

Bumble bees from Austria (Hymenoptera, Apidae)

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During the XI International Congress of Entomology in Vienna 1960 and the alpine post-excursion, the author caught about 450 bumble bees, mainly *Bombus* spp. and a few *Psithyrus* spp. The main purpose of collecting the insects was to prepare a comparative study of alpine and Scandinavian forms of certain species. However, general information as to the species occurring in Austria is commonly wanted and may justify the present survey of all specimens recorded. Unfortunately, by joining common arrangements it was neither possible to select typical bumble bee biotopes nor to spend the time wanted in some fields of particular interest. The collected species may rather be due to chance than being representative of the fauna of the respective localities. Five specimens, kindly given me by another congress member, Ph. Coiffait, are included. With an exception of *B. gerstäckeri* Mor., *B. pomorum* (Panz.), *B. confusus* Schenck., *B. m. mendax* Gerst., and *Ps. maxilosus* (Klug.) the collected species also occur in Scandinavia.

Identification has been made with the aid of the Pittioni (1939) keys. The sketch map. fig. 1 indicates the localities visited.

B. gerstäckeri Mor. Only a single worker was recorded of this interesting species which was wanted for comparison with the closely-related *B. consobrinus* Dahlb. (Løken 1961). The individual visited *Aconitum lycoctonum* L. as well as *A. variegatum* L.

N. Österreich: Near Lunz, between Mittersee and Lunzersee, 1 ♂ 21. VIII.

B. h. hortorum (L.)

Steiermark: Hartberg, 1 ♀ 2. IX.; Präbichl, 1 ♀ 26. VIII.; Kärnten: Koschuta, 1 ♀ 31. VIII.; Burgenland, Geschriebenstein, 1 ♀ 3. IX.

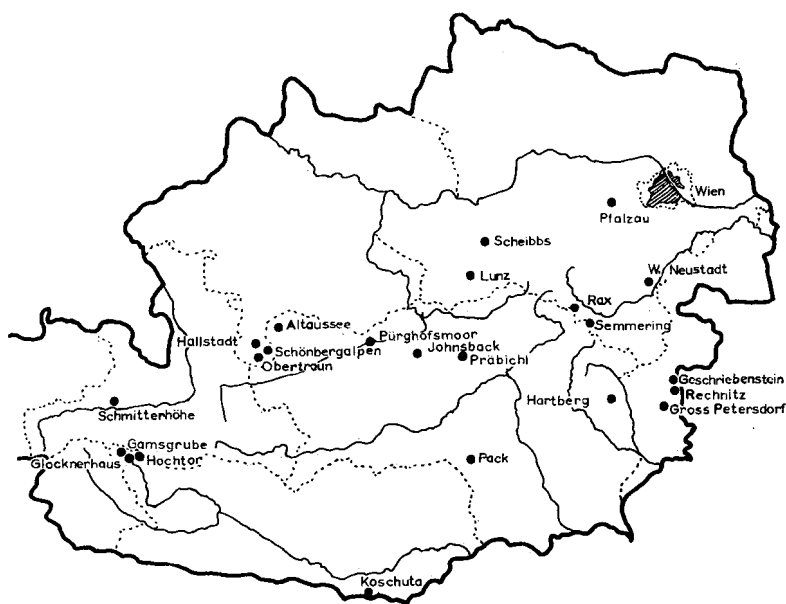


Fig. 1. Localities visited in Austria.

B. pomorum (Panz.). Two specimens which both differ from the typical colour pattern in the following characters: 1) indication of yellow pronotum, disc of third tergite mainly black; 2) pronotum, scutellum, pleurae with a mixture of yellow and black hairs; first, tergite yellow, the remainder, ferrugineous.

Burgenland: Gross Petersdorf, 2 ♀♀ 2. IX.

B. agrorum (Fabr.). The specimens are on an average more pale than the northern forms and the southern *pascuorum* form. Tripuscoide individuals, which commonly occurred together with forms not tripuscoide, were collected as far south as in Koschuta.

O. Österreich: Hallstadt, 1 ♀ 28. VIII.; Obertraun, 1 ♀ 28. VIII.; Schönbergalps, 3 ♀♀ 1 ♂ 27. VIII.; N. Österreich: Near Lunz at Lunzersee 6 ♀♀ and at Mittersee 2 ♀♀ 2 ♂♂ 21. VIII.; Pfalza, 18 ♀♀ 2 ♂♂ 23. VIII.; Scheibbs, 1 ♀ 20. VIII.; Semmering, 4 ♂♂ 26. VIII.; Steiermark: Altaussee, 1 ♀ 1 ♂ 27. VIII.; Johnsbach, 5 ♀♀ 26. VIII.; Pack 11 ♀♀ 1. X.; Präbichl, 5 ♀♀ 3 ♂♂ 26. VIII.; Pürghofsmoor, 10 ♀♀ 27. VIII.; Kärnten: Koschuta, 24 ♀♀ 1 ♂ 31. VIII.; Burgenland: Geschriebenstein, 11 ♀♀ 9 ♂♂ 3. IX.; Gross Petersdorf, 5 ♂♂ 2. IX.; Rechnitz, 5 ♀♀ 1 ♂ 3. IX.

B. humilis Ill. Pale greyish- yellow specimens with a variable amount of black hairs on the disc of thorax, occurred together

with typical melanotes. A single worker, collected in Pürghofsmoor, has a pale yellow-brown appearance.

N. Østerreich: Pfalzau, 2 ♀♀ 23. VIII.; Steiermark: Altaussee, 2 ♀♀ 27. VIII.; Hartberg, 9 ♀♀ 4 ♂♂ 2. IX.; Pürghofsmoor, 3 ♀♀ 27. VIII.; Kärnten: Koschuta, 1 ♀ 31. VIII.

B. sylvarum (L.). No melanotes were observed.

Steiermark: Altaussee, 1 ♀ 27. VIII.; Hartberg, 4 ♀♀ 7 ♂♂ 2. IX.; Burgenland: Gross Petersdorf, 1 ♀ 2. IX.; Rechnitz, 1 ♀ 3. IX. Kärnten: Gross Petersdorf, 1 ♀ 2. IX.; Rechnitz, 1 ♀ 3. IX.

B. soroensis (Fabr.). The specimens have the colour pattern typical of the central European subspecies *proteus* Gerst. A few specimens have an admixture of yellow hairs in the black thoracic collar; in a worker from Koschuta, they compose a narrow yellow band. An exception is a worker, also from Koschuta, with a colour pattern like that of *B. s. soroensis* which is all black with a white tail.

O. Østerreich: Schönbergalps, 1 ♀ 3 ♂♂ 27. VIII.; N. Østerreich: Near Lunz at Lunzersee, 1 ♀ and at Mittersee 1 ♀ 21. VIII.; Raxalps, 1 ♀ 20. VIII. (Coiffait leg.); Steiermark: Präbichl, 2 ♀♀ 26. VIII.; Pürghofsmoor, 1 ♀ VIII.; Kärnten: Hochtör, 1 ♀ 29. VIII.; Koschuta, 12 ♀♀ 7 ♂♂ 31. VIII.

B. t. terrestris (L.). In one of the specimens the yellow thoracic collar is rather narrow.

Burgenland: Rechnitz, 4 ♀♀ 3. IX.

B. l. lucorum (L.). Slight variations as usual in the typical form.

O. Østerreich: Obertraun, 1 ♂ 28. VIII.; Schönbergalps, 1 ♂ 27. VIII.; N. Østerreich: Near Lunz at Obsersee, 1 ♀ 20. VIII.; Pfalzau, 4 ♀♀ 1 ♂ 23. VIII.; Raxalps, 1 ♀ 20. VIII. (Coiffait leg.); Semmering, 3 ♂♂ 26. VIII.; Steiermark: Hartberg, 1 ♀ 1 ♂ 2. IX.; Johnsbach, 1 ♀ 4 ♂♂ 26. VIII.; Pack, 1 ♀ 1. IX.; Präbichl, 6 ♀♀ 2 ♂♂ 26. VIII.; Pürghofsmoor, 4 ♀♀ 7. VIII.; Kärnten: Koschuta, 11 ♀♀ 7 ♂♂ 31. VIII.; Burgenland: Gross Petersdorf, 1 ♂ 2. IX.; Geschriebenstein, 3 ♀♀ (inclusive 1 ♀ Coiffait leg.) 3. IX.

B. alpinus (L.). A specimen has a few yellow hairs mixed with the black hairs of pronotum.

Kärnten: Gamsgrube, 2 ♀♀ 29. VIII.

B. l. lapidarius (L.)

N. Østerreich: Pfalzau, 1 ♀ 23. VIII.; Semmering, 1 ♀ 26. VIII.; W. Neustadt, 1 ♀ (newly emerged) 23. VIII.; Salzburg: Schmitterhöhe, 1 ♀ 28. VIII.; Steiermark: Hartberg, 4 ♀♀ 6 ♂♂ 2. IX.; Pürghofsmoor, 5 ♀♀ 27. VIII.; Burgenland: Geschriebenstein, 2 ♀♀ 1 ♂ (inclusive 1 ♀ Coiffait leg.) 3. IX.; Gross Petersdorf, 17 ♀♀ 10 ♂♂ 2. IX.; Rechnitz 1 ♀ 3. IX.

B. jonellus (Kirb.).

O. Østerreich: Schönbergalps, 1 ♂ 27. VIII.; Kärnten: Glocknerhaus, 1 ♀ 30. VIII.; Koschuta, 1 ♂ 31. VIII.

B. pratorum (L.). Slight variations as usual in the typical form.

O. Österreich: Schönbergalps, 2 ♀♀ 2 ♂♂ 27. VIII.; N. Österreich: Near Lunz at Obersee, 9 ♀♀ 7 ♂♂ 21. VIII.; Kärnten: Koschuta, 1 ♀ 5 ♂♂ 31. VIII.

B. hypnorum (L.).

N. Österreich: Semmering, 1 ♀ 26. VIII.; Kärnten: Koschuta, 1 ♂ 31. VIII.

B. lapponicus (Fabr.). Only two old, worn specimens, which both have the appearance typical of ssp. *hypsophilus* Skor., known to occur in the Alps.

Kärnten: Gamsgrube, 1 ♀ 29. VIII.; Koschuta, 1 ♀ 31. VIII.

B. m. mastrucatus Gerst. Females with an indication of yellow thoracic collar may occur more commonly in the Alps than in Scandinavia, yet the typical dark form is abundant. The males have an appearance similar to the Scandinavian specimens; the yellow pattern is perhaps somewhat more pronounced.

Salzburg: Schmitterhöhe, 3 ♀♀ 28. VIII.; O. Österreich: Hallstadt, 2 ♀♀ 28. VIII.; Steiermark: Johnsbach, 2 ♀♀ 26. VIII.; Präbichl, 3 ♀♀ 26. VIII.; Pürghofsmoor, 2 ♀♀ 27. VIII.; Kärnten: Glocknerhaus, 17 ♀♀ 30. VIII.; south of Hochtor tunnel 2 ♀♀ 29. VIII.; Koschuta, 52 ♀♀ 6 ♂♂ 31. VIII.

B. confusus Schenck.

Steiermark: Hartberg, 6 ♂♂ 2. IX.; Pürghofsmoor, 4 ♀♀ 27. VIII.; Burgenland: Gross Petersdorf, 1 ♀ 2. IX.

B. m. mendax Gerst.

Kärnten: Gamsgrube, 9 ♀♀ 1 ♂ 29. VIII.; Glocknerhaus, 1 ♀ 30. VIII.

Ps. bohemicus (Seidl.).

N. Österreich: Near Lunz at Obersee, 2 ♂♂ 20. and 21. VIII.; Semmering, 1 ♂ 26. VIII.; Steiermark: Johnsbach, 1 ♂ 26. VIII.

Ps. rupestris (Fabr.).

Burgenland: Gross Petersdorf, 1 ♂ 2. IX.

Ps. campestris (Panz.).

N. Österreich: Semmering, 1 ♂ 26. VIII.; Steiermark: Johnsbach, 1 ♂ 26. VIII.; Präbichl, 1 ♂ 26. VIII.; Burgenland: Geschriebenstein, 2 ♂♂ 3. IX. (inclusive 1 ♂ Coiffait leg.); Gross Petersdorf, 1 ♂ 2. IX.

Ps. maxillosus (Klug.).

N. Österreich: Pfalzau, 1 ♀ 23. VIII.; Burgenland: Gross Petersdorf, 2 ♂♂ 2. IX.

Ps. sylvestris Lep.

Kärnten: Koschuta, 1 ♂ 31. VIII.; Burgenland: Geschriebenstein, 1 ♂ 3. IX.

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References

- LØKEN, A. 1961: *Bombus consobrinus* Dahlb., an oligolectic Bumble bee (Hymenoptera, Apidae) — XI Int. Kongress Ent. Wien 1960 I, Wien.
- PITTIONI, B. 1939: Die Hummeln und Schmarotzerhummeln der Balkan-Halbinsel, II. Spez. Teil, — Mitt. Kgl. naturw. Inst. in Sofia, XII, Sofia.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

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