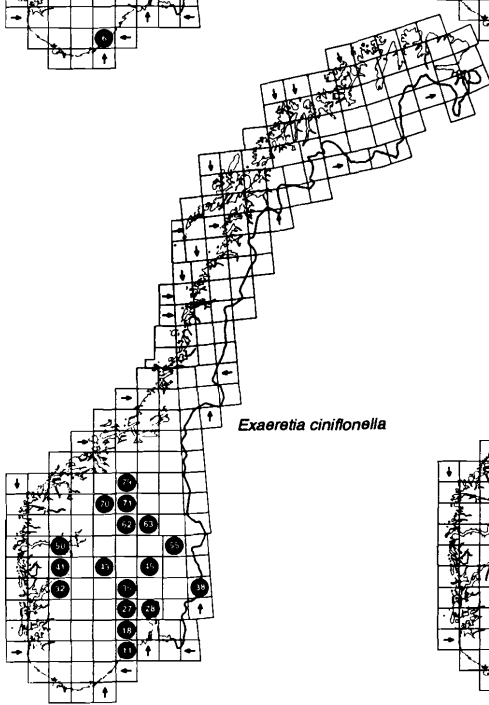
FOODPLANT: *Sorbus*, *Crataegus*, *Cotoneaster*, *Prunus spinosa*, *Fraxinus* (Palm 1989).



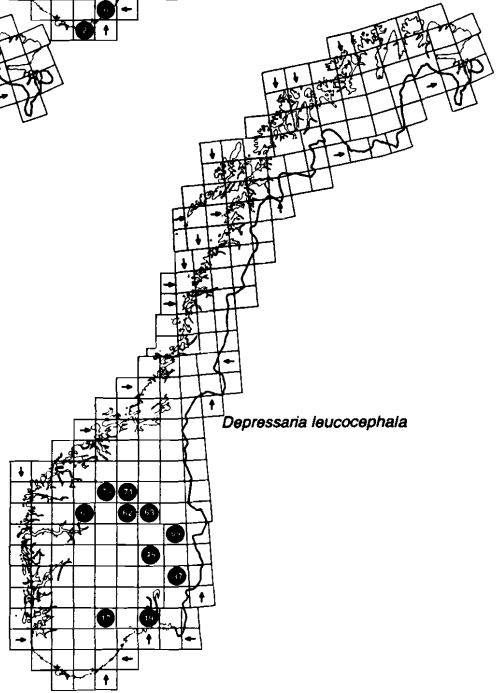
Luquetia lobella



Exaeretia allisella



Exaeretia ciniflonella



Depressaria leucocephala

***Luquetia lobella* (Denis & Schiffermüller, 1775)**

DISTRIBUTION: One record only: AAY, Tromøy: Bjelland 10 June 1992 S.A. Bakke leg. New to Norway.

TOTAL RANGE: Southern Scandinavia, C and S Europe, through Russia to the Far East (Palm 1989).

FOODPLANT: *Prunus spinosa*, outside Scandinavia also *Sorbus* and *Crataegus* (Palm 1989).

NOTE: This species is generally known as *Enicostoma lobella*. However, the designation of *lobella* as type species of *Enicostoma* is invalid (Nye & Fletcher 1991). *Luquetia* was proposed as a replacement name by Leraut (1991).

***Exaeretia allisella* Stainton, 1849**

DISTRIBUTION: Locally common in SE Norway north to ON (Lom and Vågå).

TOTAL RANGE: N and C Europe; eastwards through Russia to the Far East (Palm 1989).

FOODPLANT: *Artemisia vulgaris* (Palm 1989).

***Exaeretia ciniflonella* (Lienig & Zeller, 1846)**

DISTRIBUTION: Rather common in inland districts north to MRI, Sunndal and STI, Oppdal: Drivdalen. One record from coastal habitats: AAY, Tvedestrand: Laget 9 April 1930 N. Knaben leg.

TOTAL RANGE: Scandinavia, Scotland, the Alps; through Russia to the Far East, Caucasus, Canada (Palm 1989).

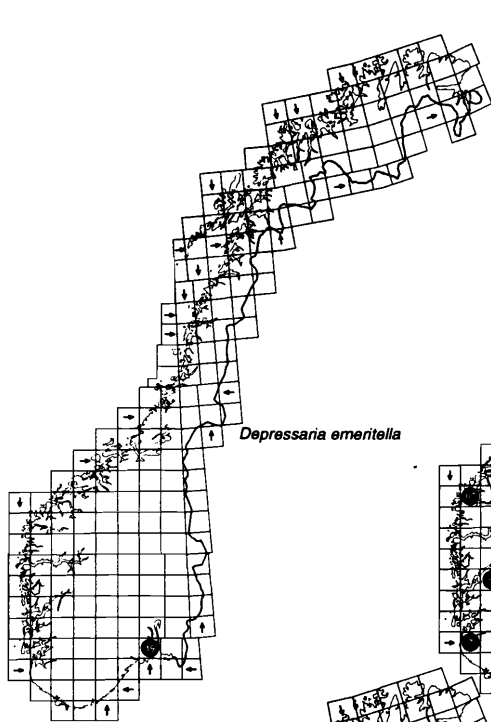
FOODPLANT: *Betula*, outside Scandinavia also *Populus* and *Salix* (Palm 1989).

***Depressaria leucocephala* Snellen, 1884 -**

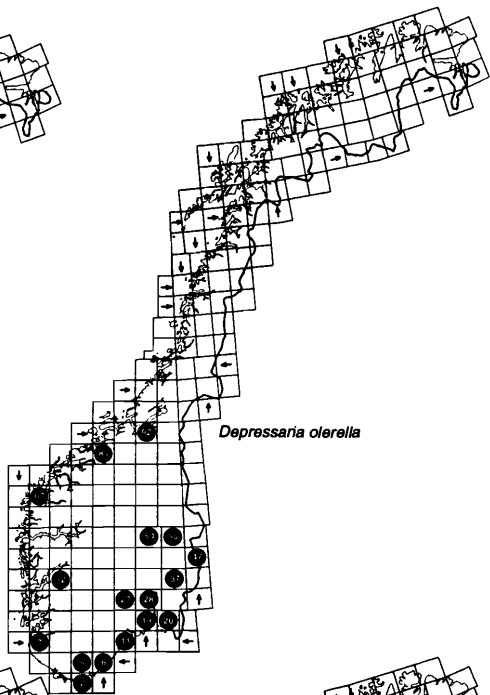
DISTRIBUTION: First discovered at OS, Gjøvik in 1960 (Opheim 1962). Rather common in the inland districts HES, OS and ON. Single records from TEI, Kviteseid and VE, Våle: Langøya. The latter is the only record from coastal areas. Not verified records: HOi and SFi (Opheim 1978).

TOTAL RANGE: N Europe, Switzerland; through European Russia and Siberia to the Far East (Palm 1989).

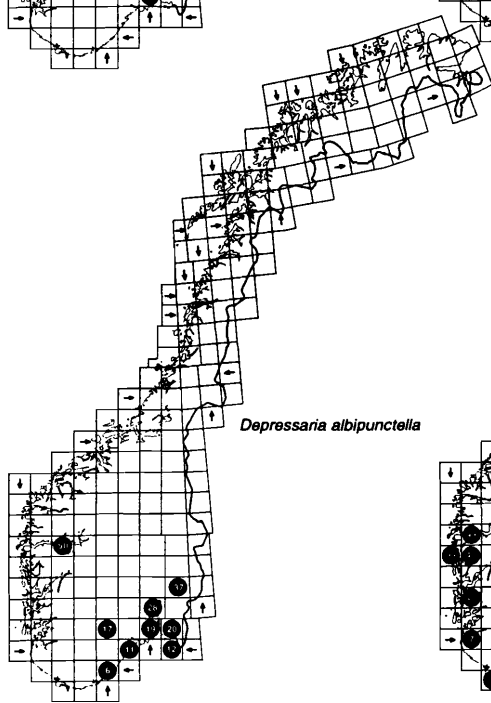
FOODPLANT: *Artemisia vulgaris* (Palm 1989).



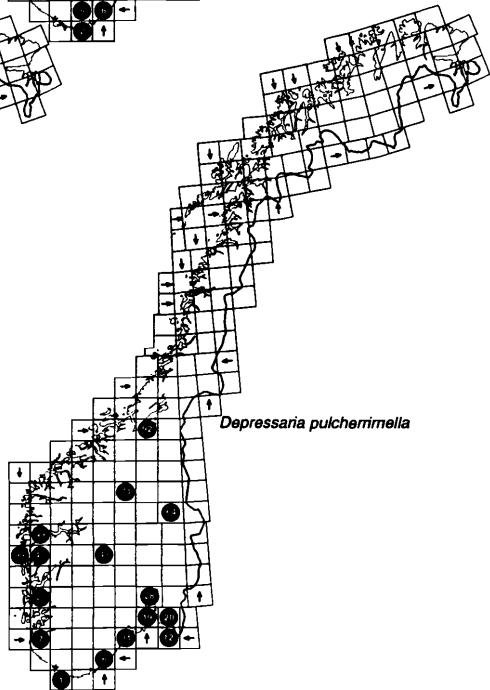
Depressaria emeritella



Depressaria olerella



Depressaria albipunctella



Depressaria pulcherrimella

***Depressaria emeritella* Stainton, 1849**

DISTRIBUTION: One record only: VE, Tjøme: Moutmarka Aug. 1981 K. Berggren leg. (Opheim 1982).

TOTAL RANGE: N, C, E and W Europe; Caucasus. The species has extended its range in N Europe in recent years (Palm 1989).

FOODPLANT: *Chrysanthemum vulgare* (Palm 1989).

***Depressaria olerella* Zeller, 1854**

DISTRIBUTION: North to STI, Trondheim. Not verified record: SFi (Opheim 1978).

TOTAL RANGE: N, W and C Europe; eastwards through European Russia to the Far East; Caucasus (Palm 1989).

FOODPLANT: *Achillea millefolium*, in Russia also *Chrysanthemum vulgare* (Palm 1989).

***Depressaria albipunctella* (Denis & Schiffermüller, 1775)**

DISTRIBUTION: Around the Oslofjord southwards to AAY, Tromøy. There are two inland localities: HES, Sør-Odal and TEI, Kviteseid. One record from W Norway: SFI, Leikanger 9 Oct. 1988 J. Anonby leg.

TOTAL RANGE: Europe and N Africa (Palm 1989).

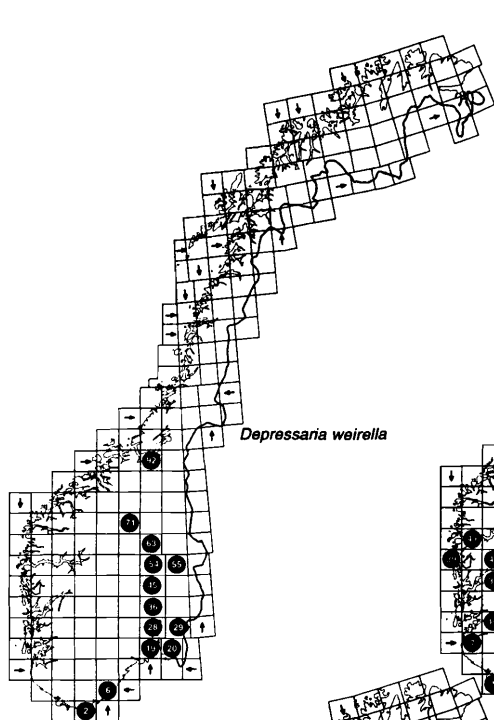
FOODPLANT: *Daucus*, *Conium*, *Torilis*, *Anthriscus*, *Chaerophyllum*, *Pimpinella*, *Seseli* (Palm 1989).

***Depressaria pulcherrimella* Stainton, 1849**

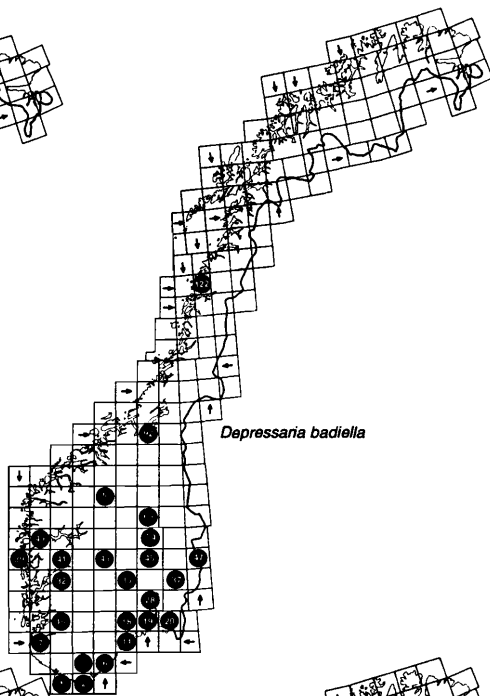
DISTRIBUTION: Locally common in S Norway north to STI, Trondheim. Not verified records: HOi, SFi, MRi (Opheim 1978).

TOTAL RANGE: N, W, E and C Europe, the Pyrenees (Palm 1989).

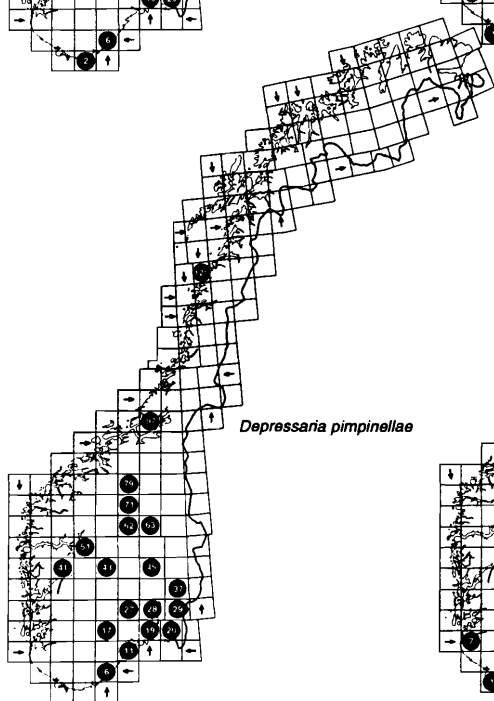
FOODPLANT: *Pimpinella*, outside Scandinavia also other Apiaceae (Palm 1989).



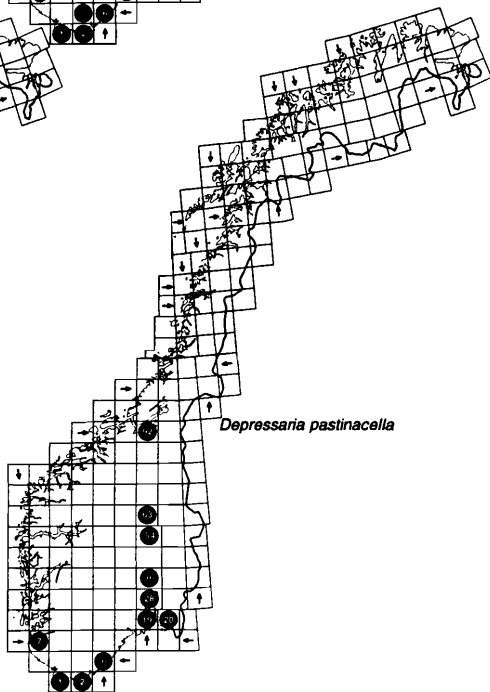
Depressaria weirella



Depressaria badiella



Depressaria pimpinellae



Depressaria pastinacella

***Depressaria weirella* Stainton, 1849**

DISTRIBUTION: Rather common in S Norway northwards to STI, Trondheim and westwards to VAY, Kristiansand. Not verified record: HOi (Opheim 1978).

TOTAL RANGE: W, N, E and C Europe, Italy and Iran (Palm 1989).

FOODPLANT: The main food-plant is *Anthriscus*, but also known from other Apiaceae (Palm 1989).

***Depressaria badlella* (Hübner, 1796)**

DISTRIBUTION: Locally very common north to NSI, Rana: Utskarpen.

TOTAL RANGE: Throughout Europe; Caucasus; N Africa; Asia Minor and Mongolia (Palm 1989).

FOODPLANT: *Hypochoeris*, *Sonchus* and *Taraxacum* (Palm 1989).

***Depressaria pimpinellae* Zeller, 1839**

DISTRIBUTION: Locally common north to NSY, Meløy.

TOTAL RANGE: W, N, E, and C Europe (Palm 1989).

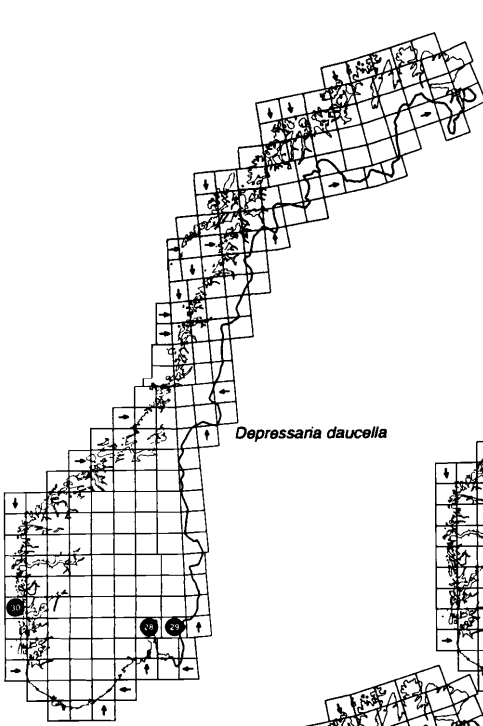
FOODPLANT: *Pimpinella* (Palm 1989).

***Depressaria pastinacella* (Duponchel, 1838)**

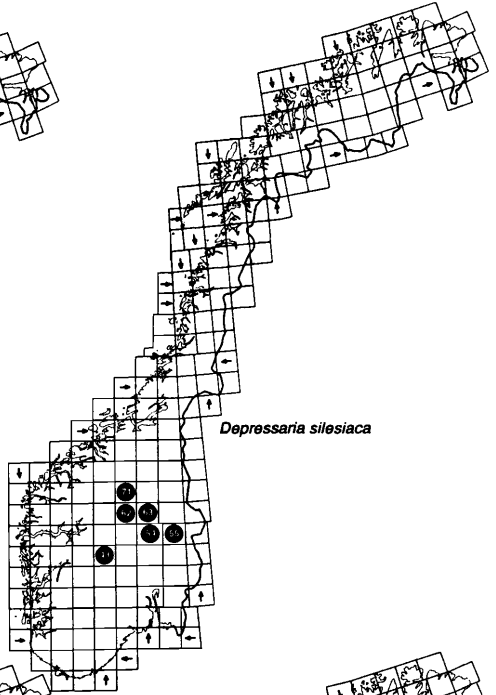
DISTRIBUTION: Scattered records north to STI, Trondheim. Locally common. Not verified record: HOy (Opheim 1978).

TOTAL RANGE: N, C and parts of S Europe; Caucasus; Afghanistan and N America (Palm 1989).

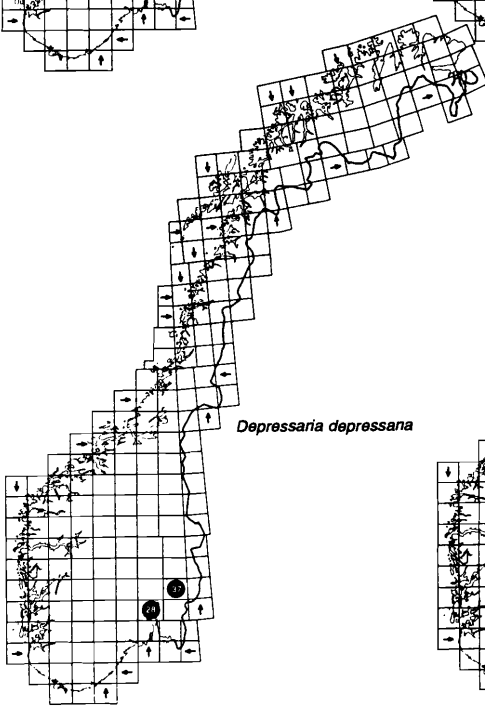
FOODPLANT: *Heracleum*, *Pastinaca* and *Angelica*. In Great Britain also *Oenanthe* (Palm 1989).



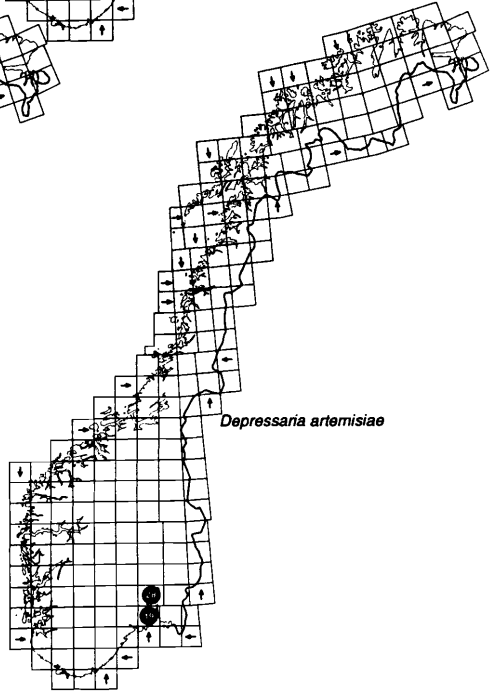
Depressaria daucella



Depressaria silesiaca



Depressaria depressana



Depressaria artemisiae

***Depressaria daucella* (Denis & Schiffermüller, 1775) (= *D. nervosa* auct.)**

DISTRIBUTION: First record: HOY, Bergen: Myravann 25 May 1966 A. Fjeldså leg. (Opheim 1967). Recently reared from *Cicuta virosa* from AK, Ski: Midsjøvann and Ås: Årungen and BØ, Lier: Linnestranda. Not verified record: VE (Opheim 1978).

TOTAL RANGE: Europe, N Africa and N America (Palm 1978).

FOODPLANT: *Oenanthe*, *Cicuta* and *Berula* in natural habitats; *Carum*, *Daucus* and *Pastinaca* in cultivated fields; outside Scandinavia also other Apiaceae (Palm 1989).

***Depressaria silesiaca* Heinemann, 1870**

DISTRIBUTION: Recently discovered (Aarvik 1983). Taken in HES, Elverum; OS, Lillehammer and Ringeby; ON, Vinstra and Dovre, and BV, Ål.

TOTAL RANGE: Known from a few sites in C Europe: Scotland, SW Poland, Finland, N and C Sweden, and the St. Petersburg district and Carelia in European Russia, but considered very rare. (Palm 1989).

FOODPLANT: *Achillea millefolium* and *Artemisia vulgaris* (Palm 1989).

***Depressaria depressana* (Fabricius, 1775)**

DISTRIBUTION: Rather common on calcareous ground with *Seseli libanotis* in inner Oslofjord (AK). Outside this area there is a record from HES, Sør-Odal, W.M. Schøyen leg.

TOTAL RANGE: Europe; Middle East; Caucasia; Asia Minor; N Africa; Mongolia (Palm 1989).

FOODPLANT: *Daucus*, *Pimpinella*, *Pastinaca*, *Seseli* and *Peucedanum* (Palm 1989). In inner Oslofjord it seems to prefer *Seseli libanotis*.

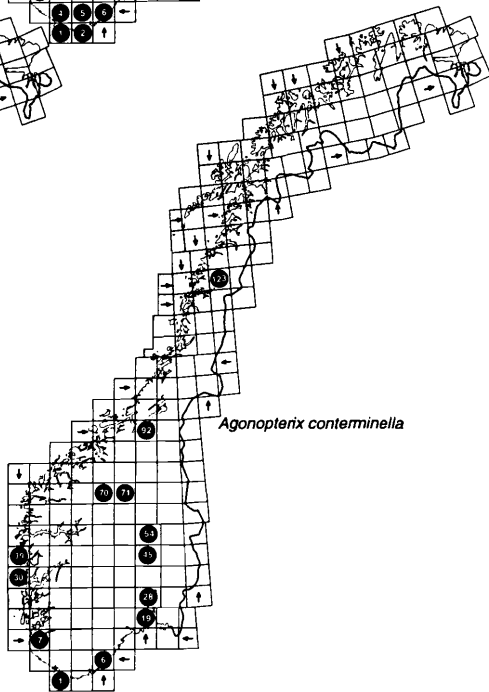
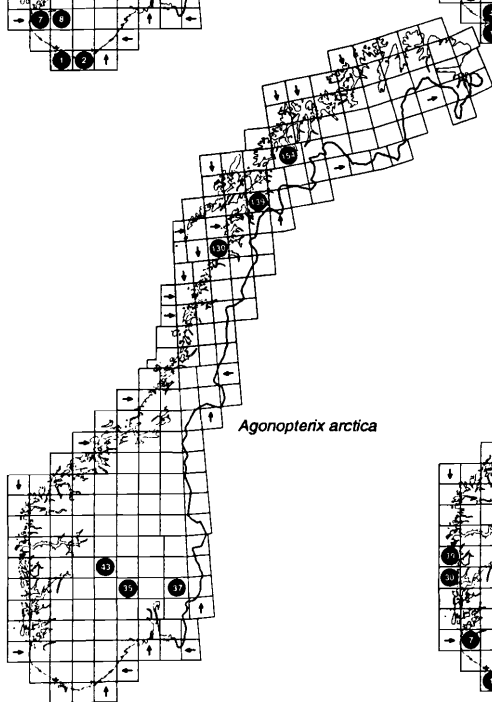
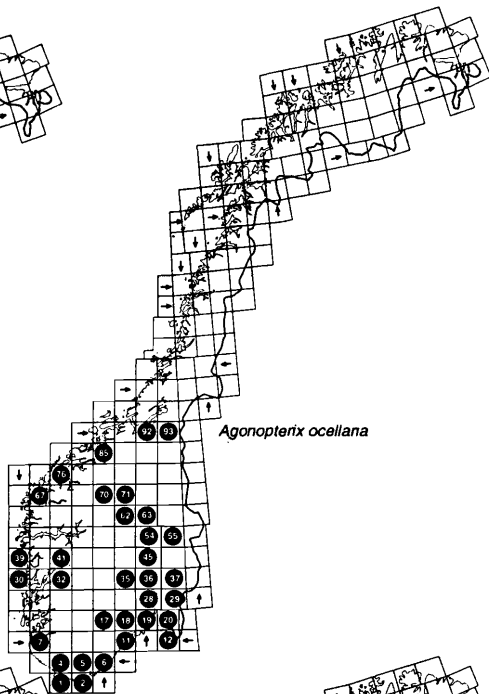
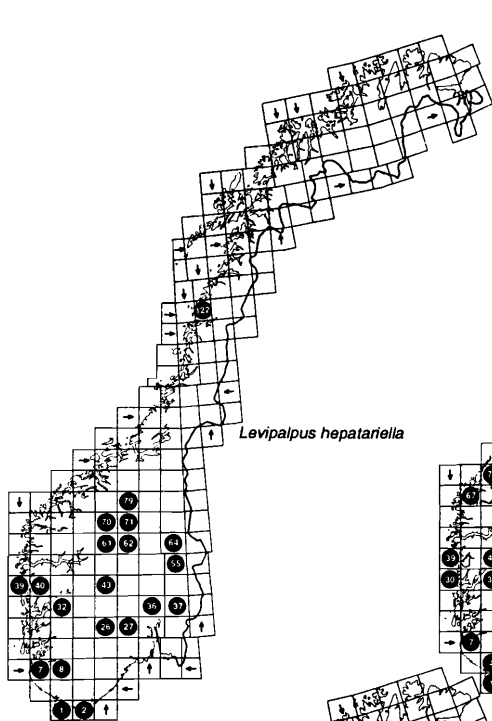
***Depressaria artemisiae* Nickeri, 1862**

DISTRIBUTION: Five localities only: Ø, Onsøy: Rauer S.A. Bakke leg.; AK, Bærum: Ostøya K.Berggren leg.; VE, Sande: Kommersøya and Killingholmen and Våle: Langøya (Hansen 1989b). Some of the specimens were reared from *Artemisia campestris*.

TOTAL RANGE: N, C and SE Europe; Mongolia and N America (Palm 1989).

FOODPLANT: *A. campestris*; in N Sweden *A. borealis* ssp. *bottnica* (Palm 1989).

NOTE: This species was listed as occurring in Norway by Haanshus (1933) based on specimens from Sogn og Fjordane, but was deleted by Opheim (1978), as the record could not be verified (see Hansen 1989b). The occurrence of *D. artemisiae* in Sogn og Fjordane is highly improbable.



***Levipalpus hepatariella* (Lienig & Zeller, 1846)**

DISTRIBUTION: Scattered and rare north to NSI, Rana: Utskarpen. Not verified records: AK, VE, AAy, SFi and NSy (Opheim 1978). In S Norway taken up to about 1000 m a.s.l. in the mountains.

TOTAL RANGE: N Europe and mountains of C Europe (Palm 1989).

FOODPLANT: *Antennaria dioica* (Buhl et al. 1989).

***Agonopterix ocellana* (Fabricius, 1775)**

DISTRIBUTION: Common north to NTI, Meråker.

TOTAL RANGE: Europe and eastwards through Russia to the Far East; N Africa (Palm 1989).

FOODPLANT: *Salix*, outside Scandinavia also *Betula* and *Quercus* (Palm 1989).

***Agonopterix arctica* (Strand, 1902)**

DISTRIBUTION: Scattered records from BØ, Krødsherad and AK, Sørum north to TRI, Målselv. Not verified records: HOy, HOi, SFy, SFi, Nsi, Fi (Opheim 1978).

TOTAL RANGE: Only known from Fennoscandia. There are unconfirmed records from the Petsamo area in European Russia (Palm 1989).

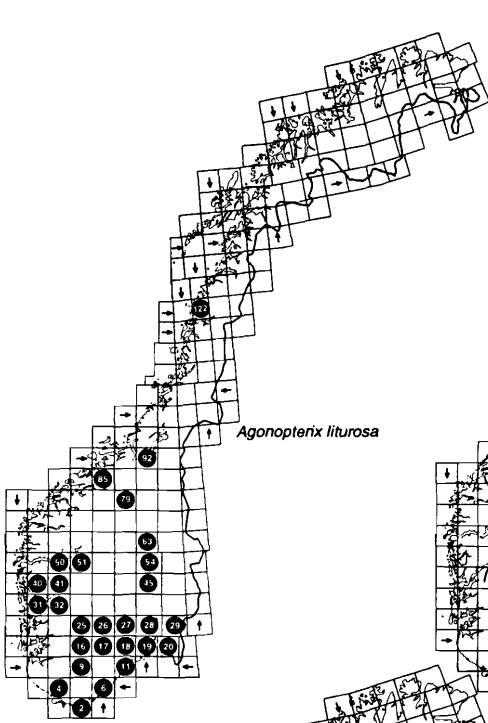
FOODPLANT: *Salix myrsinites* and possibly *Vaccinium uliginosum*. The habitat is damp woods or bogs, usually at high altitude (Palm 1989).

***Agonopterix conterminella* (Zeller, 1839)**

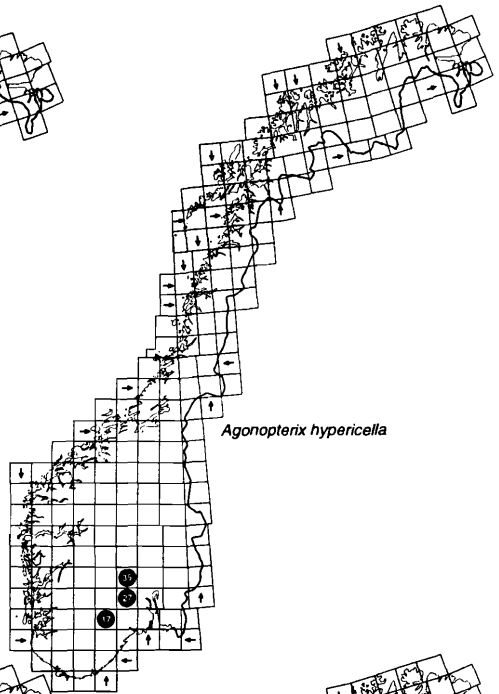
DISTRIBUTION: Scattered records north to NSI, Rana. The species is not rare, and is probably overlooked in many districts.

TOTAL RANGE: Most parts of Europe eastwards through Russia to the Far East (Palm 1989).

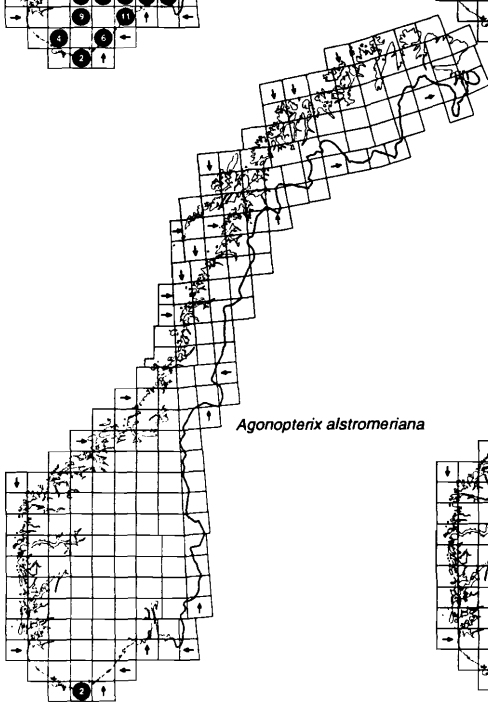
FOODPLANT: *Salix* (Palm 1989).



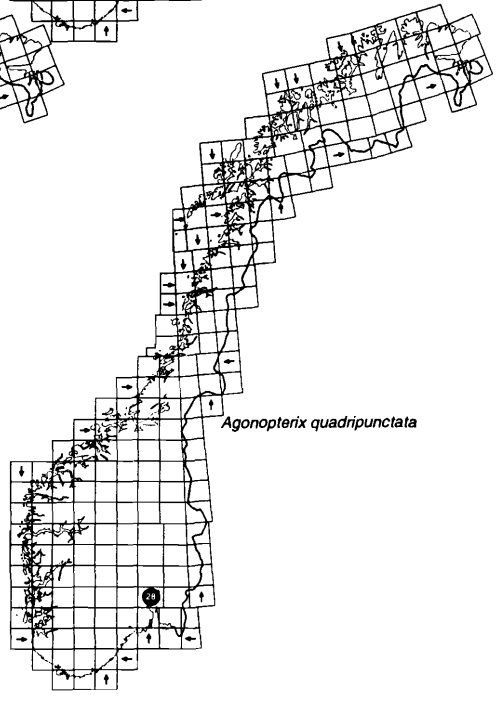
Agonopterix liturosa



Agonopterix hypericella



Agonopterix alstromeriana



Agonopterix quadripunctata

***Agonopterix liturosa* (Haworth, 1811)**

DISTRIBUTION: Common north to NSI, Rana. Not verified record: Ry, Ri, SFy (Opheim 1978).

TOTAL RANGE: Europe and eastwards to Siberia; N Africa (Palm 1989).

FOODPLANT: *Hypericum* (Palm 1989).

***Agonopterix hypericella* (Hübner, 1816)**

DISTRIBUTION: Five localities only: BV, Rollag: Toreshov 15 June 1978 B. Sagvolden leg.; BV, Rollag: Rollag stasjon 17 May 1984 B. Sagvolden leg.; TEI, Hjartdal: Ørvella 24 April 1969 K. Myhr leg.; TEI, Notodden: Notodden 25 Nov. 1979 F. Smedstad leg.; TEI, Kviteseid: Kviteseid 24 Sept. 1988 A. Bjørnstad leg. (Bjørnstad 1989, Opheim 1970, Palm 1989).

TOTAL RANGE: N, W, and C Europe; C parts of European Russia and S part of the Far East (Palm 1989).

FOODPLANT: *Hypericum* (Palm 1989).

***Agonopterix alstromeriana* (Clerck, 1759)**

DISTRIBUTION: Probably not resident in Norway. One record from VAY, Kristiansand: Stangesnes 17. Sept. 1982 S. Svendsen leg. Not verified record: HOY, Fjell: Vindenes 1978 T. Andersen leg. (Palm 1989).

TOTAL RANGE: Throughout Europe; Siberia; Kazakhstan; C Asia and Morocco (Palm 1989).

FOODPLANT: *Conium* (Palm 1989).

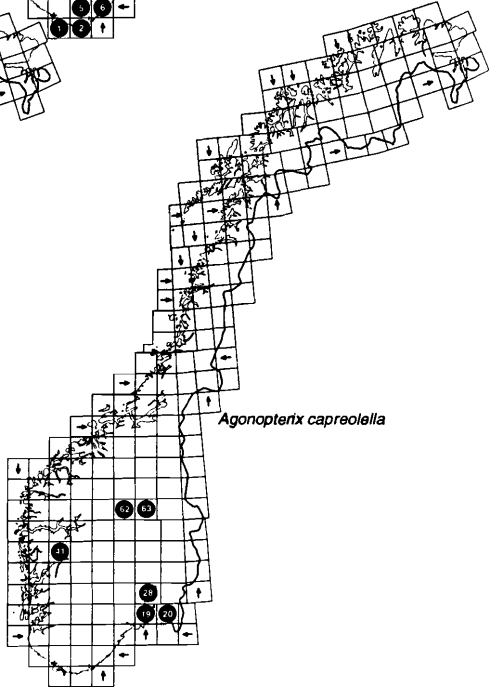
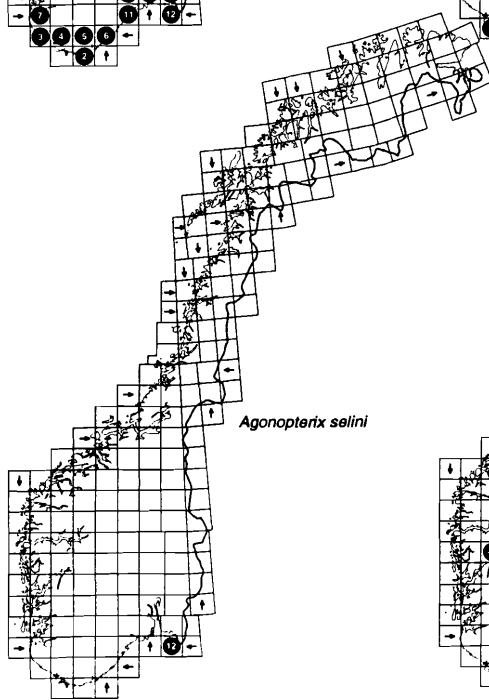
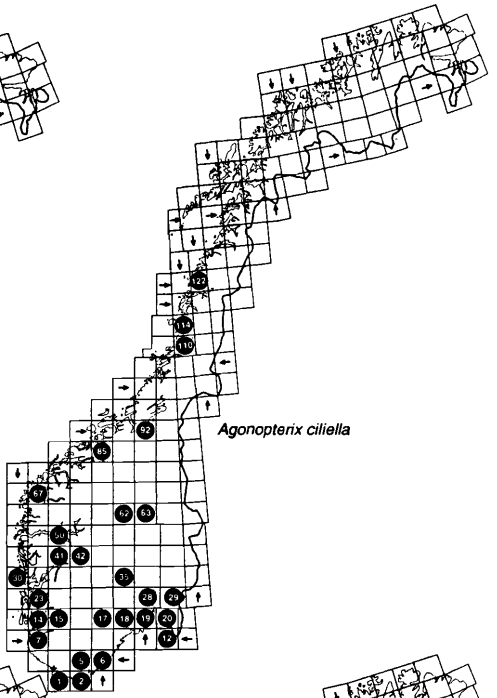
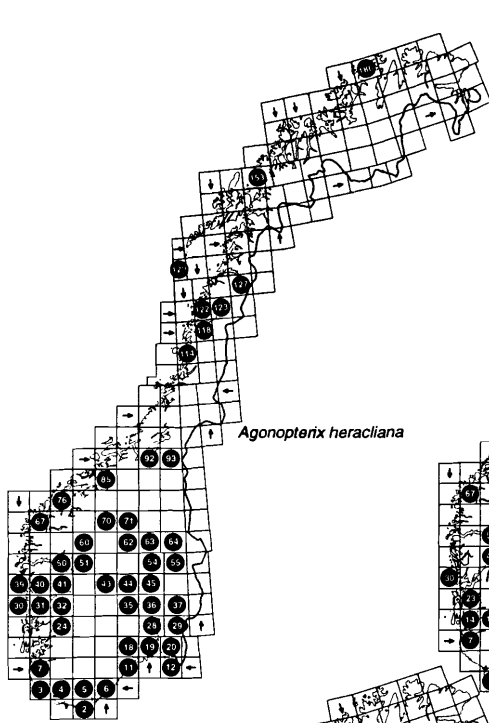
***Agonopterix quadripunctata* (Wocke, 1857)**

DISTRIBUTION: Common on calcareous ground at a few sites in inner Oslofjord:

AK: Bygdøy, Malmøya, Ostøya, Snarøya and Brønnøya.

TOTAL RANGE: Scattered in N and E Europe including SE Sweden and S Finland (Palm 1989).

FOODPLANT: *Seseli* and *Cnidium* (Palm 1989). (In Norway only on *Seseli*.)



***Agonopterix heracliana* (Linnaeus, 1758) (= *applanata* Fabricius, 1777)**

DISTRIBUTION: Very common north to NSY and NSI. Single records north to FV, Måsøy. Generally the most common species of the genus. Not verified record: FV, Alta: Bossekop (Wocke 1862).

TOTAL RANGE: Almost throughout Europe; Madeira and N Africa (Palm 1989).

FOODPLANT: *Anthriscus* and a number of other Apiaceae (Palm 1989).

***Agonopterix cillella* (Stainton, 1849)**

DISTRIBUTION: Rather common north to NSI, Rana. Often overlooked due to confusion with the previous species.

TOTAL RANGE: N and C Europe; Caucasus; Siberia; the Far East and N America (Palm 1989).

FOODPLANT: *Angelica* and numerous other Apiaceae (Palm 1989).

***Agonopterix selini* (Heinemann, 1870)**

DISTRIBUTION: One record only: Ø, Hvaler: Asmaløy, Huser 29 July 1993 S.A. Bakke leg. New to Norway.

TOTAL RANGE: N and C Europe eastwards to the Ukraine (Palm 1989).

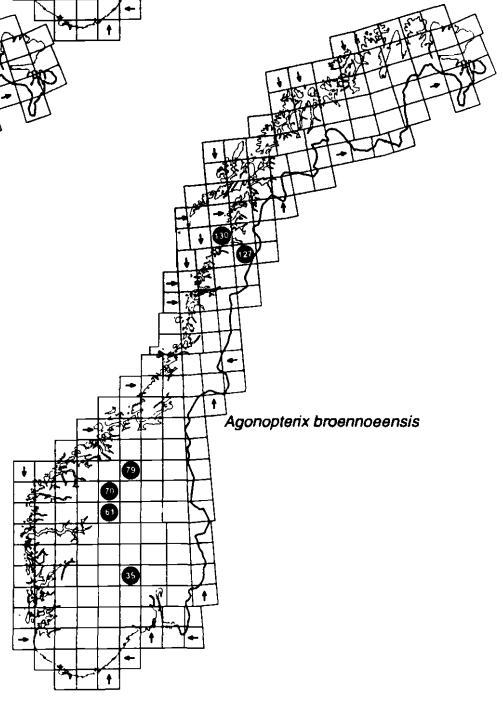
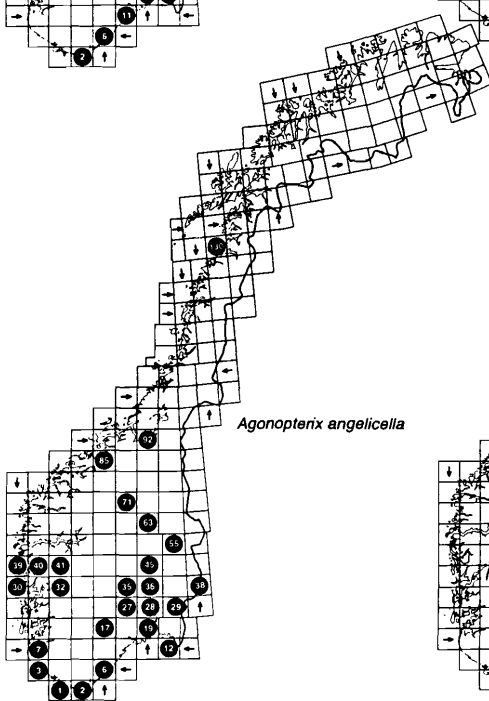
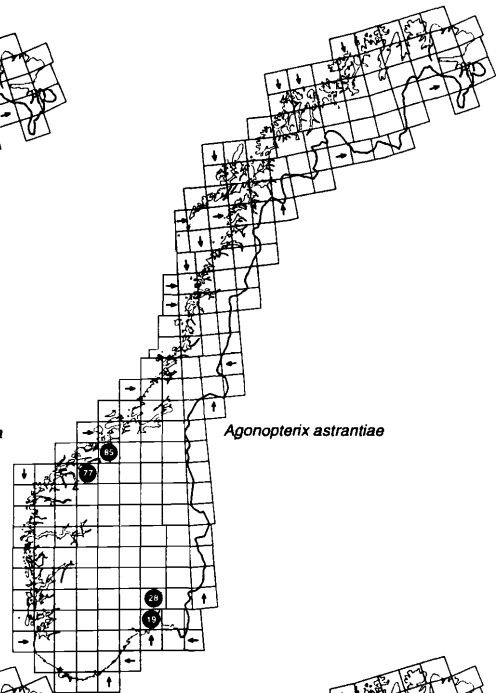
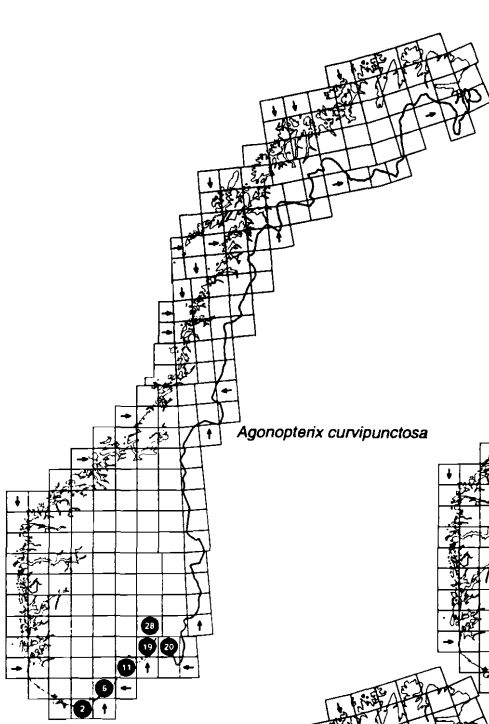
FOODPLANT: *Peucedanum palustre* and *Selinum*; in C Europe also *Athamanta cervaria* and *Cnidium* (Palm 1989).

***Agonopterix capreolella* (Zeller, 1839)**

DISTRIBUTION: Rare and local in the lowlands of SE Norway north to ON, Nord-Fron: Vinstra. One record from W Norway: HOI, Voss 14 June 1922 N. Grønlien leg.

TOTAL RANGE: Throughout Europe; Asia Minor; Turkmenia (Palm 1989).

FOODPLANT: *Pimpinella saxifragae*, outside Scandinavia also other Apiaceae (Palm 1989).



***Agonopterix curvipunctosa* (Haworth, 1811)**

DISTRIBUTION: Locally common around the Oslofjord and westward to VAY, Kristiansand. Inhabit sea shores.

TOTAL RANGE: N, W, E and C Europe; Caucasus and Asia Minor (Palm 1989).

FOODPLANT: *Angelica archangelica*, *Seseli libanotis*, *Ligusticum scoticum* (Hansen 1989a, Palm 1989).

NOTE: In Norway this species was until recently confused with *A. subpropinqua*, a species not occurring in Norway (Aarvik & Midtgaard 1986).

***Agonopterix astrantiae* (Heinemann, 1870)**

DISTRIBUTION: Four localities only: BØ, Drammen: Underlia 5 Aug. 1988 Y. Berg leg.; VE, Våle: Langøya July 1987 L.O. Hansen leg.; MRY, Molde: Sekken, Vestad Aug. 1980 P. Andersen leg.; MRI, Surnadal: Kvanne 17 Aug. 1970 R. Mehl leg. (Aarvik 1987, 1989, Hansen 1989a).

TOTAL RANGE: Scattered throughout W, E and C Europe (Palm 1989).

FOODPLANT: *Sanicula europaea*, *Astrantia major* (Palm 1989).

***Agonopterix angelicella* (Hübner, 1813)**

DISTRIBUTION: Rather common north to NSY, Bodø. Not verified records: TEy, Ri, SFy (Opheim 1978).

TOTAL RANGE: Europe and S Siberia (Palm 1989).

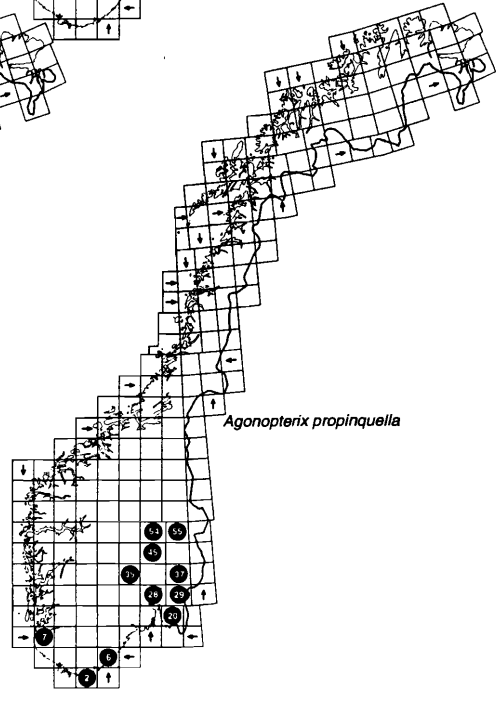
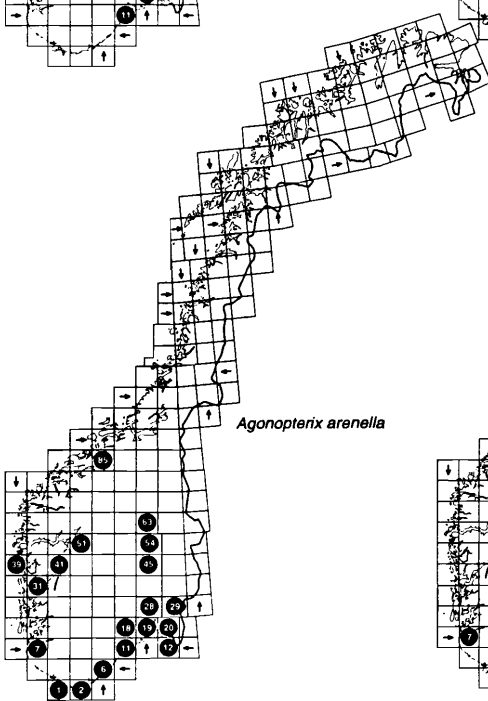
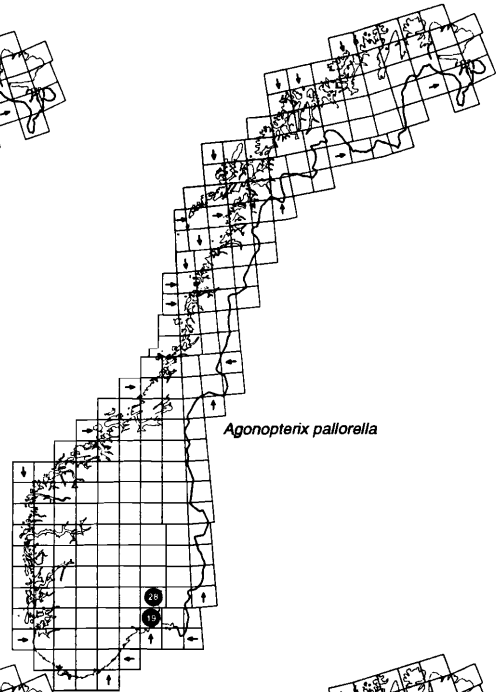
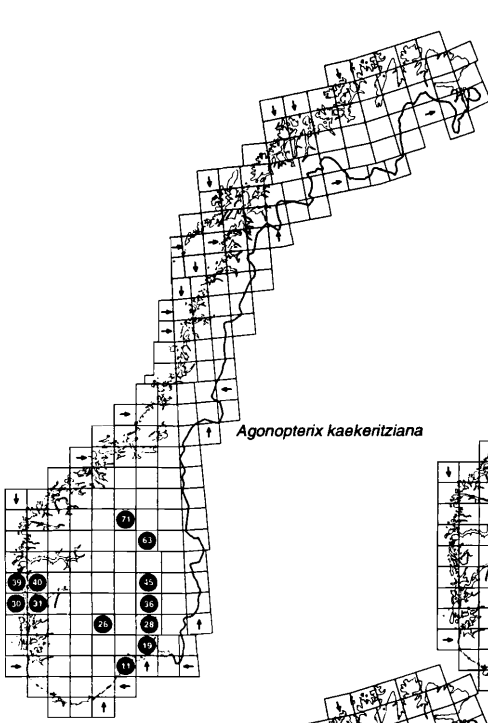
FOODPLANT: Mainly *Angelica*, but occasionally other species of Apiaceae (Palm 1989).

***Agonopterix broennoeensis* (Strand, 1920)**

DISTRIBUTION: Scattered records from BV, Sigdal north to NSY, Bodø and NSI, Saltdal. In S Norway mainly from mountains up to about 1000 m a.s.l. Records from NSY and NSI are from the lowlands. Strand's description is based on specimens from HEN, Tynset and NSY, Brønnøy (Strand 1920). According to Hannemann (1954) the types are preserved in the "Zoologischen Museum der Humboldt-Universität" in Berlin.

TOTAL RANGE: Outside Norway only recorded from N Sweden and N Finland (Palm 1989).

FOODPLANT: *Saussurea alpina* (Palm 1989).



***Agonopterix kaekeritziana* (Linnaeus, 1761)**

DISTRIBUTION: Rather rare north to ON, Vågå og Dovre. Not verified records: Bv, VÅy, Ry and SFi (Opheim 1978).

TOTAL RANGE: Throughout Europe and eastwards to the Far East; Asia Minor, Iran, Mongolia (Palm 1989).

FOODPLANT: *Centaurea jacea*, *C. scabiosa* and *C. nigra*; occasionally *Knautia* or *Cirsium* (Palm 1989).

***Agonopterix pallorella* (Zeller, 1839)**

DISTRIBUTION: A few localities in the Oslofjord area only: AK, Asker: Brønnøya; Bærum: Ostøya; Nesodden: Spro and VE, Tjøme. The habitat is sunny and warm meadows near the sea.

TOTAL RANGE: Europe; European Russia; Middle East; S part of the Far East (Palm 1989).

FOODPLANT: *Centaurea scabiosa* and *C. jacea*; in Sweden and Russia also reared from *Serratula* (Palm 1989).

***Agonopterix arenella* (Denis & Schiffermüller, 1775)**

DISTRIBUTION: Rather common north to MRI, Sunndal. Not verified record: SFy (Opheim 1978).

TOTAL RANGE: Throughout Europe and eastwards to Siberia; Caucasus; N Africa; California (Palm 1989).

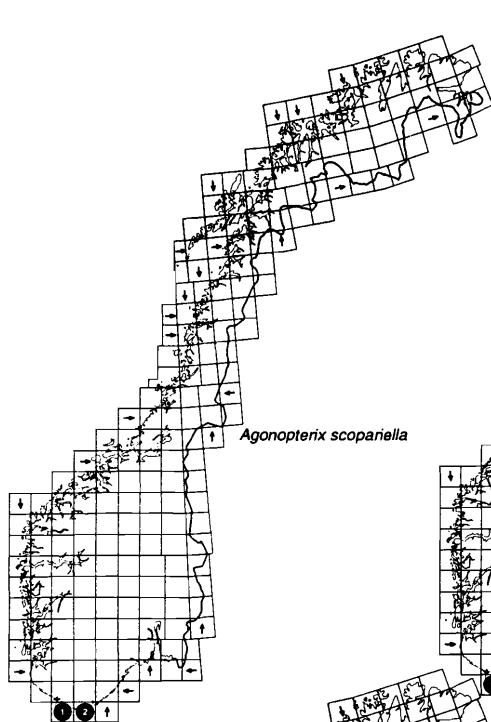
FOODPLANT: *Centaurea*, *Serratula*, *Cirsium*, *Carduus*, *Arctium*, *Knautia*, *Carlina* and *Sonchus* (Palm 1989).

***Agonopterix propinquella* (Treitschke, 1835)**

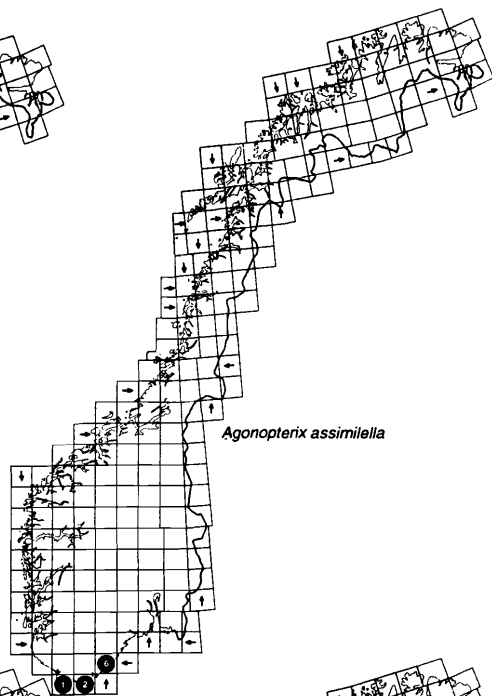
DISTRIBUTION: Locally common in the lowlands of SE Norway north to OS, Lillehammer. Only one record from W Norway: RY, Klepp: Vik 21 May 1961 T. & A. Nielsen leg.

TOTAL RANGE: Throughout Europe and eastwards to the Far East; Caucasus (Palm 1989).

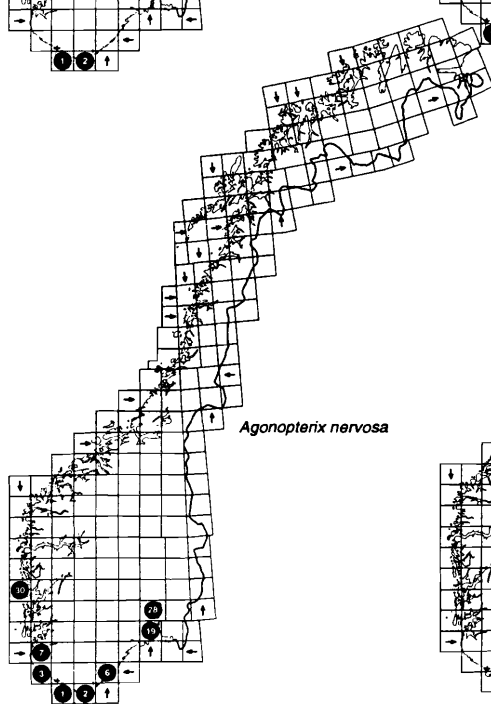
FOODPLANT: *Cirsium* and *Carduus*, outside Scandinavia also *Serratula*, *Arctium* and *Centaurea* (Palm 1989).



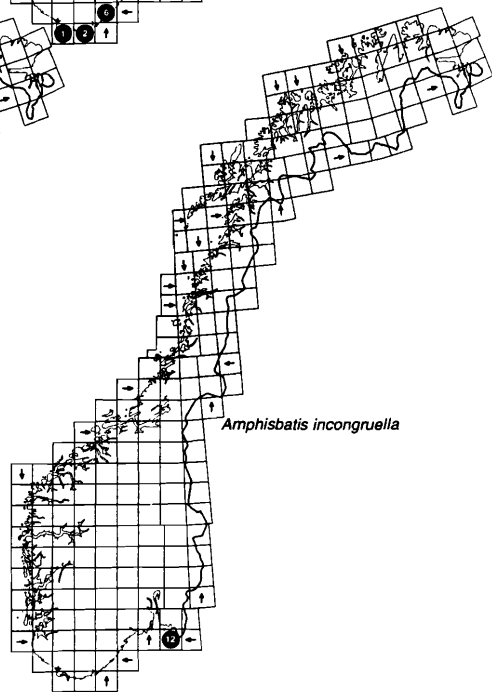
Agonopterix scopariella



Agonopterix assimilella



Agonopterix nervosa



Amphisbatis incongruella

***Agonopterix scopariella* (Heinemann, 1870)**

DISTRIBUTION: Two records only: VAY, Kristiansand: Augland 1 Sept. 1985 K. Berggren leg (Palm 1989); Farsund: Einarsneset 1991, S. Svendsen & K. Berggren leg.

TOTAL RANGE: N C and S Europe; Middle East and Crimea (Palm 1989).

FOODPLANT: *Sarothamnus* (Palm 1989).

NOTE: The species was recorded from HOI, Nordheimsund by Grønlien (1926). This record was repeated by subsequent authors, e.g. Opheim (1978). As no specimens of *A. scopariella* from HOI exist in Norwegian collections, the record from HOI was deleted by Palm (1989).

***Agonopterix assimilella* (Treitschke, 1832)**

DISTRIBUTION: Locally common along the coast from AAY, Tromøy to VAY, Farsund. It was first collected in 1976 in VAY, Kristiansand, by K. Berggren.

TOTAL RANGE: Throughout Europe except the northernmost parts; Caucasus; Asia Minor (Palm 1989).

FOODPLANT: *Sarothamnus*, outside Scandinavia also *Genista* (Palm 1989).

***Agonopterix nervosa* (Haworth, 1811)**

DISTRIBUTION: Locally common around the Oslofjord and along the coast to HOY, Bergen. In Norway often collected in gardens and parkland.

TOTAL RANGE: Throughout Europe except the northernmost parts; Caucasus; Asia Minor; N America (Palm 1989).

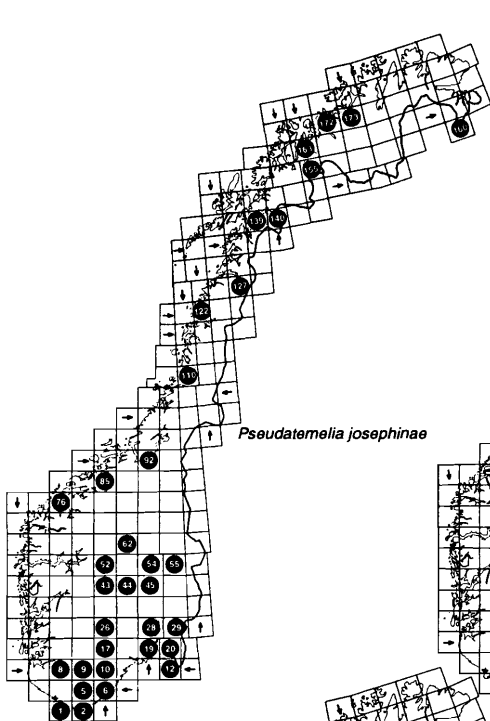
FOODPLANT: *Sarothamnus* (including cultivated forms), *Genista*, *Ulex* and *Laburnum* (Palm 1989).

***Amphisbatis incongruella* (Stainton, 1849)**

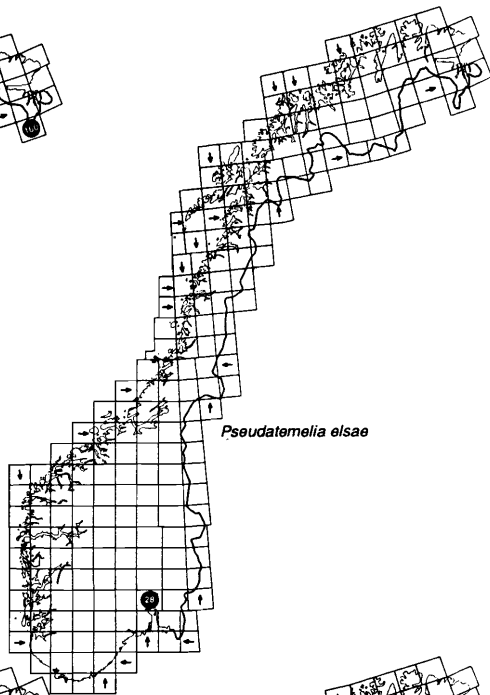
DISTRIBUTION: One record only: Ø, Hvaler 1900 or 1902 E. Strand leg. (Aarvik 1987). The habitats are heaths and moors, both damp and dry (Palm 1989).

TOTAL RANGE: N, C and S Europe; W parts of European Russia (Palm 1989).

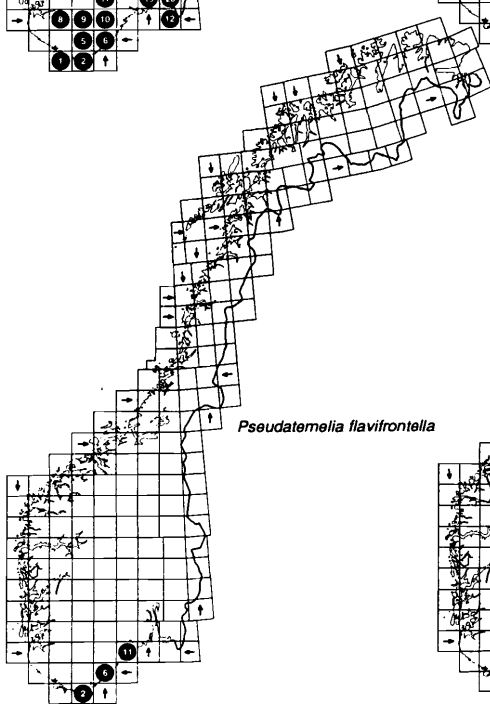
FOODPLANT: *Calluna* and other heath-plants (Palm 1989).



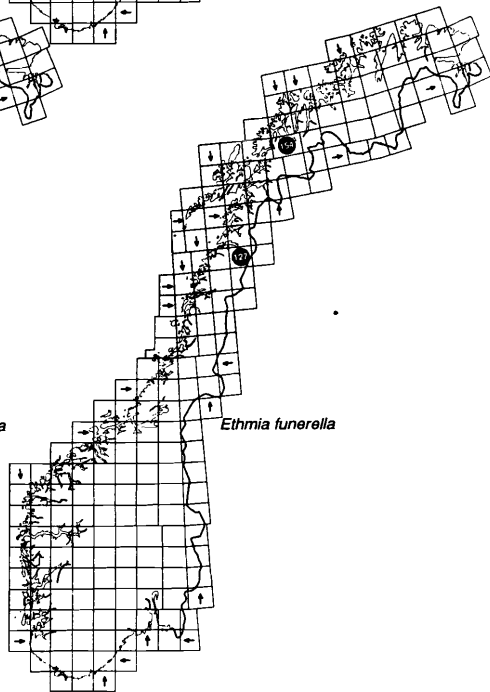
Pseudatemelia josephinae



Pseudatemelia elsae



Pseudatemelia flavifrontella



Ethmia funerella

***Pseudaemella josephinae* (Toll, 1956)**

DISTRIBUTION: Rather common north to FV, Alta. Not verified records: HEn, TEy, Ry, HOy, HOi, SFy (Opheim 1978).

TOTAL RANGE: N and C Europe (Palm 1989).

FOODPLANT: Withered leaves of *Quercus*, *Fagus*, *Betula*, *Vaccinium* and probably other plants (Palm 1989).

***Pseudaemella elsae* Svensson, 1982**

DISTRIBUTION: One record only: AK, Frogn: Håøya 27 June – 5 July 1983 L. Aarvik leg. (Aarvik & Midtgaard 1986). The habitat is dry pine forests or warm, sandy moors (Palm 1989).

TOTAL RANGE: Only known from SE Sweden, Finland, Poland and USSR: Estonia. Most common in Sweden: Gotland and Finland (Palm 1989).

FOODPLANT: Unknown.

***Pseudaemella flavifrontella* (Denis & Schiffermüller, 1775)**

DISTRIBUTION: First recorded from TEY, Kragerø: Tåtøy 8 July 1967 M. Opheim leg. (Opheim 1978); subsequently collected in AAY and VAY southwards to Kristiansand. Locally common in open oak forest.

TOTAL RANGE: N, C and S Europe (Palm 1989).

FOODPLANT: Withering leaves (Palm 1989).

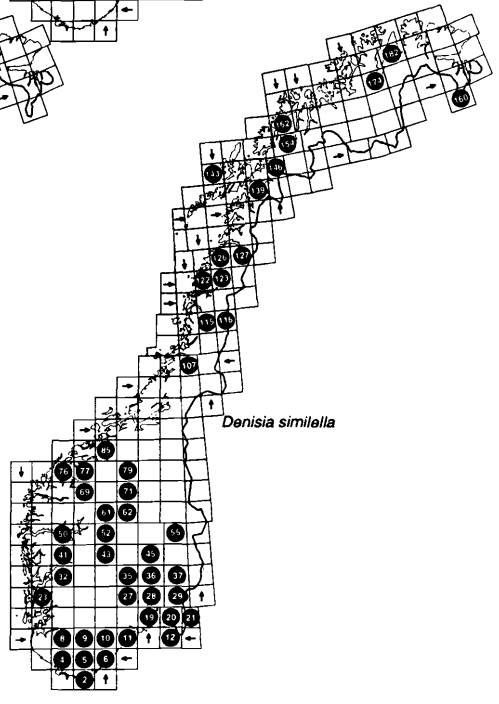
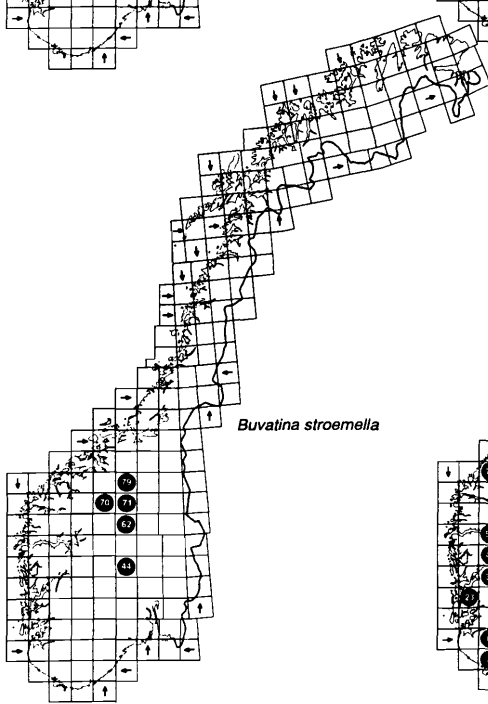
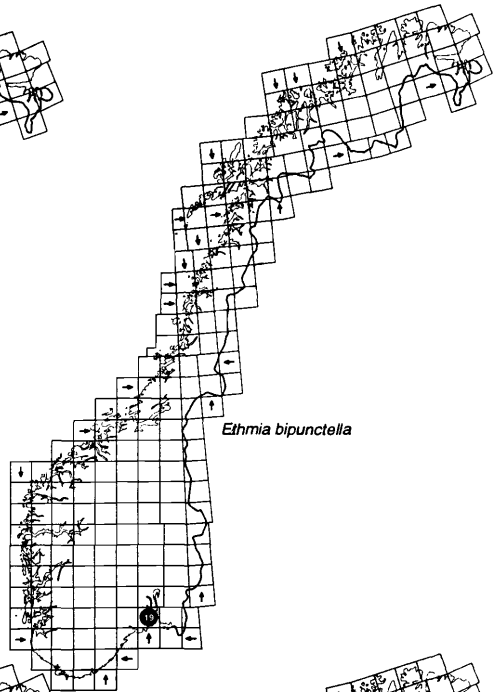
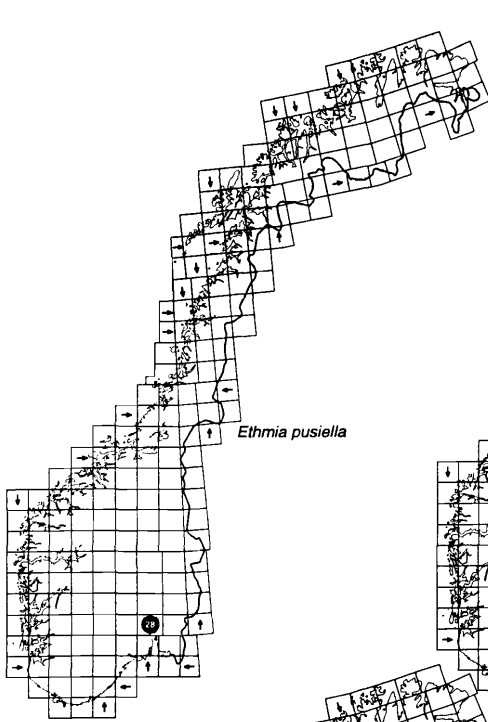
NOTE: The record from AAi (Palm 1989) was based on a misidentified specimen of *P. josephinae*.

***Ethmia funerella* (Fabricius, 1787)**

DISTRIBUTION: Three old records from N Norway only: NSI, Saltdal 9 Aug. 1881 W.M. Schøyen leg.; Saltdal: Storjord 21 June 1898 H.J.Sp. Schneider leg.; TRI, Målselv: Kristianemo 14 July 1877 H.J.Sp. Schneider leg.

TOTAL RANGE: Europe; Asia Minor; Central Asia (Palm 1989).

FOODPLANT: *Myosotis* and *Symphytum*; outside Scandinavia also *Pulmonaria* and *Lithospermum* (Palm 1989).



***Ethmia pusiella* (Linnaeus, 1758)**

DISTRIBUTION: In the middle of the last century J.H.S. Siebke caught three specimens at three sites in AK, Oslo: Kristiania, Bekkelaget and Tøyen. One recent record: AK, Asker: Brønnøya, numerous larvae 5 June 1982 L. Aarvik & F. Midtgaard leg.

TOTAL RANGE: N, C and S Europe; European Russia; Caucasia; Asia Minor; Kazakstan and C Asia (Palm 1989).

FOODPLANT: *Lithospermum officinale*; outside Scandinavia also *Pulmonaria* and other species of *Lithospermum* (Palm 1989).

***Ethmia bipunctella* (Fabricius, 1775)**

DISTRIBUTION: Only recorded from VE, Tjøme: Sandøy, larvae 5 June 1965 A. Fjellberg leg. (Opheim 1978). It was also observed at the locality a few times in the years 1968–1985 (Andersen & Søli 1988). Unfortunately there seems to be no specimens from Tjøme preserved in collections. However, we have accepted the record of this very characteristic species.

TOTAL RANGE: Throughout Europe except the northernmost parts; N Africa; Canary Islands; Asia Minor and the Middle East (Palm 1989).

FOODPLANT: *Echium* and other species of Boraginaceae (Palm 1989).

***Buvatina stroemella* (Fabricius, 1781)**

DISTRIBUTION: The species is very rare: ON, Sel: Lårgård (no date) J.H.S. Siebke leg.; ON, Lom 19 July 1967 C.F. Lühr leg.; ON, Nord-Fron: Vinstra 1 July 1988 L. Aarvik leg.; BV, Nes June 1875 W.M. Schøyen leg.; "Dovre" (without exact locality or date) J.H.S. Siebke leg.; STI, Oppdal: Bjerkaker 3 Aug. 1878 J.H.S. Siebke leg. Altogether 7 specimens.

TOTAL RANGE: N, E and C Europe (Palm 1989).

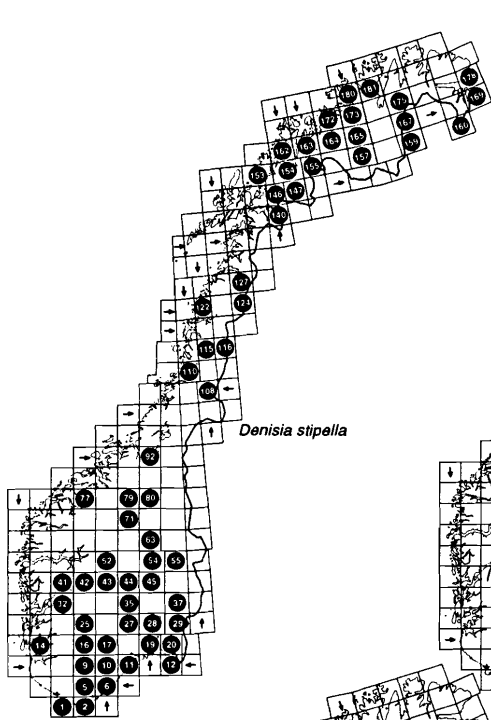
FOODPLANT: The larva has been found in old oak trunks feeding on decaying organic matter (Palm 1989). All the Norwegian records are from inland localities, outside the range of oak. This suggest that the larva may also live in old birches.

***Denisia similella* (Hübner, 1796)**

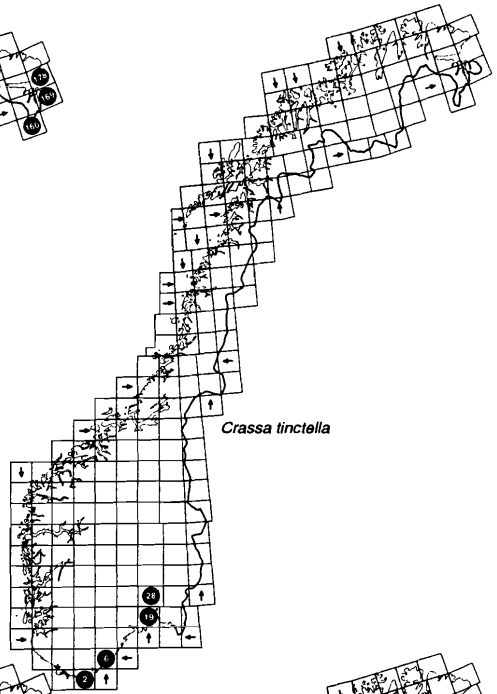
DISTRIBUTION: Rather common throughout the country except in coastal parts of W Norway.

TOTAL RANGE: N, E and C Europe; Mongolia (Palm 1989).

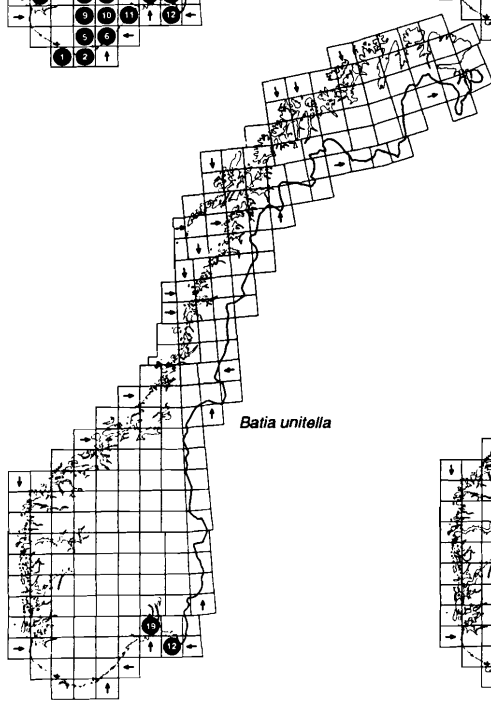
FOODPLANT: The larva feeds in or under bark, mainly of conifers. Also reared from spruce cones and fungi (Palm 1989).



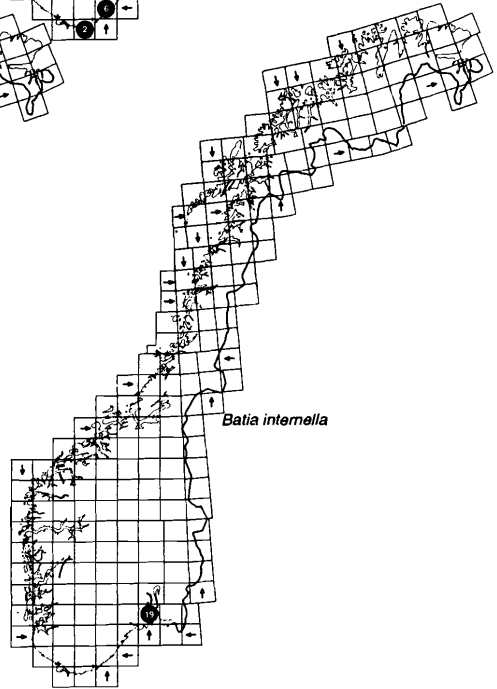
Denisia stipella



Crassa tinctella



Batia unitella



Batia internella

***Denisia stipella* (Linnaeus, 1758)**

DISTRIBUTION: Common throughout the country except in coastal parts of W Norway

TOTAL RANGE: Throughout Europe, except the southernmost parts (Palm 1989).

FOODPLANT: The larva lives in bark of various trees, often dead ones, and in stumps (Palm 1989).

***Crassa tinctella* (Hübner, 1796)**

DISTRIBUTION: Rare. Single records from the Oslofjord area southwards to VAY, Kristiansand. Not verified record: VE (Opheim 1978).

TOTAL RANGE: N, E and C Europe; parts of S Europe (Palm 1989).

FOODPLANT: Dead wood; under loose bark, or in mosses or lichens growing on trees (Palm 1989).

NOTE: Opheim's (1978) records from AK, HEs and Os represent *Euhyponeutooides albithoracellus* (HEs, Os) and *Zelleria hepariella* (AK). This species is generally known as *Tichonia tinctella*. The type species of *Tichonia* is not congeneric with *tinctella*. *Crassa* Bruand replaces *Tichonia* sensu auct. (Nye & Fletcher 1991).

***Batia unitella* (Hübner, 1796)**

DISTRIBUTION: Known from a few sites on both sides of the Oslofjord only: Ø, Onsøy: Rauer 28 July 1989 (several collectors); Ø, Hvaler: Asmaløy 3 June 1990 R. Christensen leg.; VE, Tjøme: Kjære 5 July 1969 A. Fjeldså leg.; VE, Larvik: Ranvika 3 July 1989 S.A. Bakke leg.

TOTAL RANGE: C and E Europe; Caucasus; N Spain (Palm 1989).

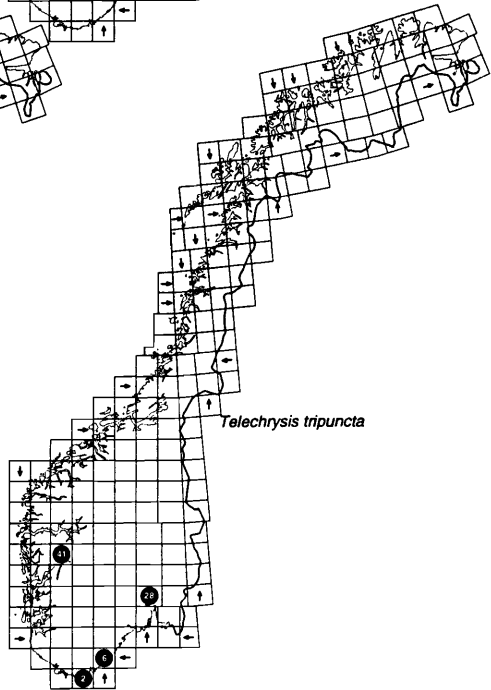
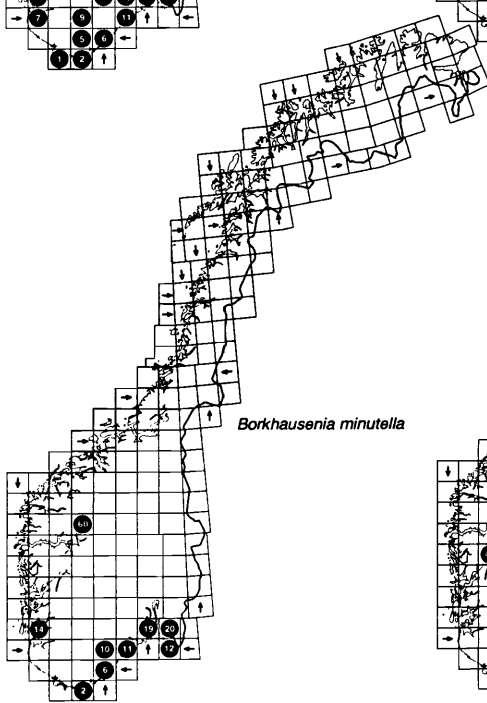
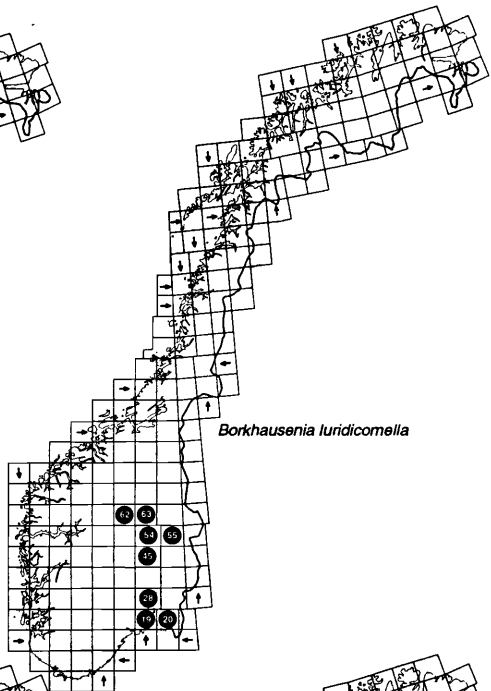
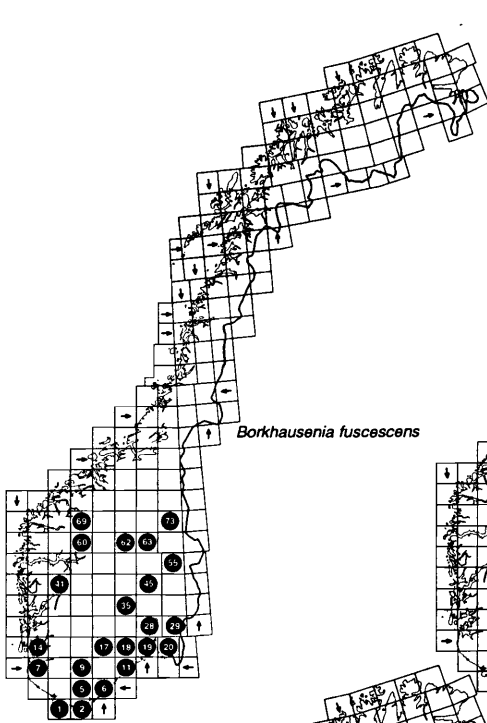
FOODPLANT: Under bark of various deciduous trees (Palm 1989).

***Batia internella* Jäckh, 1972**

DISTRIBUTION: One record only: VE, Tjøme: Sandøy 16 July 1983 A. Fjeldså leg. (Andersen & Fjeldså 1984). The habitat is open fields near the coast with bushes of *Juniperus* or *Sarothamnus* (Palm 1989).

TOTAL RANGE: Denmark, S Sweden, C and S Europe (Palm 1989).

FOODPLANT: Unknown.



***Borkhausenia fuscescens* (Haworth, 1828)**

DISTRIBUTION: Common north to MRI. Not verified record: HOy (Opheim 1978).

TOTAL RANGE: N, E and C Europe; N America (Palm 1989).

FOODPLANT: The larva feeds on fungi, dead animal or vegetable matter and in birds' nests (Palm 1989). The species often occurs indoors.

***Borkhausenia luridicomella* (Herrich-Schäffer, 1856)**

DISTRIBUTION: Rather common in SE Norway northwards to ON.

TOTAL RANGE: N, E and C Europe (Palm 1989).

FOODPLANT: Probably as for *B. fuscescens*; reared from birds' nests (Palm 1989).

***Borkhausenia minutella* (Linnaeus, 1758)**

DISTRIBUTION: Scattered along the coast from Ø and north to SFI.

TOTAL RANGE: Throughout Europe except the northernmost parts (Palm 1989).

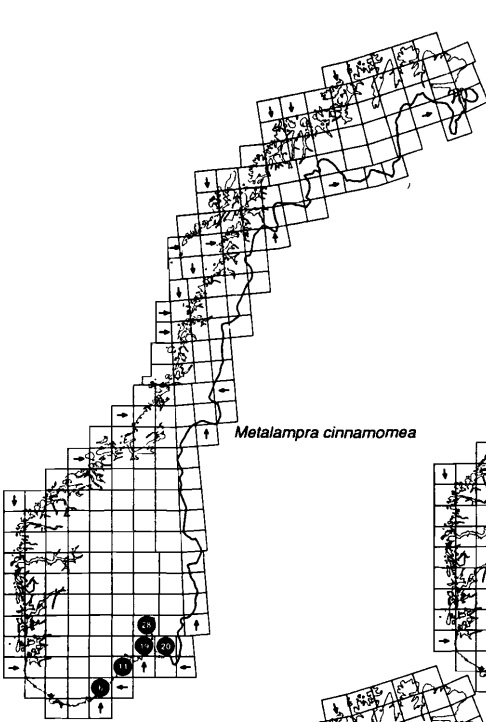
FOODPLANT: Dead animal or vegetable matter (Palm 1989). In Norway it seems to be present indoors only.

***Telechrysis tripuncta* (Haworth, 1828)**

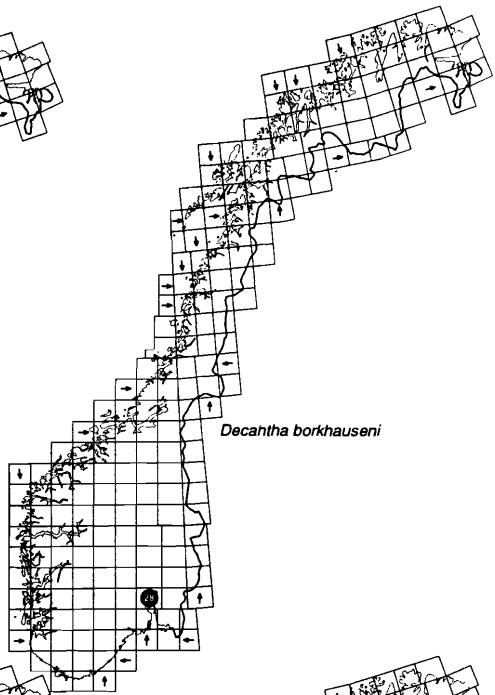
DISTRIBUTION: Five localities only: AK, Frogn: Håøya 19–27 June 1983 L. Aarvik leg.; AAY Tromøy: Skore 19 June 1992 S.A. Bakke leg.; VAY, Kristiansand: Stangenes 6 July 1977 S. Svendsen leg.; HOI, Voss 28 June 1915 and 5 July 1917 N. Grønlien leg.; HOI, Eidfjord: Øvre Eidfjord (no date) T. Nielsen leg.

TOTAL RANGE: N, E and C Europe; parts of S Europe; Caucasus; Turkey (Palm 1989).

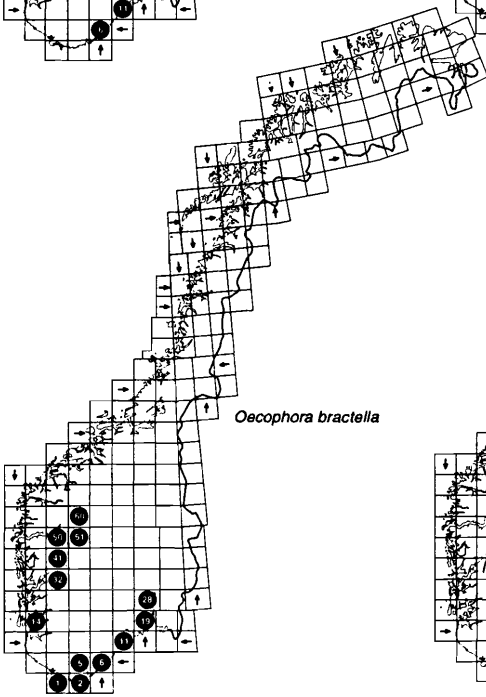
FOODPLANT: Unknown, but probably rotting wood (Palm 1989).



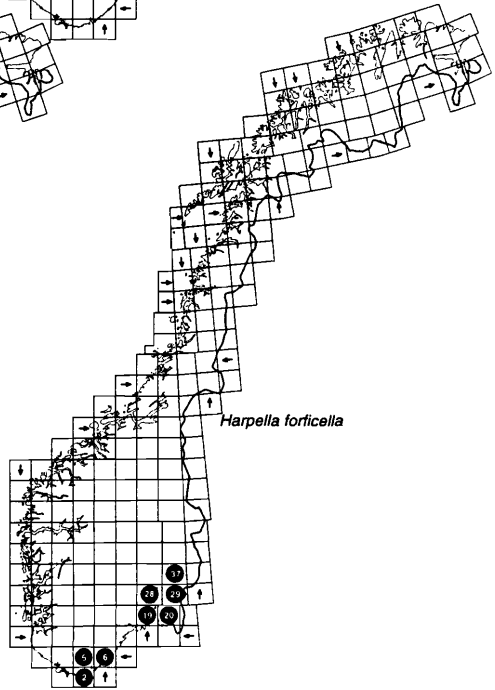
Metalampra cinnamomea



Decantha borkhauseni



Oecophora bractella



Harpella forcicella

***Metalampra cinnamomea* (Zeller, 1839)**

DISTRIBUTION: Rather rare around the Oslofjord. Two other records: TEY Drangedal: Skultrevassåsen 9 July 1992 S.A. Bakke leg.; AAY, Tromøy: Bjelland 23–25 July 1987 S.A. Bakke leg.
TOTAL RANGE: N, E and C Europe (Palm 1989).
FOODPLANT: Under bark of different trees, particularly *Pinus* (Palm 1989).

***Decantha borkhauseni* (Zeller, 1839)**

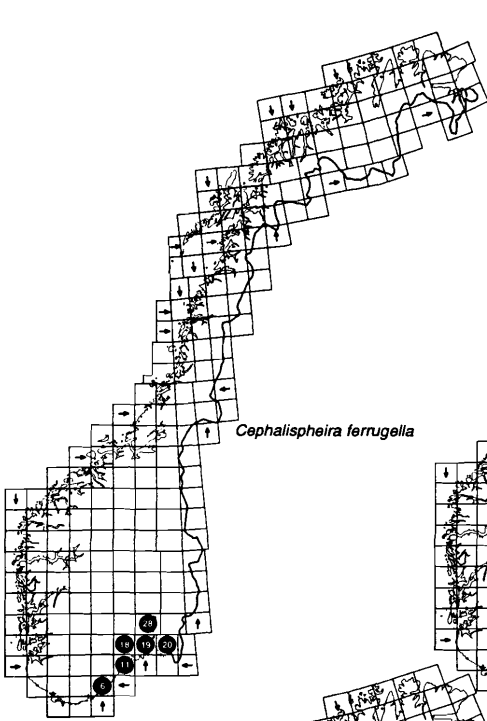
DISTRIBUTION: We have only seen specimens from AK, Oslo: Malmøya 26 July 1990 L. Aarvik leg. and BØ, Drammen: Underlia, several specimens in the years 1984–90 Y. Berg and L.O. Hansen leg. Not verified record: VE (Opheim 1978)
TOTAL RANGE: S Sweden and S Finland; eastern part of C Europe (Palm 1989).
FOODPLANT: The larva lives in the bark of pine trees (Palm 1989).

***Oecophora bractella* (Linnaeus, 1758)**

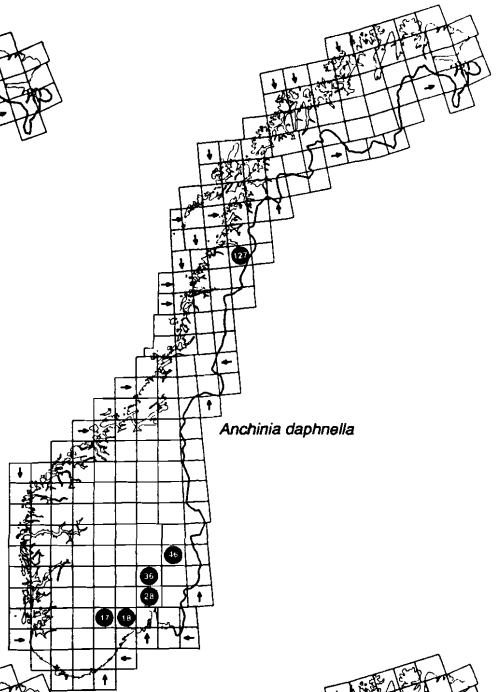
DISTRIBUTION: Taken along the coast from the Oslofjord area to VAY. It also occurs along the fiords in RI, HOI and SFI.
TOTAL RANGE: N and C Europe; eastern part of S Europe; Asia Minor (Palm 1989).
FOODPLANT: The larva lives under bark of different trees and in fungi growing on trunks (Palm 1989).

***Harpella forficella* (Scopoli, 1763)**

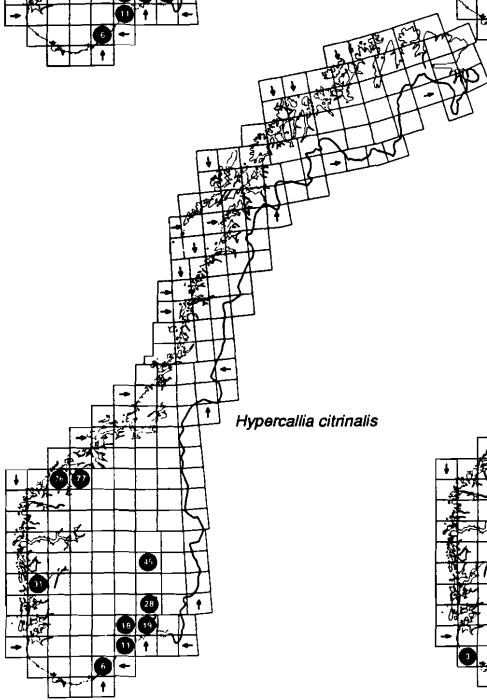
DISTRIBUTION: Rare around the Oslofjord and southwards to VAY, Kristiansand. Recently collected from the inland: AK, Rælingen: Åmodt 30 June 1993 R. Christensen leg. and Sørum: Egner 15 April 1992 O. Sørlibråten leg. Not verified record: VE (Opheim 1978).
TOTAL RANGE: N, E and C Europe; parts of S Europe; Asia Minor (Palm 1989).
FOODPLANT: Dead wood and fungi on deciduous trees (Palm 1989).



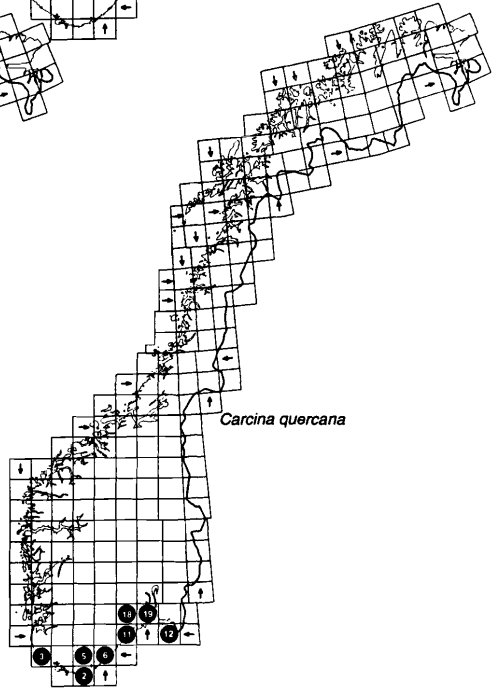
Cephalispheira ferrugella



Anchinia daphnella



Hypercallia citrinalis



Carcina quercana

***Cephalispheira ferrugella* (Denis & Schiffermüller, 1775)**

DISTRIBUTION: Rather common around the Oslofjord and southwards to AAY, Tromøy.

TOTAL RANGE: N, E and C Europe; northern parts of S Europe (Palm 1989).

FOODPLANT: *Campanula persicifolia* and occasionally *C. rotundifolia* (Palm 1989).

NOTE: This species is generally known as *Orophia ferrugella*. The type species of *Orophia* is not congeneric with *ferrugella*. *Cephalispheira* Bruand replaces *Orophia* sensu auct. (Nye & Fletcher 1991).

***Anchinia daphnella* (Hübner, 1796)**

DISTRIBUTION: Scattered records from TEY, Porsgrunn north to NSI, Saltdal. Larvae are sometimes encountered in high numbers. Not verified record: STi (Opheim 1978).

TOTAL RANGE: N and E Europe; eastern part of C Europe (Palm 1989)

FOODPLANT: *Daphne mezereum* (Palm 1989).

***Hypercallia citrinalis* (Scopoli, 1763)**

DISTRIBUTION: Rather rare north to OS, Gjøvik and MRI, Valldal.

TOTAL RANGE: Europe; Caucasus; S Siberia; Asia Minor and Mongolia (Palm 1989).

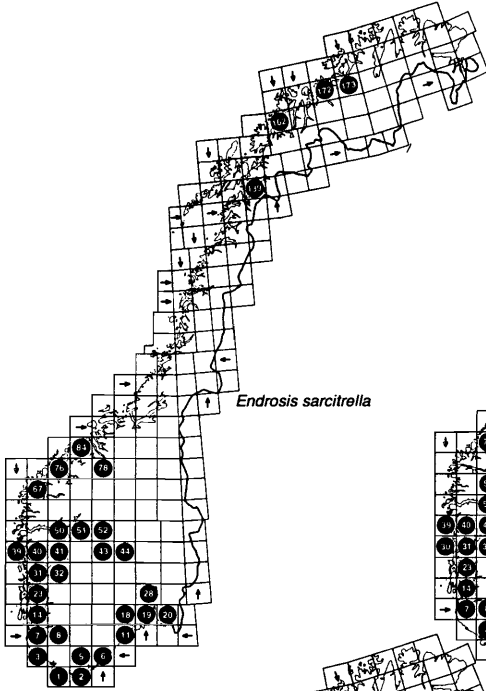
FOODPLANT: *Polygala vulgaris* (Palm 1989).

***Carcina quercana* (Fabricius, 1775)**

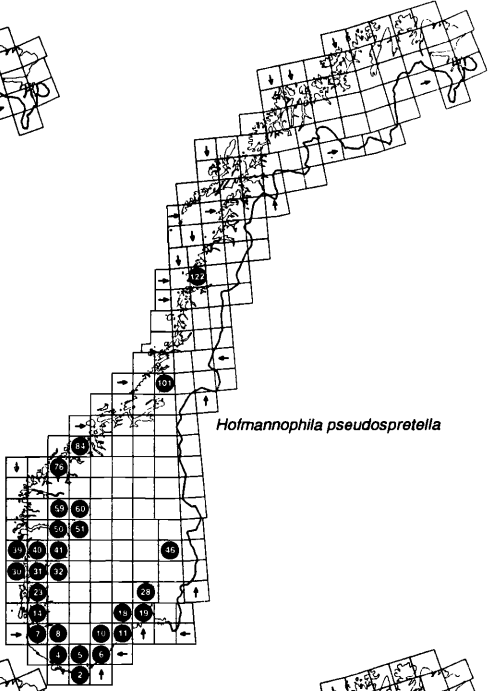
DISTRIBUTION: Rather common in oak forests in the coastal areas from Ø, Hvaler and VE, Tønsberg, to RY, Sokndal.

TOTAL RANGE: Throughout Europe except the northernmost parts; Asia Minor; Caucasus; N Africa; introduced to N America (Palm 1989).

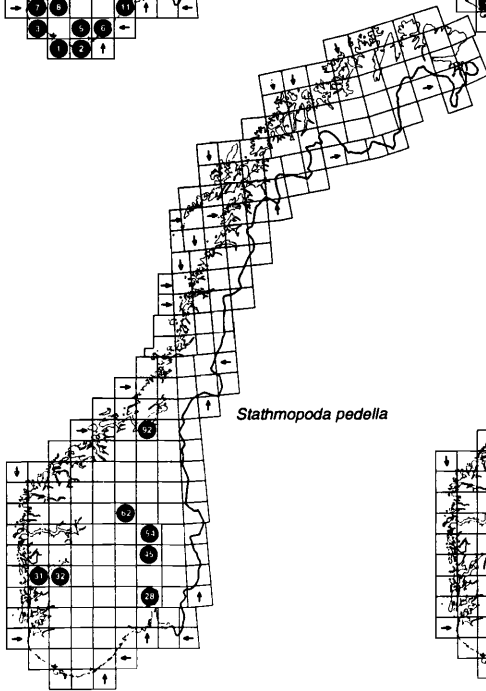
FOODPLANT: Mainly *Quercus*, but occasionally other deciduous trees (Palm 1989).



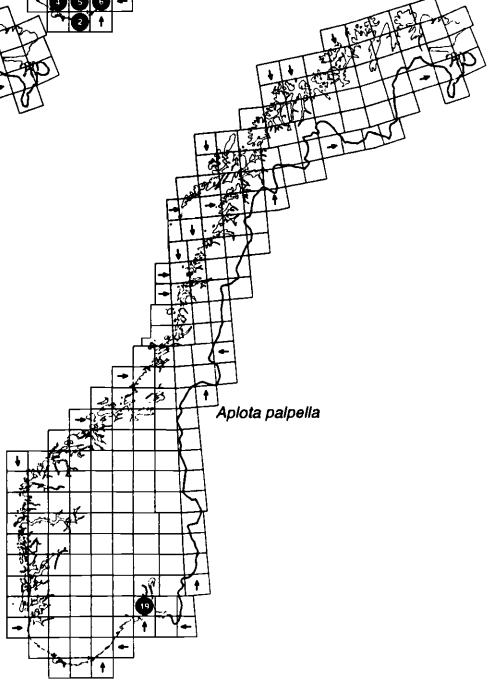
Endrosis sarcitrella



Hofmannophila pseudospretella



Stathmopoda pedella



Aplota palpella

***Endrosia sarcitrella* (Linnaeus, 1758)**

DISTRIBUTION: In most districts north to FV, but common only in coastal areas of S Norway. In Norway mainly indoors.

TOTAL RANGE: Cosmopolitan (Palm 1989).

FOODPLANT: Dead vegetable matter (Palm 1989).

***Hofmannophila pseudospretella* (Stainton, 1849)**

DISTRIBUTION: Rather common in coastal areas north to NSI, Rana; one inland locality: HES, Stange.

TOTAL RANGE: Cosmopolitan (Palm 1989).

FOODPLANT: Dry vegetable and animal matter; mostly indoors, but may also occur outdoors (Palm 1989).

***Stathmopoda pedella* (Linnaeus, 1761)**

DISTRIBUTION: Rare; scattered records north to STI, Trondheim. Not verified records: VE and SFi (Opheim 1978).

TOTAL RANGE: Europe (Palm 1989).

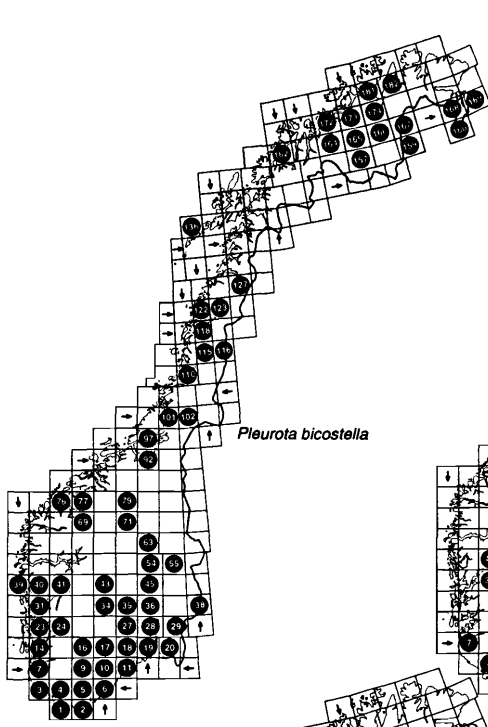
FOODPLANT: *Alnus incana* and *A. glutinosa* (Palm 1989).

***Aplota palpella* (Haworth, 1828)**

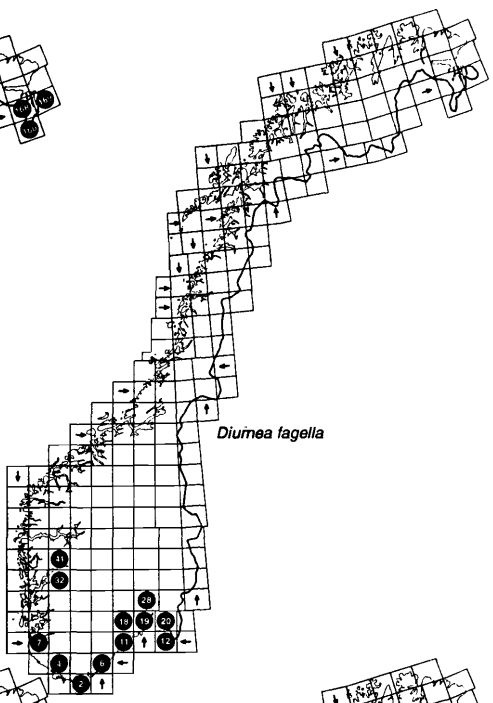
DISTRIBUTION: One record only: Ø, Råde: N. Sletter 5 July 1981 L. Aarvik leg. (Aarvik 1983).

TOTAL RANGE: N E and C Europe; northern part of S Europe (Palm 1989).

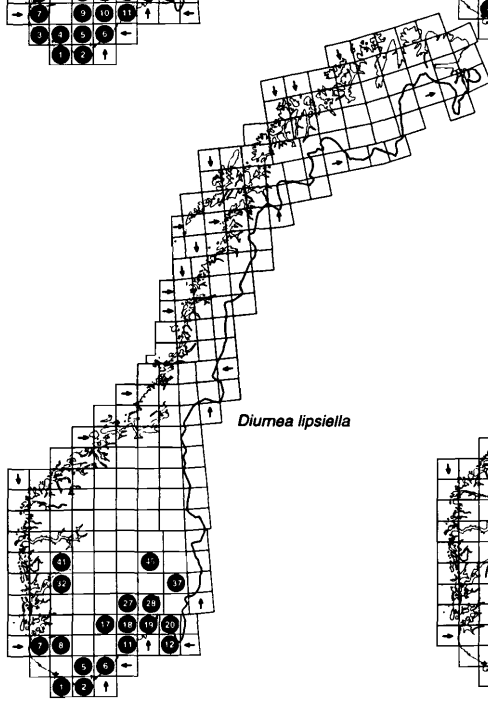
FOODPLANT: Mosses growing on old tree trunks or cliffs (Palm 1989).



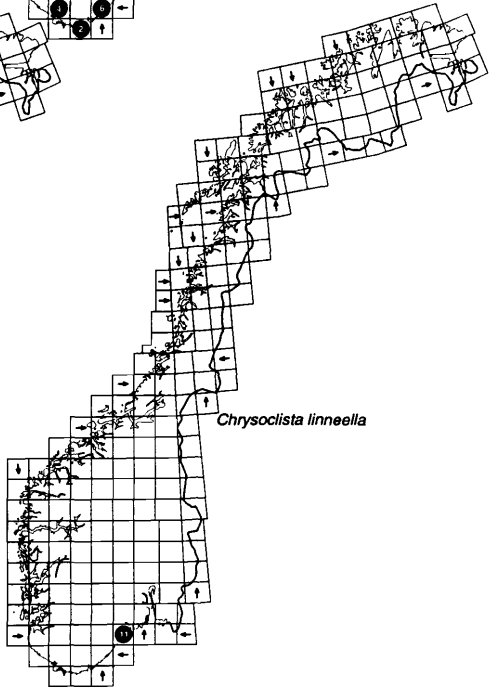
Pleurota bicostella



Diumea fagella



Diumea lipsiella



Chrysocista linneella

***Pleurota bicostella* (Clerck, 1759)**

DISTRIBUTION: Common throughout Norway. Not verified records SFy and SFi (Opheim 1978).

TOTAL RANGE: Europe, extending eastwards to Amur; Afghanistan (Palm 1989).

FOODPLANT: *Calluna* and *Erica* (Palm 1989).

***Diurnea fagella* (Denis & Schiffermüller, 1775)**

DISTRIBUTION: Rather common in coastal areas from the Oslofjord to HOI. Not verified record: HOy (Opheim 1978).

TOTAL RANGE: Throughout Europe; S Siberia; Asia Minor (Palm 1989).

FOODPLANT: Polyphagous, feeding on various deciduous trees and shrubs (Palm 1989).

***Diurnea lipsiella* (Denis & Schiffermüller, 1775) (= *phryganella* Hübner, 1796)**

DISTRIBUTION: Rather common in coastal areas north to HOI. Single records from inland localities: AK, Aurskog-Høland; OS, Gran; TEI, Kviteseid; VAI, Sirdal.

TOTAL RANGE: N, E and C Europe (Palm 1989).

FOODPLANT: Various trees and shrubs (Palm 1989).

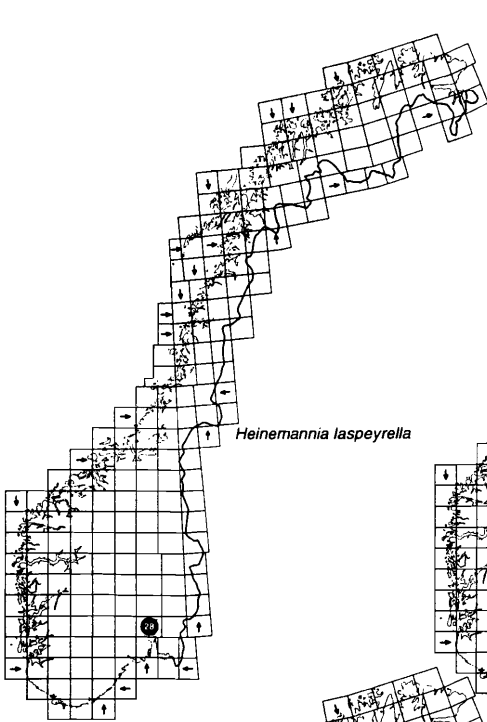
Agonoxenidae

***Chrysoclista linneella* (Clerck, 1759)**

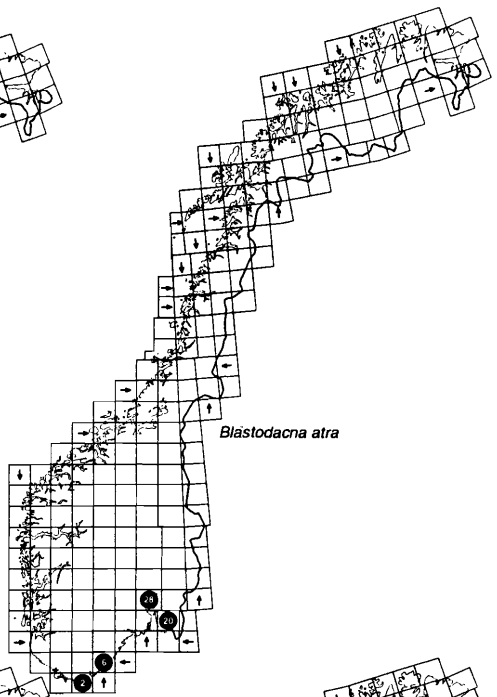
DISTRIBUTION: A single record: AAY, Risør 9 July 1927 N. Grønlien leg., A. Fjeldså det. (ZMB).

TOTAL RANGE: N, E and C Europe; Asia Minor; -N America (Zagulajev & Sinev 1990).

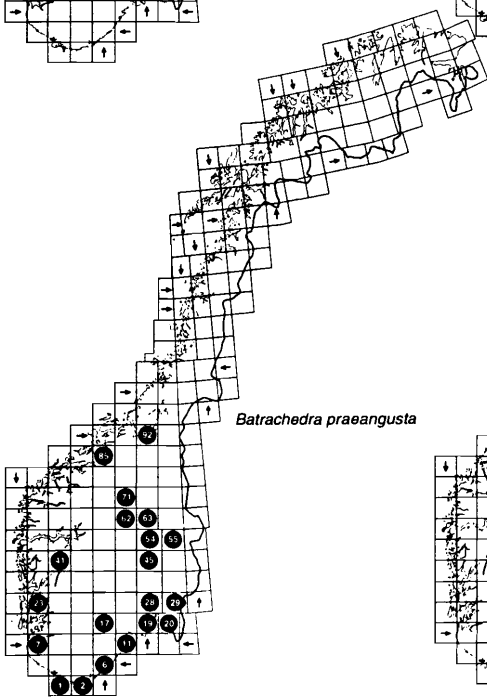
FOODPLANT: In bark of old lime trees (*Tilia cordata*) (Emmet 1979).



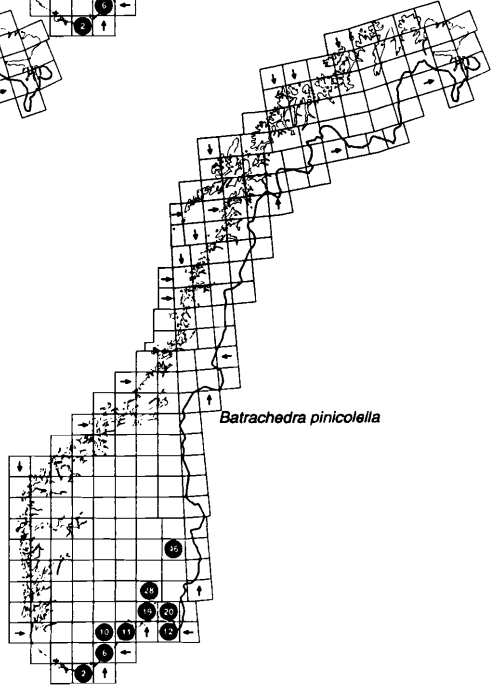
Heinemannia laspeyrella



Blastodacna atra



Batrachedra praeangusta



Batrachedra pinicolella

***Heinemannia laspeyrella* (Hübner, 1796)**

DISTRIBUTION: Recorded only from the following islands in the inner Oslofjord: AK, Asker: Brønnøya; Bærum: Ostøya; Frogn: Håøya. First record: Brønnøya 1980 (Aarvik 1983, Aarvik & Midtgaard 1986).

TOTAL RANGE: N Europe, not Denmark; central part of W Europe east to Czechoslovakia (Zagulajev & Sinev 1990).

FOODPLANT: *Trifolium* (Zagulajev & Sinev 1990).

***Blastodacna atra* (Haworth, 1828)**

DISTRIBUTION: Rather rare; a few localities in coastal areas in S and SE Norway.

TOTAL RANGE: Throughout Europe; Caucasus (Zagulajev & Sinev 1990).

FOODPLANT: *Malus* (Emmet 1979).

Batrachedridae

***Batrachedra praeangusta* (Haworth, 1828)**

DISTRIBUTION: Common north to STI, Trondheim.

TOTAL RANGE: N, E and C Europe eastwards to Siberia, Central Asia and Mongolia; N America (Zagulajev & Sinev 1990).

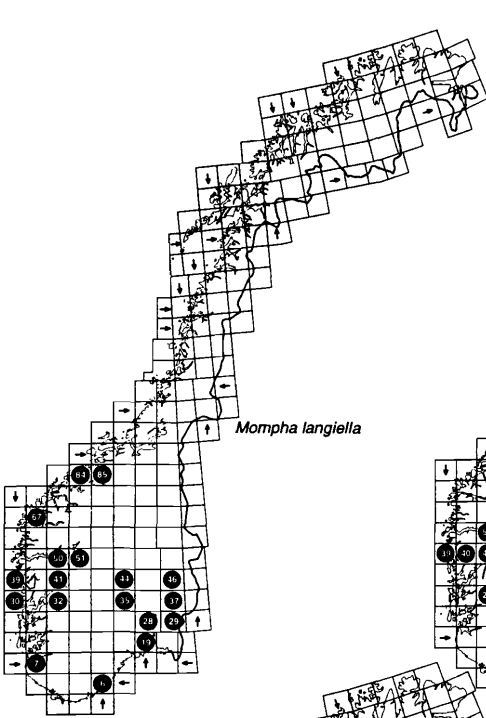
FOODPLANT: *Populus* and *Salix* (Emmet 1979).

***Batrachedra pinicolella* (Zeller, 1839)**

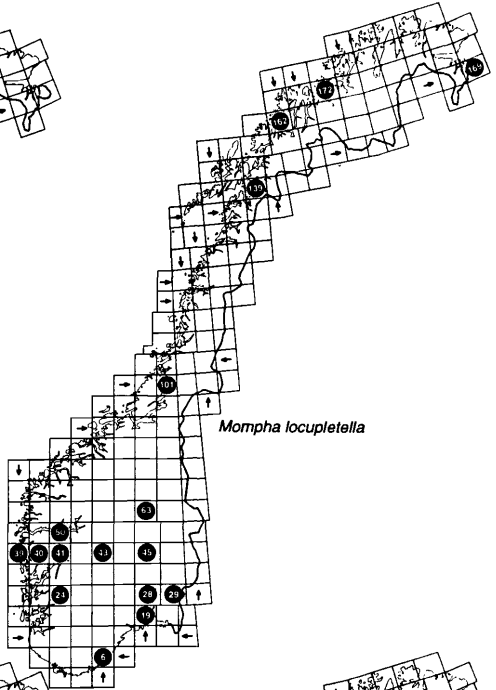
DISTRIBUTION: Rather common in SE Norway north to HES, Hamar.

TOTAL RANGE: N, E and C Europe (Zagulajev & Sinev 1990).

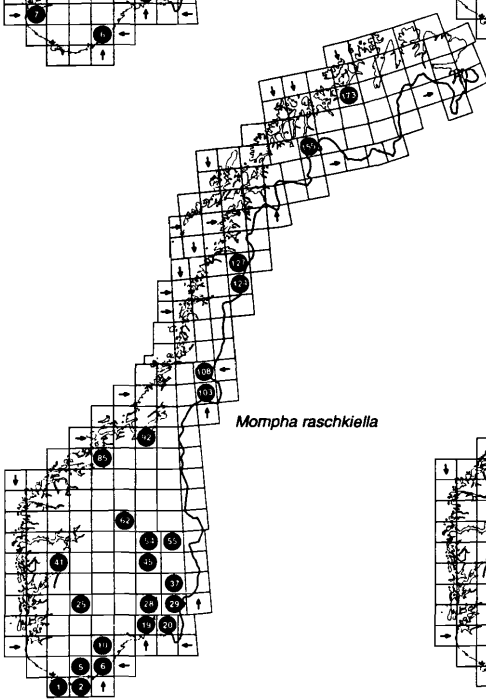
FOODPLANT: *Picea abies* and *Pinus sylvestris* (Emmet 1979).



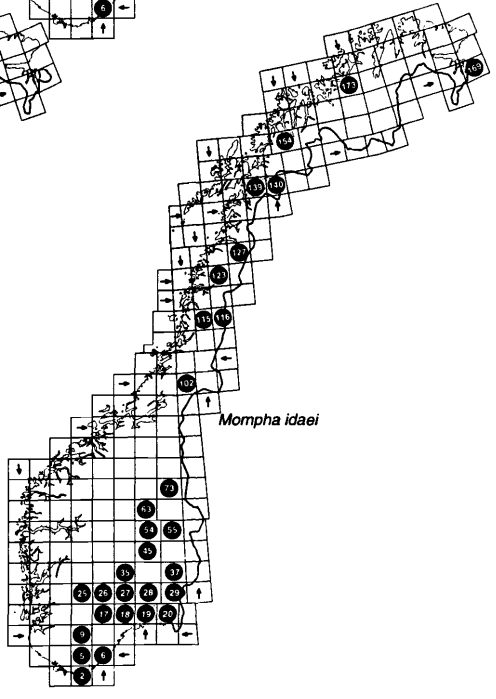
Mompha langiella



Mompha locupletella



Mompha raschkiella



Mompha idaei

Momphidae

***Mompha langiella* (Hübner, 1796)**

DISTRIBUTION: Rather common north to MRI, Sunndal. In SE Norway taken north to HES and OS. Not verified records VE and Ri (Opheim 1978).

TOTAL RANGE: N, E and C Europe (Zagulajev & Sinev 1990).

FOODPLANT: *Epilobium montanum*, *E. hirsutum* and *Circaea lutetiana* (Emmet 1979).

***Mompha locupletella* (Denis & Schiffermüller, 1775)**

DISTRIBUTION: Scattered records north to FV, Alta. The species is difficult to spot, and is probably overlooked in many districts. Not verified records: TEi, Ry and SFy (Opheim 1978).

TOTAL RANGE: N, E and C Europe (Zagulajev & Sinev 1990).

FOODPLANT: Various *Epilobium* spp. (Emmet 1979).

***Mompha raschkiella* (Zeller, 1839)**

DISTRIBUTION: Rather common north to FV, Alta. Certainly overlooked in many districts. Not verified records: Bv, Ry, HOy and SFi (Opheim 1978).

TOTAL RANGE: N, E and C Europe; S Siberia (Zagulajev & Sinev 1990).

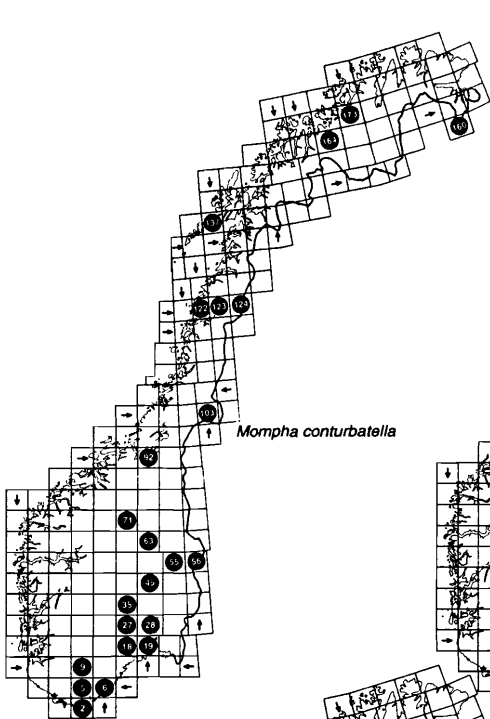
FOODPLANT: *Epilobium angustifolium* (Emmet 1979).

***Mompha idaei* (Zeller, 1839)**

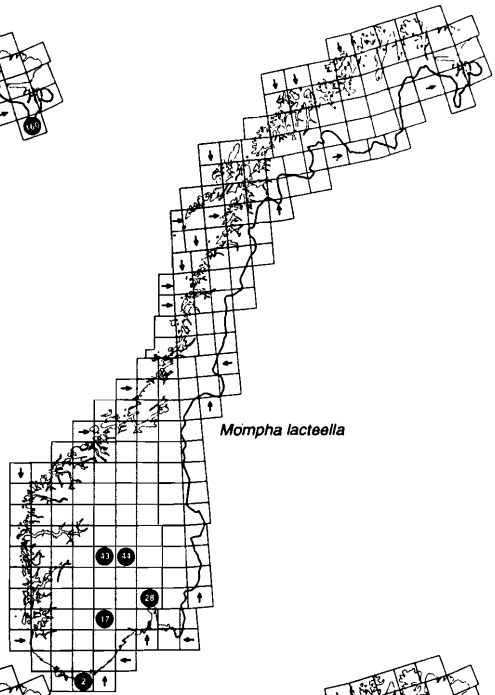
DISTRIBUTION: Rather common north to FV, Alta, but apparently absent from W Norway.

TOTAL RANGE: N, E and C Europe; Central Asia (Zagulajev & Sinev 1990).

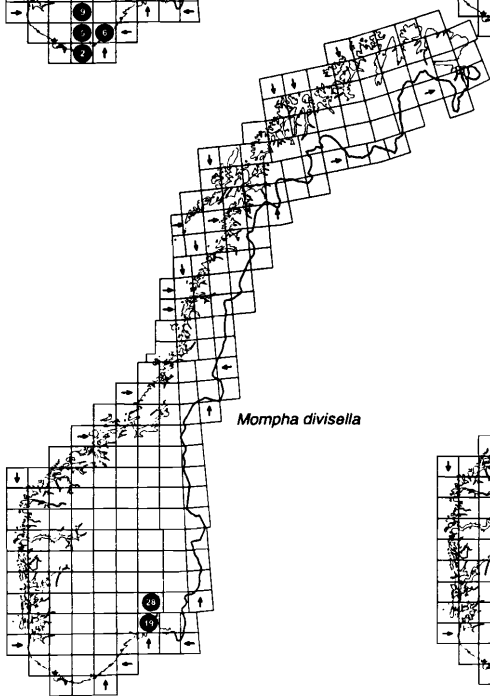
FOODPLANT: *Epilobium angustifolium* (Zagulajev & Sinev 1990).



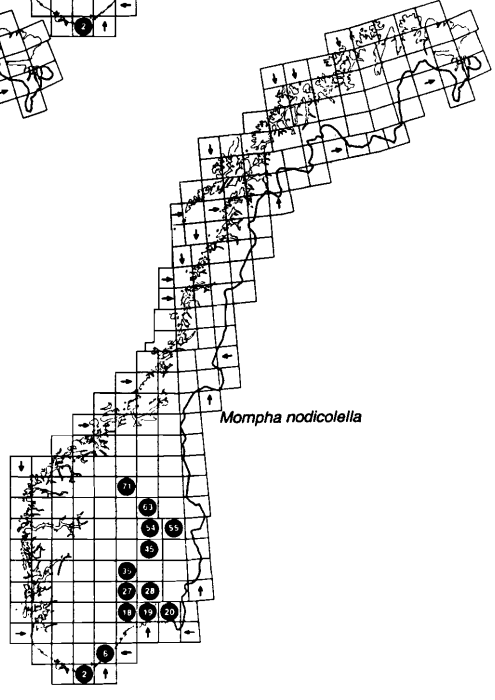
Mompha conturbatella



Mompha lacteella



Mompha divisella



Mompha nodicolella

***Mompha conturbatella* (Hübner, 1819)**

DISTRIBUTION: Rather common north to FV, Alta; probably overlooked in many districts. Not verified records: TEi, Ry, HOy, HOi and SFi (Opheim 1978).

TOTAL RANGE: Europe, eastwards to S Siberia and Central Asia (Zagulajev & Sinev 1990).

FOODPLANT: *Epilobium angustifolium* (Emmet 1979).

***Mompha lacteella* (Stephens, 1834)**

DISTRIBUTION: Rare; recorded from a few districts in SE Norway, but probably overlooked. Not verified record: VE (Opheim 1978).

TOTAL RANGE: N, E and C Europe (Zagulajev & Sinev 1990).

FOODPLANT: *Epilobium hirsutum* (Emmet 1979). Must also feed on other *Epilobium* in Norway, as it is collected outside the range of *E. hirsutum*.

***Mompha divisella* Herrich-Schäffer, 1854**

DISTRIBUTION: Recently discovered in Norway: BØ, Røyken: Kinnartangen 4 April 1985 and 30 Aug. 1987; BØ, Røyken: Grimsrud 24 June 1986; BØ, Drammen: Underlia 2 Sept. 1987; VE, Våle: Langøya medio Sept. 1987; VE, Sande: Killingholmen 3 Sept. 1987. (Hansen 1989a, b). Most of these specimens were reared from *Epilobium montanum*. On 13 May 1991 a specimen was taken at AK, Frogn: Solbergstrand, L. Aarvik leg.

TOTAL RANGE: N, E, C and SW Europe eastwards to C Asia (Zagulajev & Sinev 1990).

FOODPLANT: *Epilobium montanum*, *E. palustre* and *E. lanceolatum* (Emmet 1979).

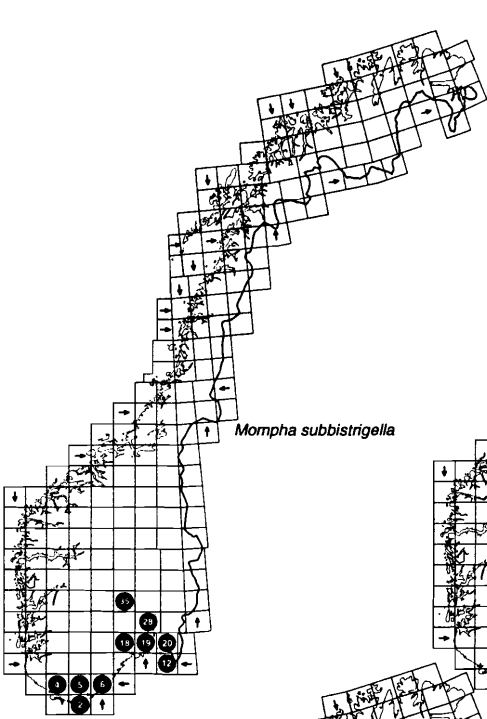
NOTE: The species was listed as Norwegian by Schøyen (1893) and Haanshus (1933), but later deleted (Opheim 1978) as the record could not be confirmed (see Opheim 1971, Hansen 1989b).

***Mompha nodicolella* Fuchs, 1902**

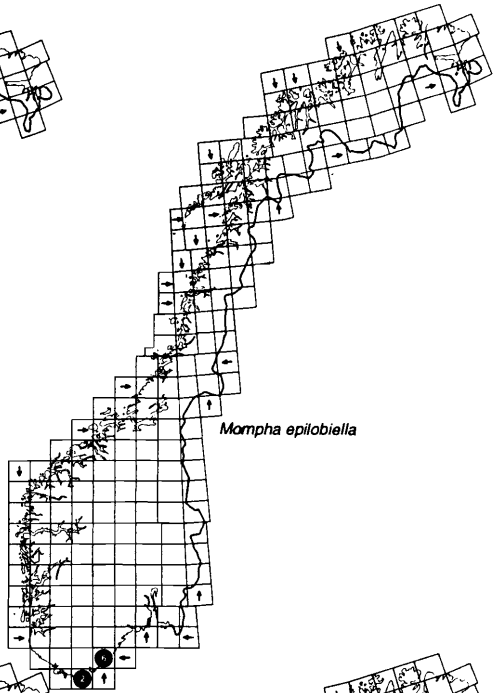
DISTRIBUTION: First recorded from Norway in 1970 (Opheim 1971). The species is now common in SE Norway north to ON, Vågåmo.

TOTAL RANGE: N, E and C Europe; S Siberia (Zagulajev & Sinev 1990).

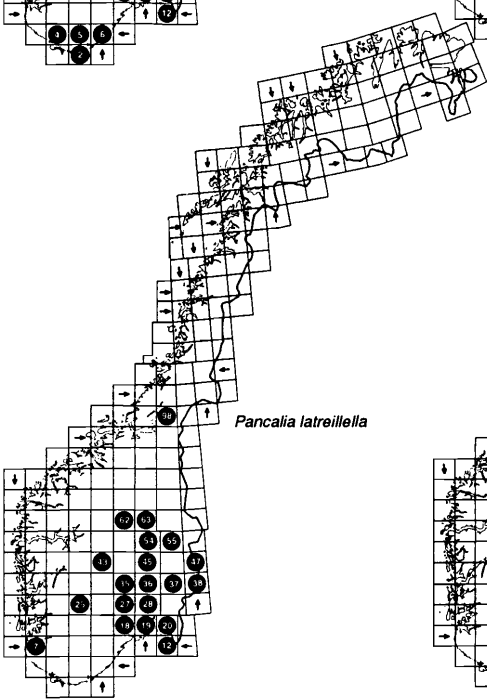
FOODPLANT: *Epilobium angustifolium* (Emmet 1979).



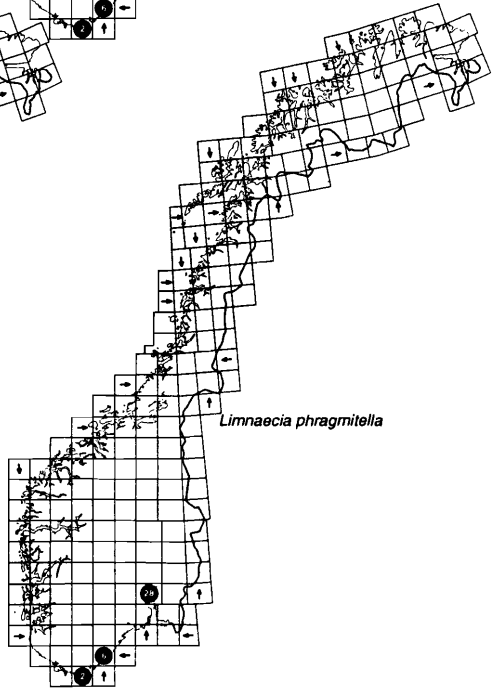
Mompha subbistrigella



Mompha epiobiella



Pancaia latreillella



Limnaecia phragmitella

***Mompha subbistrigella* (Haworth, 1828)**

DISTRIBUTION: Distributed in SE Norway north to BV, Rollag.

TOTAL RANGE: Europe; Asia Minor (Zagulajev & Sinev 1990).

FOODPLANT: *Epilobium montanum* (Emmet 1979).

***Mompha epilobiella* (Denis & Schiffermüller, 1775)**

DISTRIBUTION: Two records only: AAY, Tromøy kirke 30 May 1993 S.A. Bakke leg. and VAY, Kristiansand: Stangenes 23 May 1981 S. Svendsen leg. New to Norway.

TOTAL RANGE: Europe, eastwards to C Asia (Zagulajev & Sinev 1990).

FOODPLANT: *Epilobium hirsutum* (Emmet 1979).

Cosmopterigidae

***Pancalia latreillella* (Curtis, 1830)**

DISTRIBUTION: Rather common in SE Norway. Also taken in RY, Klepp and NTI, Inderøy. Not verified record: HOi (Opheim 1978). Prefers sun exposed sites.

TOTAL RANGE: Europe, eastwards to Siberia, the Far East and Japan (Zagulajev & Sinev 1990).

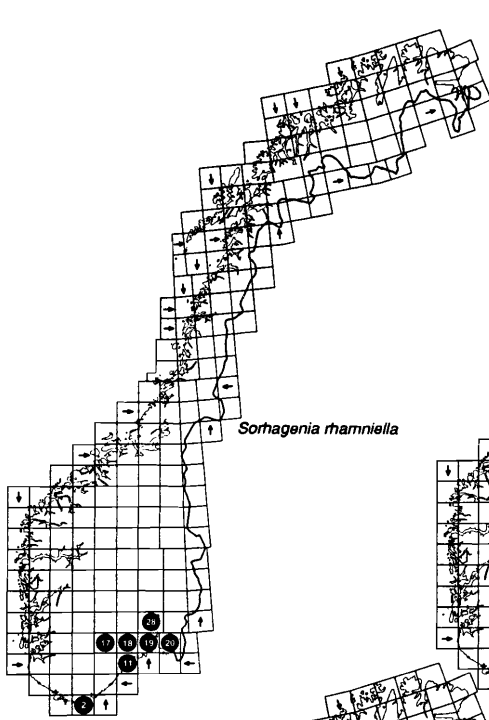
FOODPLANT: *Viola* (Emmet 1979).

***Limnaecia phragmitella* Stainton, 1851**

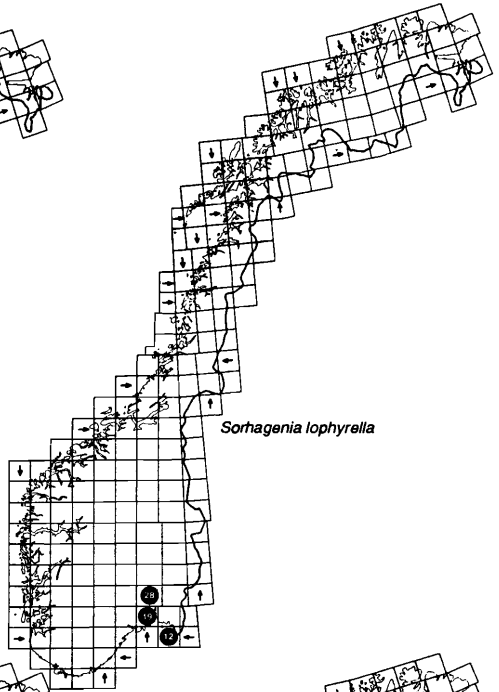
DISTRIBUTION: Recorded as new to Norway in VAY, Kristiansand 17 July 1970 K. Berggren leg. Later taken in Kristiansand and AAY, Grimstad. In 1986 collected in high numbers at Grimstad: Reddalsvann K. Berggren leg. Also taken in BØ, Røyken: Kinnartangen 11 Aug. 1984 L.O. Hansen leg. Not verified record: VE (Opheim 1978).

TOTAL RANGE: Europe; Central Asia; N and S Africa; N America (Zagulajev & Sinev 1990).

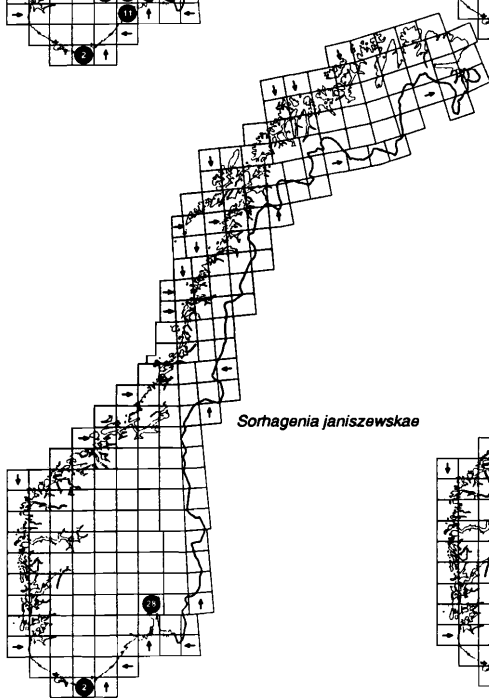
FOODPLANT: *Typha* (Emmet 1979).



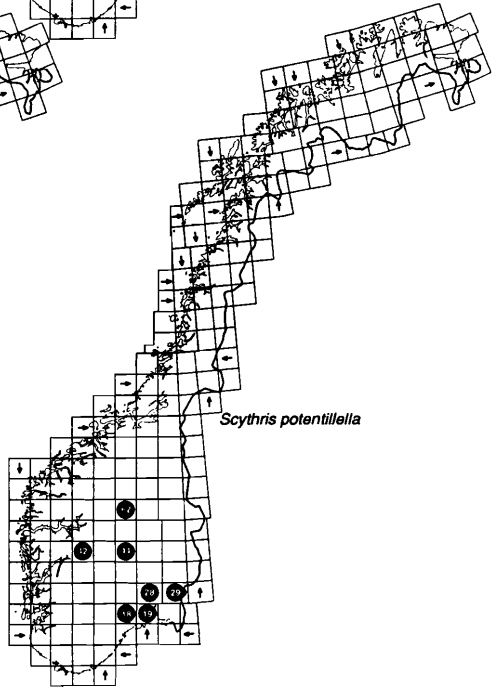
Sorhagenia rhamnifolia



Sorhagenia lophyrella



Sorhagenia janiszewskae



Scythris potentillifolia

***Sorhagenia rhamniella* (Zeller, 1839).**

DISTRIBUTION: Locally common around the Oslofjord and along the coast to VAY, Kristiansand; also taken in TEI, Tokke, Sjausel 27 July 1994 L. Aarvik leg.

TOTAL RANGE: N, E and C Europe; Caucasus (Zagulajev & Sinev 1990).

FOODPLANT: *Frangula* and *Rhamnus* (Emmet 1979).

***Sorhagenia lophyrella* (Douglas, 1846)**

DISTRIBUTION: Locally common around the Oslofjord and along the coast to VAY, Kristiansand. Not verified record: TEy (Opheim 1978).

TOTAL RANGE: Europe; Asia Minor (Zagulajev & Sinev 1990).

FOODPLANT: *Rhamnus* and *Frangula* (Emmet 1979).

NOTE: The record from VAY (Opheim 1978) is erroneous.

***Sorhagenia janiszewskae* Riedl, 1962**

DISTRIBUTION: First recorded from VAY, Kristiansand: Kuholmen 11 Aug. 1975 K. Berggren leg. (Opheim 1980). Also taken in BØ, Drammen: Underlia 7–14 July 1984 L.O. Hansen leg.

TOTAL RANGE: Europe (Zagulajev & Sinev 1990).

FOODPLANT: *Frangula* (Emmet 1979).

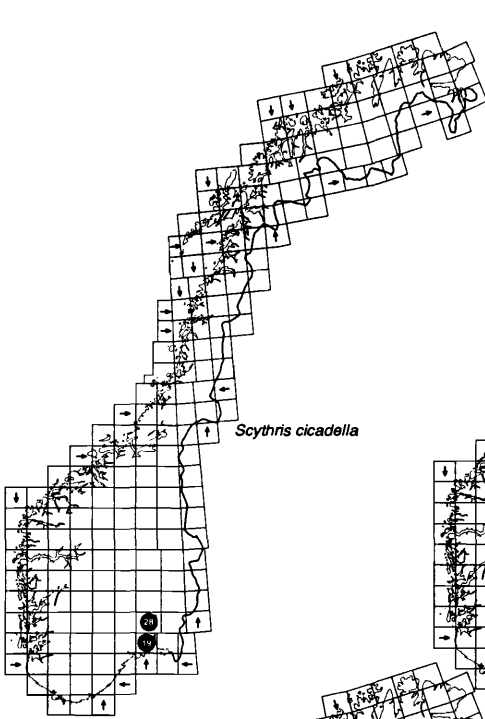
Scythridae

***Scythris potentillella* (Zeller, 1847)**

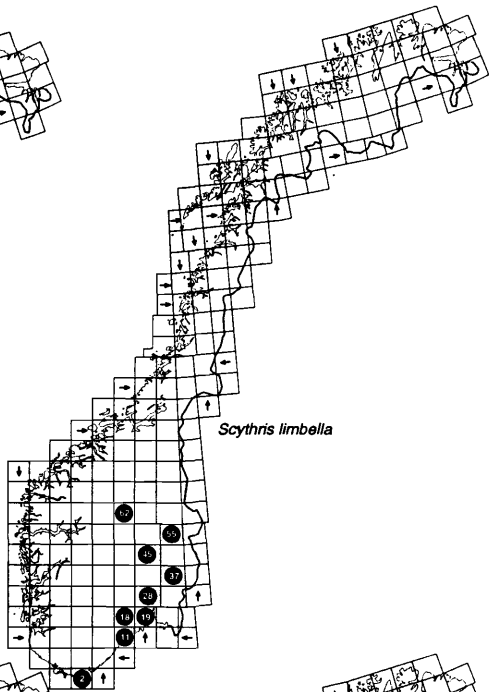
DISTRIBUTION: A few localities in S Norway, northernmost ON, Nord-Fron: Kvam. The habitat is sandy places on open moraine hills, slopes or hummocks, even above the timber line (Bengtsson 1984). At the Zoological Museum in Oslo there is a specimen labelled "Jotunfj." (= Jotunheimen) which confirms that it occurs at high altitude. This specimen had been identified as *S. inspersella*. Recently taken at HOI, Ulvik: Finse July 1991 about 1220 m a.s.l. Ihlebæk & Kjoberg leg.

TOTAL RANGE: N and C Europe (Bengtsson 1984).

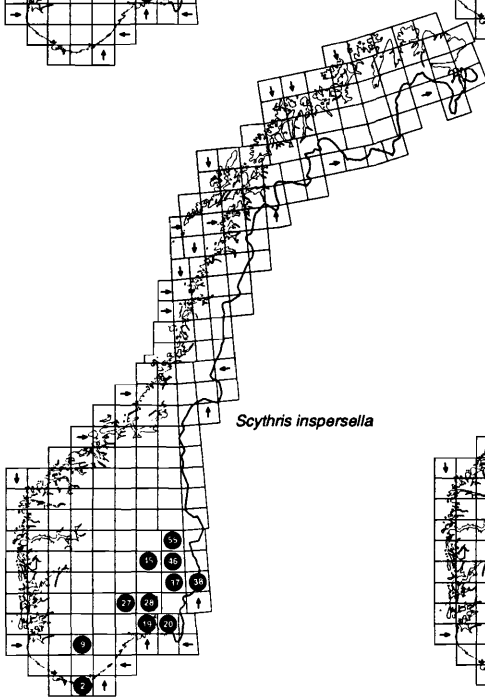
FOODPLANT: *Rumex acetosella* (Bengtsson 1984).



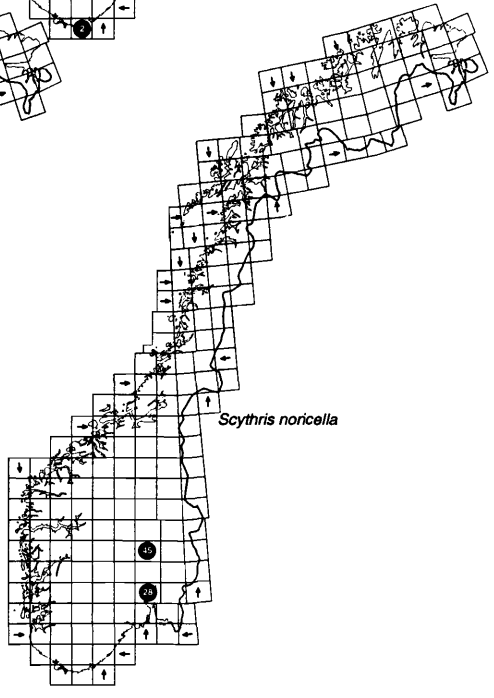
Scythris cicadella



Scythris limbella



Scythris inpersella



Scythris noricella

***Scythris cicadella* (Zeller, 1839)**

DISTRIBUTION: Two localities only: BØ, Hurum: Mølen 14 July 1989 and 8 July 1991 L.O. Hansen & S. A. Bakke leg., Røyken: Kinnartangen June 1991 L.O. Hansen leg. New to Norway. The habitat is sandy places.

TOTAL RANGE: N and C Europe (Bengtsson 1984).

FOODPLANT: *Scleranthus*, but as it also occurs where this plant does not grow, there must exist an additional foodplant (Bengtsson 1984).

***Scythris llimbella* (Fabricius, 1775)**

DISTRIBUTION: Scattered records in SE Norway. The moth is locally common on waste ground and in similar places where the food-plant grows. Not verified records: VE (Opheim 1978).

TOTAL RANGE: Europe; eastwards to Asia Minor and Turkestan (Bengtsson 1984).

FOODPLANT: *Chenopodium* and *Atriplex* (Bengtsson 1984).

NOTE: In the Zoological Museum in Oslo there is one specimen labelled "Elvenes, S. Varanger" L.M. Esmark leg. We suspect that this specimen is mislabelled, because the occurrence of *S. limbella* in Finnmark is rather improbable. In our opinion the occurrence there should be verified.

***Scythris inspersella* (Hübner, 1817)**

DISTRIBUTION: Only taken in a few districts in SE Norway, but probably overlooked, because the larvae are sometimes collected in high numbers.

TOTAL RANGE: Throughout N, E and C Europe (Bengtsson 1984).

FOODPLANT: *Epilobium angustifolium* (Bengtsson 1984).

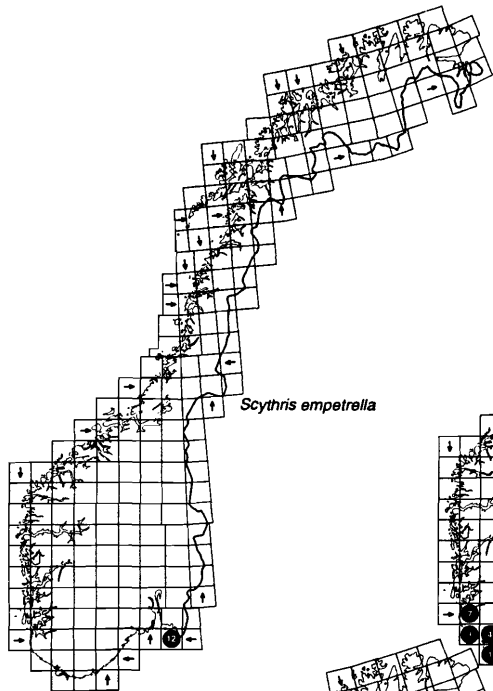
NOTE: The record from On by Opheim (1978) is erroneous, as the specimen in question belongs to *S. potentillella*.

***Scythris noricella* (Zeller, 1843)**

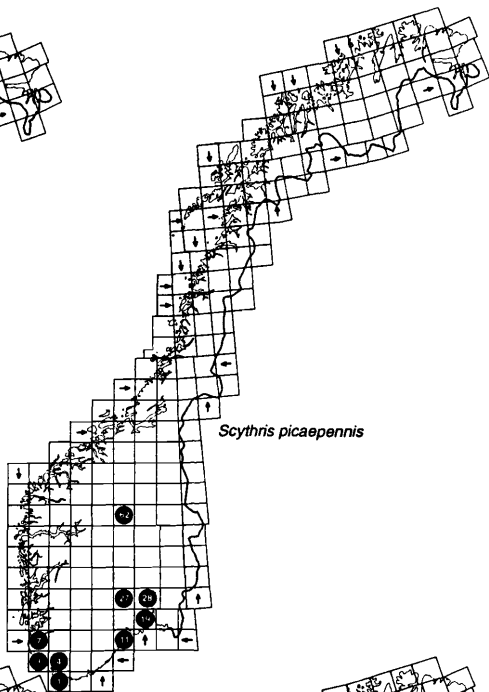
DISTRIBUTION: Two localities only: AK, Ås: Ås 12 Aug. 1984 and OS, Gjøvik: Rambekk 9 Aug. 1981 L. Aarvik leg. (Aarvik 1983, 1989).

TOTAL RANGE: Rare in Sweden and Finland; recorded from mountain areas in eastern C Europe; Belgium; the Alps; Greenland and Kamtchatka (Bengtsson 1984).

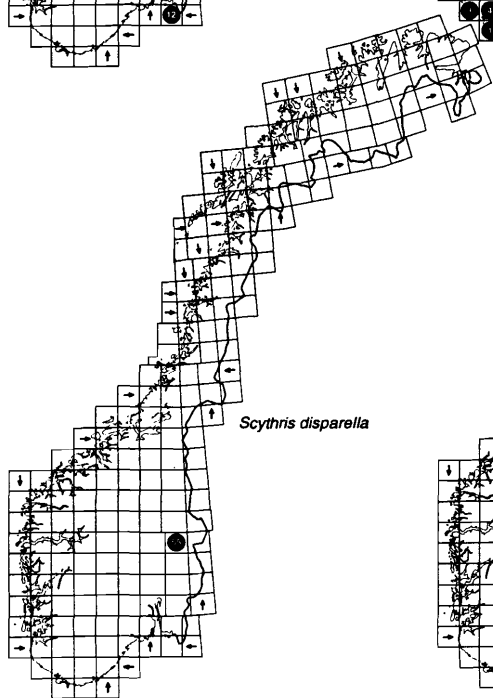
FOODPLANT: *Epilobium angustifolium* (Bengtsson 1984).



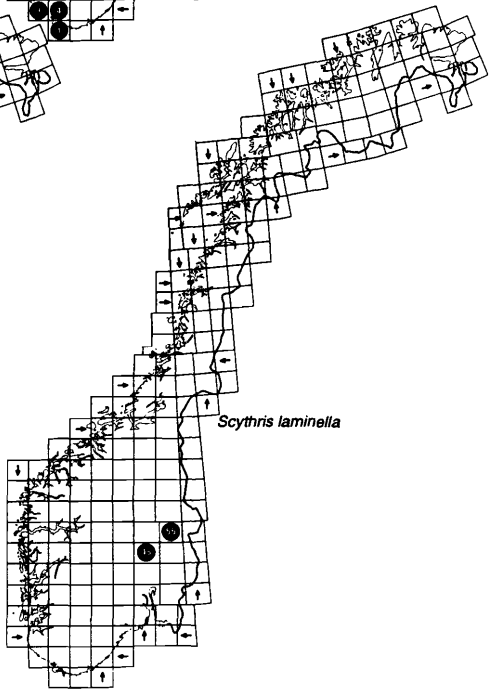
Scythris empetrella



Scythris picaepennis



Scythris disparella



Scythris laminella

***Scythris empetrella* Karsholt & Nielsen, 1976**

DISTRIBUTION: One locality only: Ø, Hvaler: Skipstadsand 1902 E. Strand leg.; Strand collected numerous specimens at Hvaler, but the species has not been rediscovered there in recent years. Not verified record: VE (Ander- sen & Søli 1988) and VAY (Opheim 1978). The habitat is sandy ground.

TOTAL RANGE: N Europe and W part of C Europe (Bengtsson 1984).

FOODPLANT: *Empetrum*, outside Scandinavia also *Calluna* and *Erica* (Bengtsson 1984).

***Scythris picaepennis* (Haworth, 1828)**

DISTRIBUTION: Scattered records along the coast from AK, Asker: Brønnøya to RY, Klepp: Orre; two records from the interior: ON, Nord-Fron: Vinstra, June 1992 L.O. Hansen & K. Myhr leg. and TEI, Notodden: Lisleherad July 1993 A. Bakke leg. The habitat is meadows with low herbs.

TOTAL RANGE: N and C Europe; N Africa (Bengtsson 1984).

FOODPLANT: *Lotus*; outside Scandinavia also *Thymus*, *Helianthemum*, *Succisa* and *Plantago* (Bengtsson 1984).

***Scythris disparella* (Tengström, 1848)**

DISTRIBUTION: One Norwegian record: HES, Elverum: Hernes 28 June 1981 (Aarvik et al. 1988). The habitat is sunny meadows and slopes with low herbaceous vegetation (Bengtsson 1984).

TOTAL RANGE: Sweden, Finland, Germany, the Netherlands, Belgium, France, Yugoslavia and Switzerland (Bengtsson 1984).

FOODPLANT: Unknown.

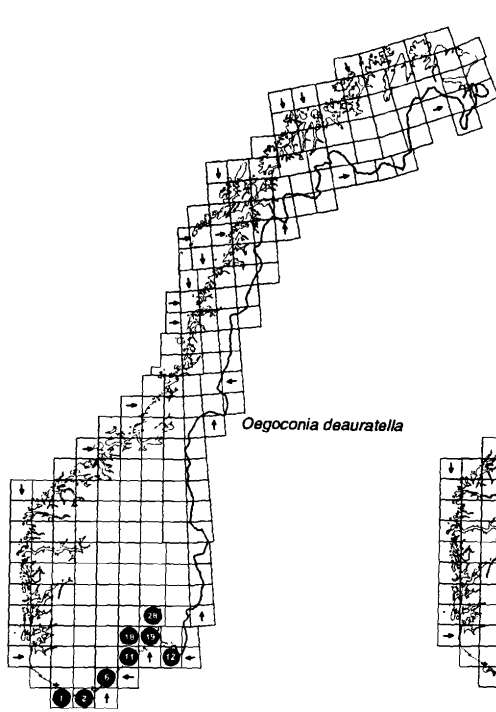
***Scythris laminella* (Denis & Schiffermüller, 1775)**

DISTRIBUTION: Two localities only: HES, Ringsaker: Helgøya 14 July 1849 L.M. Esmark leg. and Elverum: Hernes 28 June 1981 K. Larsen leg. The habitat is dry heaths with *Hieracium pilosella* (Bengtsson 1984).

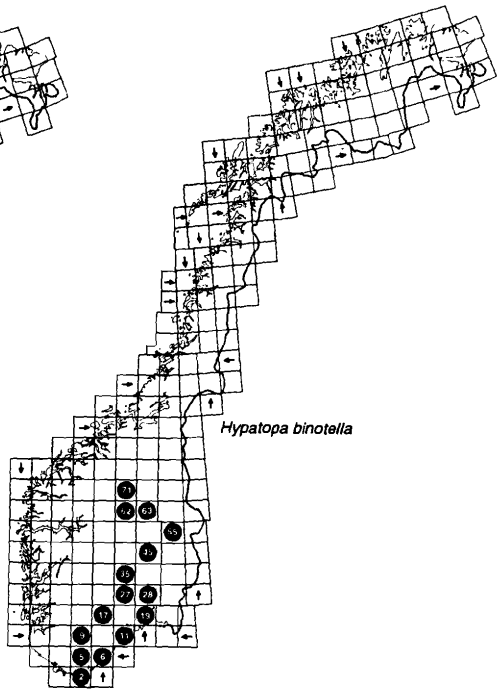
TOTAL RANGE: N, E, W and C Europe (not Great Britain) south to N Italy (Bengtsson 1984).

FOODPLANT: *Hieracium pilosella* and *Rhytidiadelphus squarrosus* (Bengtsson 1984).

NOTE: Previous records from AK (Bengtsson 1984, Opheim 1978) are based on misidentified specimens of *S. potentillella* and *S. picaepennis*.



Oegoconia deauratella



Hyatopa binotella

Blastobasidae

***Oegoconia deauratella* (Herrich-Schäffer, 1854) (= *bacescui* Popescu-Gorj & Capuse, 1965)**

DISTRIBUTION: Rather rare in the Oslofjord area and southwards to VAY, Farsund.

TOTAL RANGE: N, E and C Europe (Agassiz 1982, Piskunov 1990b).

FOODPLANT: Decaying vegetable matter (Emmet 1979).

***Hypatopa binotella* (Thunberg, 1794)**

DISTRIBUTION: Rather common in SE Norway north to ON, Vågåmo.

TOTAL RANGE: N, E and C Europe (not in Great Britain) (Piskunov 1990a).

FOODPLANT: Fallen leaves of conifers (Piskunov 1990a).

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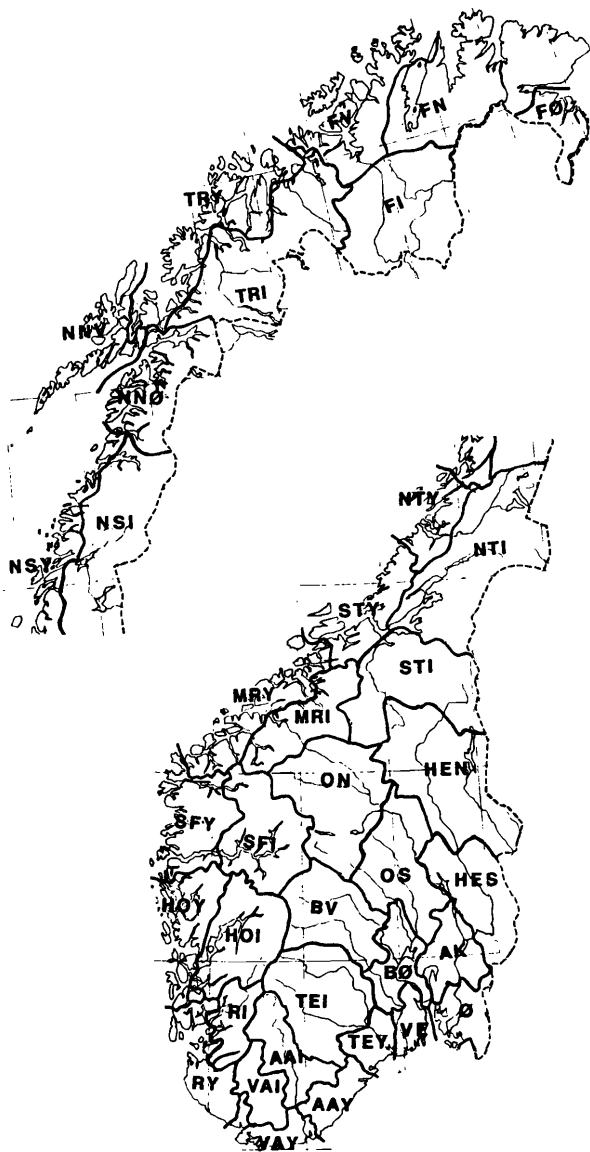
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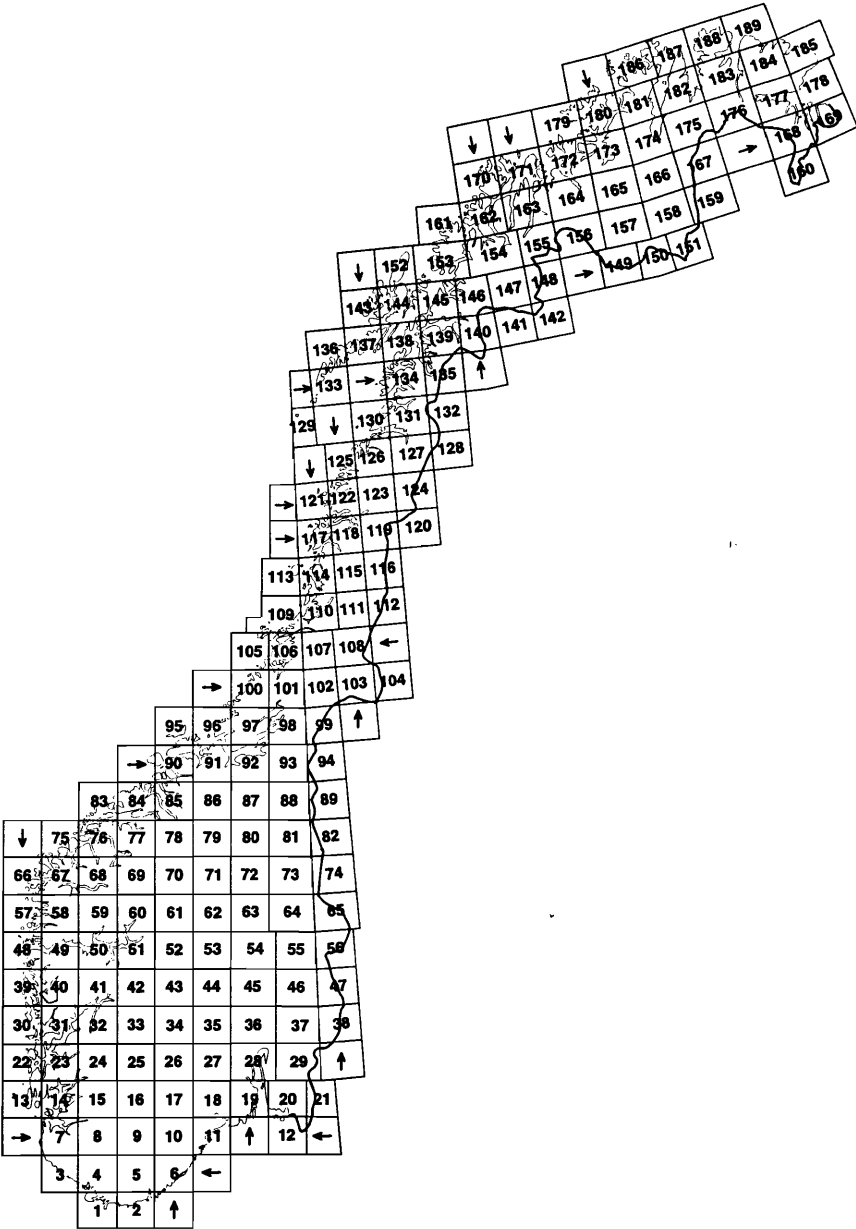
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THE FAUNISTICAL PROVINCES AND THE EIS-GRID SYSTEM OF NORWAY

List of abbreviations for the faunistical provinces (Økland 1981).



- Ø:** Østfold
- AK:** Akershus
- HES:** Hedmark, southern
- HEN:** Hedmark, northern
- OS:** Oppland, southern
- ON:** Oppland, northern
- BØ:** Buskerud, eastern
- BV:** Buskerud, western
- VE:** Vestfold
- TEY:** Telemark, outer
- TEI:** Telemark, inner
- AAV:** Aust-Agder, outer
- AAI:** Aust-Agder, inner
- VAV:** Vest-Agder, outer
- VAI:** Vest-Agder, inner
- RY:** Rogaland, outer
- RI:** Rogaland, inner
- HOY:** Hordaland, outer
- HOI:** Hordaland, inner
- SFY:** Sogn og Fjordane, outer
- SFI:** Sogn og Fjordane, inner
- MRY:** Møre og Romsdal, outer
- MRI:** Møre og Romsdal, inner
- STY:** Sør-Trøndelag, outer
- STI:** Sør-Trøndelag, inner
- NTY:** Nord-Trøndelag, outer
- NTI:** Nord-Trøndelag, inner
- NSY:** Nordland, southern, outer
- NSI:** Nordland, southern, inner
- NNØ:** Nordland, north-eastern
- NNV:** Nordland, north-western
- TRY:** Troms, outer
- TRI:** Troms, inner
- FV:** Finnmark, western
- FI:** Finnmark, inner
- FN:** Finnmark, northern
- FØ:** Finnmark, eastern



BATRACHEDRIDAE

Batrachedra
praerugosa - OS ON BØ - VE TEY TEI AAY - VAY - RY - HOY HOI - - - MRI - - - STI - - - - -
pinicola Ø AK HES - - - - - AAY AAI VAY -

MOMPHIDAE

langella Ø AK HES - OS - BØ BV - - - AAY AAI - - - RY - HOY HOI SFI MRY MRI - - - NTY - - - TRI EV - - - FØ
luculetella Ø AK HES - OS ON BØ VE - - - AAY AAI VAY - - - RI HOY HOI - - - - - - - - - - - - -
raschkiella Ø AK HES - OS ON BØ VE - - - TEI AAY AAI VAY - - - HOI - - - - - - - - - - - - -
idei Ø AK HES HEN OS ON BØ BV VE TEY TEI AAY AAI VAY - - - - - - - - - - - - -
conturbatella Ø AK HES HEN OS ON BØ BV VE TEY TEI AAY AAI VAY - - - - - - - - - - - - -
lactella AK - - - OS - BØ BV - - - TEI - - - - - - - - - - - - -
divisella AK - - - OS - BØ BV - - - - - - - - - - - - -
nodicella Ø AK HES - OS ON BØ BV VE TEY TEI AAY - VAY - - - - - - - - - - - - -
substrigella Ø AK - - - OS ON BØ VE - - - TEI AAY AAI VAY VAI - - - - - - - - - - - - -
epibiella Ø AK -

COSMOPTERIGIDAE

Pancella Ø AK HES - OS ON BØ BV VE TEY TEI - - - - - - - - - - - - -
latrella - - - - - BØ - - - - - AAY - VAY - - - - - - - - - - - - -
Limnaecia -
phragmitella Ø AK - - - - - TEY TEI - - - - - - - - - - - - -
Sorghania Ø AK - - - OS - BØ VE - - - - - - - - - - - - -
rhammiella Ø AK -
lophytella - - - - - BØ - - - - - - - - - - - - -
janiszewskae -

SCYTHRIDIDAE

Scythria Ø AK - - - ON BØ BV VE TEY TEI - - - - - - - - - - - - -
potentilla -
Cicadella Ø AK HES - OS ON BØ - - - AAY - VAY - - - HOI - - - - - - - - - - - - -
limbella Ø AK HES - OS ON BØ VE - - - AAI VAY - - - - - - - - - - - - -
inspersella - AK - - - OS - - - - - - - - - - - - -
noricella Ø AK - - - ON BØ VE - - - TEI - - - - - - - - - - - - -
empetrella -
picaepennis -
disparella -
laminella - - - - - HES - - - - - - - - - - - - -

BLASTOBASIDAE

Oegoconta Ø AK - - - - - VE TEY TEI AAY - VAY - - - - - - - - - - - - -
deauratella -
Hypatopa Ø AK HES - OS ON BØ BV VE TEY TEI AAY AAI VAY - - - - - - - - - - - - -
binotella -

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