

Notes on Hymenoptera

By

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1. Investigations of the bee-fauna in south-eastern Sweden

By means of a grant of the Swedish Natural Science Research Council I had an opportunity of doing entomological investigations in eastern Scania, Blekinge and south-eastern Småland during July and towards the 10th of August, 1958. Partly, my investigations came to include territories in Scania, where Tjeder (1954) had made investigations of the insect-fauna. In the first place I had in view the making of an inventory of the fauna of wild apids. But my collections also contain species belonging to other groups among the aculeate hymenopteras and the chrysidids.

Owing to my permanent work the investigations could only take place during the summer and consequently they only include the species which are flying during the summer. Only a few individuals of the spring-species were captured when I came to south-eastern Scania after Midsummer.

For that reason the following list of species records even the names of species, which were captured during a short journey across the district in the middle of June, 1957. Only for these species the date is noted in the list. During this journey several species were captured which were not found at renewed visits on the localities in the summer of 1958.

In spite of very bad climatic conditions no less than 37 different localities with varied biotops have been investigated. The majority of these localities were visited on different occasions. Inside these regions it has been difficult to get hold of profitable localities, as we here are dealing with a typical agricultural district.

In the agricultural district of south-east Scania viz. Österlen several flowering fields of common purple trefoil (*Trifolium pratense*) and rape (*Brassica rapus* v. *oeliferus*) were investigated, but neither humble-bees nor wild bee-species could be found. Instead I saw only honey bees (*Apis mellifica*), and those belonged to the hives which the farmers were obliged to put out near the clover fields in order to guarantee the fructification of the clover. And the bees and humble-bees did not find their way to the wild vegetation although it contained such flowers as *Vicia cracca*, *Lathyrus pratensis*, *Medicago falcata* and *sativa*, *Lotus corniculatus*, *Leontodon autumnalis*, *Tanacetum vulgare* etc. The reason for the absence of the insects in these agricultural districts is no doubt the consequence of the use of chemical insecticides in the fight against different noxious insects. Because of their use the

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important humble-bees and the wild bees are almost extirpated. To lay down the ditches and spray the roads with binding-mediums against dust are also contributive reasons for the absence of these insects. There is a striking contrast between the insect life in the agricultural districts and the more or less intact sandy grounds along the coast.

It is unfortunate that an investigation of this group of insects should not have been made before the use of insecticides had received such great proportions. It would be of interest, however, to make an investigation of the early apid-species in order to get a conception of whether they have reduced in the same way as the species flying in the summer.

In connection with the determination of the collections I received assistance from the following experts viz. P. Blüthgen (*Halictus* and solitary wasps), R. Elfving (*Prosopis*), E. Kjellander (*Sphcodes* and partly *Andrena*) and H. Wolf (the group of *Andrena minutala*). To these gentlemen I wish convey my sincerest thanks.

The list of the species is arranged in accordance with Stoeckert's "Fauna Apoideorum Germaniae" (1954).

Concerning the names of the provinces the following abbreviations are used viz. Scania (Sk), Blekinge (Bl) and Småland (Sm).

Fam. Colletidae

Subfam. Colletinae

Colletes succincta L. — Sk. Näsum ♂♂; Baskemölla ♂♂. — Bl. Torhamn: Sandhamn ♀♂♂; Kristianopel ♂♂; Sibbaboda 4 ♂. All individuals visiting *Calluna vulgaris*. — *C. daviesana* Sm. — Sk. Simrishamn ♀♀♂♂; (*Chrysanthemum leucanthemum*); Röddinge ♂; Ystad ♂; Gislöv ♂; Kivik 3 ♀♂. All visiting *Matricaria inodora*; Vitemölla, sandy ground 2 ♀ 3 ♂; Bäckaskog, the grounds belonging to the demesne of the Crown ♂ (*Tanacetum vulgare*). — Bl. Karlskrona ♂ (*Tanacetum vulgare*); Sölvesborg 24.6.1957 ♂♂ (*Chrysanthemum leucanthemum* cult.). — Sm. Bergkvara, the harbour 2 ♀♂ (*Tanacetum* and *Matricaria inodora*). — *C. fodiens* Geoff. — Sk. Simrishamn ♂ 2 ♀; Vitemölla ♀♂ (In both localities *Chrysanthemum leucanthemum* cult.); Näsum, gravel-pit ♀♂ (*Tanacetum*).

Subfam. Prosopinae

Prosopis gibba Saund. — Sk. Löderup, the dunes ♀ (*Geranium silvaticum*); Sandhammaren, the dunes ♂♂ (*G. silvaticum*). — *P. confusa* Nyl. — Sk. Bosjökloster, the old garden ♀ (*Thymus serpyllum*); Sandhammaren, the dunes ♂♂ (*G. silvaticum*). — Bl. Aspö ♀ (*Leontodon autumnalis*). — *P. brevicornis* Nyl. — Sk. Sjöbo ♀ (*Jasione*); Sandhammaren, the dunes ♂♂ (*G. silvaticum*); Ystad, sea-shore ♀ (*Jasione montana*). — Bl. Aspö ♀♀ (*Crepis tectorum*). — Sm. Bergkvara, meadow near the harbour ♀ (*Matricaria inodora*). — *P. pictipes* Nyl. — Sk. Vitemölla, sea-shore ♂ (*Th. serpyllum*). — Bl. Karlskrona ♂ (*Leontodon autumnalis*). — *P. annulata* L. — Sk. Sandhammaren, the dunes ♀♀ (*G. silvaticum*, *Jasione*). — *P. communis* Nyl. — Sk. Villands-Vånga, garden ♀ 24.6.1957 (*Chrysanthemum leucanthemum* cult.); Simrishamn, several ♀♂ (*Aegopodium podagraria*, *Potentilla reptans*, *Sedum album*); Vitemölla, several ♀♂ (*Berteroa incana*, *Gypsophila elegans*); Kivik, sandy ground ♀ (*Medicago falcata*); Åhus, sea-shore ♀♂♂ (*Hieracium umbellatum*); Kristianstad, garden 3 ♀ 3 ♂ (*Tagetes*). — Bl. Karlskrona ♀♀♂♂ (*Tanacetum*); Aspö ♀ (*Crepis*

tectorum); Olofström, market garden ♀♀ (*Anethum graveolens*, *Matricaria inodora*, *Tanacetum* cult.). — *P. angustata* Schenck. — Sk. Sjöbo, sandy ground ♀; Vitemölla, sea-shore (both captured on *Jasione*); Åhus, sea-shore ♂ (*Hieracium umbellatum*). — *P. annularis* Kirby. — Sk. Ystad, sea-shore ♀ (*Jasione*); Simrishamn ♀ (*Potentilla reptans*); Brantevik ♀♀ (*Hieracium umbellatum*); Sandhammaren, meadow among the dunes near the lighthouse ♀ (*G. silvaticum*). — *P. hyalinata* Sm. — Sk. Bosjö-kloster, the old garden 21.6.1957, 6 ♀ 2 ♂ (*Thymus serpyllum*); Simrishamn 8 ♀ 12 ♂ (*Jasione*, *Potentilla anserina*, *Sedum album*); Löderup, the dunes 2 ♀ ♂ (*Th. serpyllum*); Gärsnäs, garden 3 ♀ 2 ♂ (*Potentilla fruticosa* cult.); Vitemölla, sea-shore and gardens ♂ 10 ♀ (*Berteroa*, *Gypsophila elegans*); Brantevik ♀ (*Berteroa*); Kivik ♀ (*Medicago sativa*); Kristianstad, garden ♀ (*Potentilla fruticosa* cult.) — Bl. Sölvesborg, garden ♀ 23.6.1957 (*Chrysanthemum leucanthemum* cult.); Karlskrona, Tromtö ♀ ♂ (*Tanacetum vulgare*); Olofström, garden 3 ♀ (*Anethum graveolens*, *Matricaria inodora*). — Sm. Bergkvara, meadow near the harbour ♀ (*M. inodora*).

Fam. Andrenidae

Subfam. Andreninae

Andrena carbonaria L. — Sk. Gislöv ♀ (*Chrysanthemum leucanthemum*); Gärsnäs ♀♀ (*M. inodora*); Villands-Vånga ♂ 24.6.1957 (*Taraxacum*). — *A. haemorrhoea* Fabr. (= *albicans* auct.). — Simrishamn 4 ♀ (*Rosa rugosa*); Villands-Vånga ♂ 24.6.1957. — *A. nigroaenea* Kirby. — Sk. Hälsingborg ♀ 20.6.1957 (*Rosa rugosa*); Gärsnäs ♀ (*M. inodora*); Simrishamn ♀ (*Rosa rugosa*). — Bl. Sölvesborg ♀♀ (*Rosa rugosa*). — *A. humilis* Imh. — Sk. Baskemölla ♂, flying over *Lotus corniculatus*. — *A. bicolor* Fabr. (= *gwynana* Kirby). — Sk. Näsrum ♀; Vitemölla ♀ both individuals visiting *Campanula rotundifolia*. — *A. (Andrenella) subopaca* Nyl. — Sk. Lund, the botanical garden 3 ♀, 20.6.1957 (*Potentilla fruticosa*); Trolleån, castle-park 21.6.1957 7 ♀ (*Veronica chamaedrys*); Villands-Vånga ♀♀ 24.6.1957 (*Veronica longifolia* cult.). — *A. saundersella* Perk. — Hälsingborg ♀ 20.6.1957 (*Potentilla anserina*); Trolleån, castle-park ♂ ♂ 21.6.1957 (*Veronica chamaedrys*); Villands-Vånga ♀ ♂ 24.6.1957 (*Veronica longifolia* cult.); Listerum ♀ (*Campanula rotundifolia*); Simrishamn ♀ (*Potentilla reptans*). — *A. marginata* Fabr. — Sk. Sjöbo ♂ (*Knautia arvensis*). — *A. hattorfiana* Fabr. — Sk. Baskemölla ♀ 31.7.1957 (*Succisa pratensis*); Näsrum ♀ (*Knautia arvensis*). — *A. jacobi* Perk. Simrishamn ♀ (*Rosa rugosa* and *bicolor*). — *A. chrysopyga* Schrenck. — Sk. Baskemölla ♂ 12 ♀ 21.6.1957, only visiting *Sarothamnus scoparius*). — *A. nigriceps* Kirby. — Sk. Sjöbo 3 ♂ 4 ♀ (*Matricaria inodora*); Simrishamn ♀ (*Campanula rotundifolia*); Vitemölla 3 ♀ (*Tanacetum* sp. cult.); Brantevik ♂ (*Solidago virgaurea*). — *A. fuscipes* Kirby — Sk. Näsrum 3 ♂, Bl. Torhamn: Sandhamn ♂ ♂; Sibbaboda ♂; Kristianopol ♂, In all localities visiting *Calluna vulgaris*. — *A. denticulata* Kirby. — Sk. Näsrum ♀ (*Solidago virgaurea*). — *A. barbilabris* Kirby (= *sericea* Christ., *albicus* Kirby). — Sk. Hälsingborg ♀ 20.6.1957 (*Rosa rugosa*); Baskemölla ♀ 21.6.1957 (*Sarothamnus scoparius*). — *A. wilkella* Kirby. — Sk. Hälsingborg ♀ 2 ♂ 20.6.1957; Lund, botanical garden ♀ ♂ 20.6.1957; Saxtorp 4 ♀ 20.6.1957; Baskemölla ♀ 8 ♂ 21.6.1957 and ♂ 9.7.1958 (in all localities visiting *Trifolium pratense* and at Baskemölla *Lotus corniculatus* too); Villands-Vånga ♀♀ 24.6.1957 (*L. corniculatus*). — Bl. Sölvesborg ♂ 24.6.1957 (*Trifolium repens*). — *A. geliae* v.d. Vecht. — Sk. Saxtorp ♀ 20.6.1957; Häljarp ♀ 20.6.1957 (in both localities captured on *Vicia cracca*); Sjöbo ♂ 21.6.1957; Baskemölla 8 ♀ 5 ♂ 21.6.1957 (*L. corniculatus*).

Subfam. *Panurginae*

Panurgus banksianus Kirby. — Sk. Sjöbo ♀♀ 21.6.1957 flying and sitting at the entrance at the nest. At a later visit (19.7.1958) only 2 ♂♂ were captured on *Leontodon autumnalis*. Näsrum 24.6.1957 ♀♀♂ (Hypochaeris radiata); — Bl. Sölvesborg ♀ 23.6.1957 (Hypochaeris radiata); Mjöleryd 5 ♀ and Tring 2 ♀ 25.6.1957. In both localities the females were captured in the flower-strews of *Hypochaeris radiata* where they had taken shelter in consequence of the coldish and cloudy weather. Torhamn 26.7.1957. The locality is situated about 4 km north the church of Torhamn. It was a great occurrence of nests on each side of the road. — *P. calcaratus* Scop. — Sk. Sjöbo 4 ♂ (Leontodon autumnalis); Näsrum ♀ (*Hieracium umbellatum*). — Bl. Sölvesborg ♀♀ (*Calendula officinalis*).

Fam. *Halictidae*Subfam. *Halictinae*

Halictus quadricinctus Fabr. — Sk. Brantevik ♂♂ (*Berteroa incana*); Vitemölla ♂♂ (*Berteroa*); Näsrum ♂ (*Solidago virgaurea*). — Bl. Olofström ♂♀ (*Matricaria inodora*, *Solidago virgaurea*). — *H. rubicundus* Christ. — Sk. Villands-Vånga ♀ 24.6.1957 (*Taraxacum*); Baskemölla ♀ 31.7.1957 (*Solidago virgaurea*); Järrestad ♂ (flying). — *H. leucozonius* Schrank. — Sk. Vik ♀♀ (*Cirsium arvense*); Sjöbo ♀♂♂ (*Leontodon autumnalis*); Simrishamn ♀ (*Taraxacum*); Vitemölla ♀♂♂ (*Berteroa incana*). — *H. lativentris* Schenk. — Bl. Olofström ♂ (*M. inodora*). — *H. fasciatus* Nyl. — Sk. Sjöbo ♀ (*Leontodon autumnalis*). — *H. leucopus* Kirby. — Sk. Löderup, sea-bathing ♀ (*Matricaria inodora*); Simrishamn ♀ (*Taraxacum*); Järrestad ♀ (*Sedum spurium*); Brantevik ♀♂ and Vitemölla ♀♀ (*Berteroa incana*). — Bl. Karlskrona ♀♀♂♂ (*Hieracium umbellatum*); Aspö ♀♀ (*Crepis tectorum*); Olofström ♀♀ (*M. inodora*). — *H. punctatissimus* Schenck. — Bl. Olofström ♀ (*M. inodora*). — *H. morio* Fabr. — Sk. Järrestad ♀ (*Sedum spurium*); Listerum 4 ♀ (*Centaurea scabiosa*). — Bl. Karlskrona 7 ♀ (*Hieracium umbellatum*); Aspö ♀ (*C. tectorum*). — *H. calceatus* Scop. — Sk. Sjöbo ♂ (*Jasione*); Näsrum ♂ (*Solidago virgaurea*). — Bl. Karlskrona ♂ (*S. virgaurea*).

Sphcodes reticulatus Thms. — Sk. Kristianstad ♂♂ (*M. inodora*). — *Sph. monilicornis* Kirby. — Sk. Järrestad ♂. — *Sph. pellucidus* Sm. — Sk. Vitemölla, several ♂♂ (*Gypsophila elegans*). — Sm. Bergkvara 4 ♂ (*Matricaria inodora*). — *Sph. ephippius* L. (= *divisus* Kirby). — Sk. Saxtorp ♀♀ 11.8.1957 (*Calendula officinalis*); Vitemölla ♂ (*Gypsophila*). — *Sph. fasciatus* v. Hagens. — Sk. Brantevik ♂; Järrestad ♂ (*M. inodora*); Vitemölla 2 ♂ (*Gypsophila*). — Bl. Karlskrona ♂♂ (*M. inodora*). — *Sph. crassus* Thms. — Sk. Vitemölla ♂♂ (*Gypsophila*).

Subfam. *Dufourinae*

Dufourea halictula Nyl. — Sk. Saxtorp, sandy ground near the church ♀ 4 ♂, Häljarp ♀♂ 20.6.1957; Näsrum ♀♂ 24.6.1957; Sjöbo 21.6.1957. At my visit in Sjöbo 1957 it was a large number of individuals both males and females but in 1958 (19.7) only a few individuals were observed. — Bl. Tving ♂♂ 25.6.1957. In all localities visiting *Jasione*.

Fam. Melittidae

Subfam. Melittinae

Melitta leporina Panz. — Sk. Simrishamn ♀ (*Aster novae-belgiae*) 5 ♂; Vik 5 ♀ 9 ♂; Järrestad ♂; Sjöbo ♂; Löderup's sea-resort 3 ♂; St. Olof ♂; Listerum 4 ♂; Ystad sea-resort ♂; Vitemölla 3 ♂; Åhus sea-resort ♀; Kivik 3 ♂; Bodum ♀ 2 ♂. — Bl. Sölvesborg ♀♂. All individuals visiting *Medicago sativa*. — *M. haemorrhoidalis* Fabr. — Sk. Sjöbo ♀ (*Campanula rotundifolia*); Listerum 2 ♂ (*C. rapunculoides*); St. Olof ♀ (*C. rapunculoides*); Ystad, sea-resort ♂♂ (*C. rotundifolia*); Gislöv ♂ (*C. latifolia*); Vitemölla, sea-shore ♂ 3 ♀ (*C. rotundifolia*); Kristianstad ♀, hidden in an inflorescence of *Cichoria intybus* in consequence of raining weather. Näsrum ♀♀ (*C. rotundifolia*). — Bl. Karlshamn ♀ (*C. rotundifolia*). — Sm. Kalmar ♀ (*C. latifolia*). — *M. tricineta* Kirby (= *melanura* Nyl.). — Sk. Löderup, sea-resort ♂.

Subfam. Dasypodinae

Dasyпода hirtipes Fabr. (= *plumipes* Panz.). — Sk. Simrishamn ♀; Vik ♂; Sandhammaren, near the lighthouse 3 ♂ (*Geranium silvaticum*). — Sm. Kalmar ♂ (*Leotodon autumnalis*). — *D. mixta* Rad. (= *thomsoni* Schlet.). — Sk. Degeberga ♀♀ (*Knautia arvensis*).

Subfam. Macropidinae

Macropis labiata Fabr. — Sk. Vik ♀; St. Olof ♀; Näsrum ♀♂; Bl. — Karlskrona ♀. All individuals visiting *Lysimachia vulgaris*.

Fam. Megachilidae

Subfam. Megachilinae

Anthidium manicatum L. — Sk. Simrishamn ♀♂ (*Marrubium vulgare*); Gärsnäs ♂ (*Stachys lanata*); Listerum ♂ (*Anchusa officinalis*); Gislöv ♀♀♂♂ (*St. lanata*); Vitemölla ♀♂ (*Lavendula vera*); Kivik ♀ (*L. vera*); Kristianstad ♀ (*Mar. vulgare*). — Bl. Karlskrona ♂ (*St. palustris*). Tving ♂; Olofström ♂ 3 ♀ (*St. lanata*). — *A. punctatum* Latr. — Sk. Näsrum 24.6.1957 ♂ (*Lotus corniculatus*); Simrishamn ♂ (*Medicago sativa*); Baskemölla 3 ♂ 21.6.1957; Haväng ♂♂. In consequence of the very strong wind both males had taken shelter in the inflorescence of *Centaurea jacea*. — *A. punctatum* f. *minus* Nyl. (= *A. minus* Nyl. 1848; *A. p.* var. *bequareti* Alf. 1926; *A. p.* var. *suecicum* Alf. 1927. See Popov 1948). — Sk. Näsrum 24.6.1957 ♀ (*Lotus corniculatus*); Simrishamn ♀♀ (*Medicago sativa*); Vitemölla ♀ (*M. sativa*).

Trachusa byssina Panz. (= *serratulae* Panz.). — Sk. Simrishamn ♀ (*Medicago sativa*); Baskemölla ♂ (*Lotus corniculatus*); Eljeröd ♀ (*Anchusa officinalis*); Löderup, sea-resort ♀♀♂♂ (*M. sativa*); Sjöbo 21.6.1957 ♀♀♂♂ (*Cynoglossum vulgare*).

Stelis ornatula Klug. — Sk. Simrishamn ♀ (*Geranium pratense*).

Dioxys tridentata Nyl. — Sk. Simrishamn, sea-shore ♀; Löderup sea-resort ♀. Together with the host *Megachile argentata* visiting *Thymus serpyllum*.

Heriades truncorum L. — Sk. Sjöbo ♀ (*Campanula rotundifolia*); Simrishamn ♀♀ (*C. latifolia*); Vitemölla ♂ 3 ♀ (*Tanacetum cult.*). — Bl. Karlskrona ♀ (*Tanacetum vulgare*); Aspö ♀ (*Hieracium umbellatum*); Olofström, several ♀♀ (*Tanacetum cult.*).

Chelostoma nigricorne Nyl. — Sk. Saxtorp ♂♂ 20.6.1957 (*Chrysanthemum leucanthemum*); Trolleholm ♀ 21.6.1957; Ljungby 22.6.1957 (*Doronicum*); Villands-Vånga

♀ 3 ♂ 24.6.1957 (*Chry. leucanthemum*). — *C. florissomne* L. — Järrestad 3 ♂; Sjöbo ♀; Ystad, sea-resort; Listerum 3 ♂; Vitemölla 4 ♀ (In all localities visiting *Campanula rotundifolia*). — Bl. Karlskrona ♀♀♂♂ old house-wall.

Osmia rufa L. — Sk. Simrishamn ♀♀ 26.6.1958, several females visiting the flowers of *Rosa rugosa* and *pimpinellifolia*; Trolleholm ♀ 21.6.1957, nest in an old house-wall. Kristianstad 4 ♀ 22.6.1957 (*Echium vulgare*). — *O. fulviventris* Panz. — Sk. Simrishamn ♀ (*Anchusa officinalis*). — *O. caerulescens* L. — Sk. Vitemölla ♀ (*Marrubium vulgare*); Åhus sea-resort ♀. — *O. leucomelaena* Kirby. — Sk. Näsum ♀ 24.6.1957 (*L. corniculatus*); Röddinge ♀; Sandhammaren ♂ (*Geranium silvaticum*). — Bl. Karlskrona ♀ (*Hieracium umbellatum*).

Megachile centuncularis L. — Sk. Simrishamn 4 ♀ (*L. corniculatus*, *Lathyrus pratensis*); Järrestad 3 ♀ (*Nepeta* and *Aster* sp.); Vitemölla ♀; Kivik ♀; Åhus sea-resort ♀♂. In these three localities visiting *Medicago sativa*. — *M. versicolor* Sm. v. *hibernica* Perk. — Sk. Åhus, sea-resort 3 ♀ (*Lathyrus pratensis*). — *M. willoughbiella* Kirby. — Sk. Simrishamn 3 ♀ (*Aster chinensis*, *Campanula rotundifolia*); Sandhammaren ♀ (*Geranium silvaticum*); Geranäs ♀ (*Lavendula*); St. Olof ♀ (*Campanula rotundifolia*); Baskemölla 3 ♂ 21.6.1957 (*L. corniculatus*); Vitemölla ♀♀ (*Campanula rotundifolia*); Trolleholm 3 ♂ 21.6.1957 (*L. pratensis*); Bäckaskog ♂. — Bl. Torhamn, sandy ground near the church, ♂ 25.6.1957 (*Vicia cracca*). — *M. lagopoda* L. — Sk. Simrishamn, sea-resort several ♀♂ Borrbj: Mälarhusen ♀♂; Vitemölla ♀♂; Kristianstad ♀. All localities visiting *Centaura scabiosa*. Hälsingborg ♂ 20.6.1957 (*Cirsium lanceolatum*). — *M. circumcincta* Kirby. — Sk. Häljarp ♀ 20.6.1957 (*Vicia cracca*); Trolleholm ♀ 21.6.1957 (*Lathyrus pratensis*). — *M. circumcincta* K. *fennica* Niemelä. — Baskemölla ♀♀ 21.6.1957 (*L. pratensis*, *Lotus corniculatus*). — Bl. Torhamn, sandy ground near the church ♀♂ 25.6.1957 (*Vicia cracca*). — *M. analis* Nyl. v. *künnemanni* Alf. — Sk. Baskemölla 3 ♀ 21.6.1957 (*Lotus corniculatus*); Vitemölla ♀ (*Vicia cracca*); Simrishamn 3 ♀ (*Lavendula*). — *M. argentata* Fabr. Concerning the localities of this species see Erlandsson (1960).

Coelioxys quadridentata L. — Sk. Simrishamn ♀ (*Chrysanthemum leucanthemum*); Näsum ♀ (*Lotus corniculatus*). — Bl. Torhamn, sandy ground near the church, ♀ 25.6.1957 (*Vicia cracca*). — *C. eleogata* Lep. — Sk. Gislöv ♂, flying near the ground. — *C. inermis* Kirby (= *acuminata* Nyl.) — Sk. Trolleholm ♂♂ 22.6.1957; Saxtorp, sandy ground near the church ♀ 21.6.1957 (*Vicia cracca*); Simrishamn ♀♀; Vik ♀; Löderup, sea-resort ♀. In all localities visiting *Medicago sativa*. Järrestad ♀ (*Aster novae-belgiae*). — *C. mandibularis* Nyl. — Sk. Saxtorp ♀ 21.6.1957 in the same locality as *C. inermis* (*Vicia cracca*); Kristianstad ♀ 22.6.1957 (*L. corniculatus*); Löderup, sea-resort ♀♂ (*Thymus serpyllum*), in the same locality as the host *Megachile argentata*. Sandhammaren, several ♀♂, meadow among the dunes near the lighthouse, where the males and females were flying together with *Megachile argentata* visiting the flowers of *Geranium silvaticum*. Baskemölla (*L. corniculatus*); Vitemölla ♂ (*Thymus serpyllum*); — Bl. Sölvesborg ♀ 24.6.1957 (*L. corniculatus*); Torhamn, sandy ground near the church ♀ 25.6.1957 (*Vicia cracca*).

Fam. Apidae

Subfam. Anthophorinae

Nomada marshamella Kirby. — Sk. Simrishamn ♀ (*Taracacum*). — *N. rufipes* Fabr. — Sk. Näsum ♀ (*Calluna vulgaris*); St. Olof ♀ (*Jasione*). — *N. flavopicta* Kirby. — Sk. Vik, several males and females visiting the inflorescence of *Cir-*

sium palustre. Simrishamn (C. palustre); St. Olof ♀ (C. palustris). — Bl. Tving ♂ (Jasione). — Sm. Emmaboda ♀ and Hagby ♂ (Jasione).

Epeolus Latr. Only a few specimens were captured. They are being determined in connection with an investigation of all Swedish species.

Eucera longicornis L. — Sk. Baskemölla, several ♀♂ 21.6.1957 and Simrishamn 2 ♀ 5 ♂ (Lathyrus pratensis).

Anthophora quadrimaculata Panz. (= *vulpina* Fabr.) — Sk. Simrishamn 3 ♂; Järrestad 2 ♂; Gärsnäs ♂; Gislöv ♂ 3 ♀; Borrby ♀♂; St. Olof ♀; Vitskövle ♀; Kristianstad ♀♂ (all *Nepeta*); Vitemölla ♀ 3 ♂ (*Lavendula*). — Bl. Olofström ♀ (*Nepeta*). — *A. fucata* Panz. — Sk. Simrishamn ♂ and Gislöv ♀ (*Anchusa officinalis*). — *A. fucata* Panz. v. *norvegica* Nyl. — Sk. Järrestad ♀ (*A. officinalis*). — Bl. Olofström ♀ (*Nepeta*).

Bombus terrestris L. — Besides this species Linné' (1761) has described the allied species *B. lucorum*. These two species has partly been regarded as different species partly *B. lucorum* as a subspecies or a race of *B. terrestris*. For that reason it is necessary to make a penetratingly investigation of the complex of *B. terrestris* coll. in Sweden. Therefor I will not give some localities of the species. — *B. lapidarius* L. — Sk. Simrishamn 2 ♀ 3 ♂ (*Lathyrus pratensis* and *maritima*, *Trifolium pratense*, hybridum, *repens*, *Anchusa officinalis*, *Nepeta*, *Lavendula*); Sjöbo ♀♀; Sandhammaren 2 ♀; Vik 3 ♀; Haväng ♀; Röddinge ♀; Ljungby ♀; Kristianstad ♂; In all localities visiting *Anchusa officinalis*. Åhus, sea-resort 2 ♂ 2 ♀ (*Medicago sativa*); Bodum 2 ♀; Borrby: Mälarhusen ♂; Kivik 2 ♀ (all *Centaurea scabiosa*); — Bl. Sölvesborg ♀ (*Rosa rugosa*); Aspö ♀ (*Matricaria inodora*); Torhamn: Sandhamn 3 ♀, Sibbaboda ♀, Kristianopel ♂ (all *Calluna vulgaris*). — Emmaboda ♀♀ (*Aconitum napellus*); Kalmar ♂ (*Tagetes*). — *B. pratorum* L. — Sk. Sjöbo ♀♂ and Sandhammaren ♂ (*Anchusa officinalis*); Villands-Vånga ♀ (*Rubus idaeus*); Kristianstad 2 ♂ and Bäckaskog ♀ (*Tagetes*); Åhus, sea-resort ♂ (*Medicago sativa*). — Bl. Sölvesborg 2 ♀ 23.6.1957 (*Ribes grossularis*). — Sm. Hjorted 2 ♀ 24.6.1957 (*Vicia silvatica*); Mjöleryd 25.6.1957 ♀ (*Rubus idaeus*). — *B. jonellus* Kirby. — Sk. Vitemölla ♀♂ (*Thymus serpyllum*); Simrishamn, sea-resort ♂ (*Centaurea scabiosa*); Åhus, sea-resort ♂ (*Medicago falcata*). — Bl. Torhamn, sandy ground near the church ♀ 25.6.1957 (*Vicia cracca*). — *B. hypnorum* L. — Sk. Hälsingborg ♀ 20.6.1957 (*Rosa rugosa*); Listerum ♀ (*Lathyrus heterophyllus*); Ystad, sea-resort ♂ (*Anchusa officinalis*); Vitemölla ♀ (*Lathyrus pratensis*); Kivik ♀ (*Lycium barbatum*). — *B. soroensis* Fabr. — Sk. Vitemölla, sea-resort 3 ♀ (*Campanula rotundifolia*); St. Olof 2 ♀ and Kristianstad ♀ (*C. latifolia*). — Bl. Sibbaboda 2 ♀ (*Calluna vulgaris*). — *B. hortorum* L. — Sk. Haväng 2 ♀; Eljeröd ♂; Röddinge ♀; Sjöbo ♀; Simrishamn ♀; Kivik ♀; Kristianstad ♀, all *Anchusa officinalis*; — Bl. Torhamn ♀ 25.5.1957 (*Anchusa officinalis*). — *B. hortorum* L. v. *nigrescens* Schmdt. — Sk. Bäckaskog ♀ (*Aconitum napellus*). — *B. subterraneus* L. — Sk. Simrishamn ♀ (*Lathyrus maritimus*), ♂ (*Centaurea scabiosa*); Röddinge ♂ (*Anchusa officinalis*); Vitemölla 2 ♂ (*Medicago falcata*). — *B. distinguendus* Mor. Simrishamn 3 ♀ (*Lathyrus maritimus*); Vik ♀; Järrestad 2 ♀; Vitemölla ♂ (*Anchusa officinalis*). — *Bombus agrorum* Fabr. ssp. *barcai* Vogt. — Sk. Baskemölla ♀ 21.6.1957; Trollenäs ♀ 21.6.1957; Oppmanna-Söderby ♀ 24.6.1957; Vik ♀; Eljeröd 3 ♀; Röddinge ♀; Sjöbo 2 ♀; Sandhammaren ♀; St. Olof 2 ♀; Kivik ♀♀; Löderup ♀; Åhus 3 ♀; Vitemölla 3 ♀; Kristianstad 4 ♀; Bäckaskog 3 ♂. — Bl. Torhamn ♀ 3 ♀ 25.6.1957; Sölvesborg ♀ 23.6.1957; Karlskrona ♀. — Sm. Emmaboda ♀; Kalmar ♀. The following flowers have been visited: *Anchusa officinalis*, *Dahlia variabilis*, *Nepeta* sp., *Centaurea scabiosa*, *Medicago falcata* and *sativa*, *Lathyrus pratensis* and *maritima*, *Tagetes* sp., *Telesia speciosa*, *Trifolium pratense* and *repens*, *Vicia cracca*. —

B. muscorum Fabr. — Sk. Saxtorp ♀ 20.6.1957 (*Lathyrus pratensis*); Borrby: Mälarhusen 3 ♀ (*Centaurea scabiosa*); Vitemölla 2 ♀ (*Anchusa officinalis*); Löderup 3 ♀ (*Symphytum officinale*); Åhus sea-resort 4 ♀; Kristianstad 2 ♂ 3 ♀; Bäckaskog ♀, all *Medicago sativa*. — *B. silvarum* L. — Sk. Näsum ♀ 24.6.1957 (*Lotus corniculatus*); Kivik 2 ♀ (*Nepeta*); Haväng ♀ (*Anchusa officinalis*); Listerum 3 ♀ (*Centaurea scabiosa*); Vitemölla 3 ♀ (*Lathyrus pratensis*, *Vicia cracca*); Bäckaskog 2 ♀ (*Dahlia variabilis*). — Bl. Sölvesborg ♀ 23.6.1957 (*Rosa rugosa*). — *Bombus silvarum* L. var. *nigrescens* Pérez. — Sk. Baskemölla 2 ♀ 21.6.1957; Saxtorp ♀ 20.6.1957; Hälsingborg ♀ 20.6.1957; Löderup, sea-resort ♀; Sandhammaren ♀; Borrby: Mälarhusen ♀; Listerum ♀; Kristianstad ♀. — Bl. Sölvesborg 3 ♀ 23.6.1957. This variety has been captured on the following flowers: *Anchusa officinalis*, *Anthyllis vulneraria*, *Centaurea scabiosa*, *Sarothamnus scoparius*, *Symphytum officinale*, *Trifolium pratense* and *repens*. — *B. equestris* Fabr. — Sk. Saxtorp, sandy ground near the church, ♀ 20.6.1957 (*Vicia cracca*); Listerum ♀ (*Centaurea scabiosa*). — *B. ruderarius* Müll. — Sk. Simrishamn ♂ (*Vicia cracca*); Vik ♀ (*Anchusa officinalis*); Bäckaskog ♀ (*Nepeta*). — Bl. Sölvesborg 23.6.1957 ♀ (*Lathyrus pratensis*).

Psithyrus rupestris Fabr. — Simrishamn ♂ 5 ♀ (*Lathyrus maritimus*, *Centaurea scabiosa*); Löderup ♀ (*Symphytum officinale*); Borrby: Mälarhusen 3 ♀ (*Centaurea scabiosa*); Kivik ♂ (*Lavendula*). — *Ps. barbutellus* Kirby. — Simrishamn ♀ 2 ♂ (*Lathyrus maritimus*); Baskemölla ♀ 21.6.1957 (*Lathyrus pratensis*, *Anthyllis vulneraria*); Sjöbo ♂; Kivik 3 ♂; Kristianstad ♂; Bl. Karlshamn 2 ♂ and Karlskrona ♂ (*Centaurea scabiosa*).

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