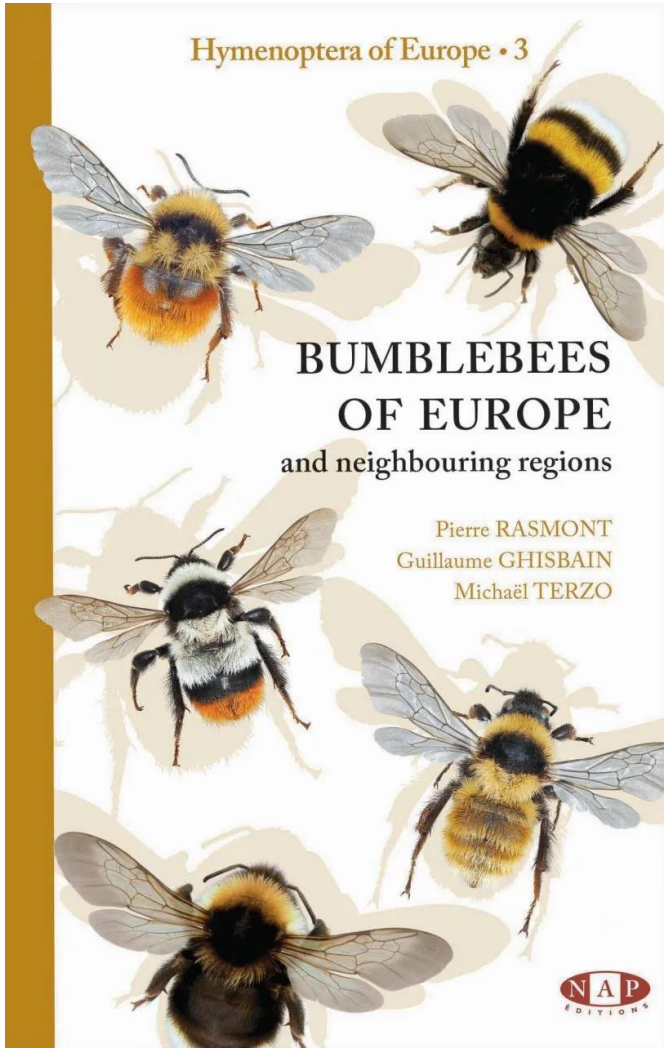
BUMBLEBEES OF EUROPE

and neighbouring regions



This guide is the third volume of a series on Hymenoptera of Europe. A key allows the identification of the 14 subgenera of bumblebees present in this region. Then, for the first time, there are detailed identification keys for the 79 species of bumblebees found in Europe and neighbouring countries.

Each species is presented with all its geographic variations as well as with notes on its ecology, behaviour, flower preferences and conservation status.

Original photos are included for each of the West Palaearctic species. Some extremely rare bumblebees are pictured for the very first time. The book also features many colour plates to help readers recognise over 240 forms and subspecies.

ABOUT THE BOOK

Detailed identification keys to all bumblebee species of the region

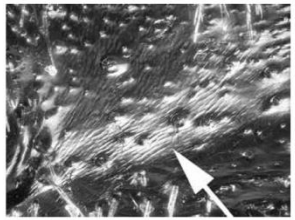


Fig. 208. - *Bombus lapponicus*. Female. Right mandible, enlargement of the basal carina (arrow).

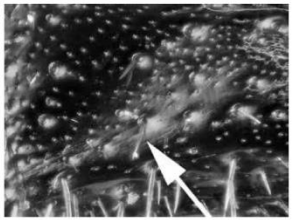


Fig. 209. - *Bombus monticola*. Female. Right mandible, enlargement of the basal carina (arrow).

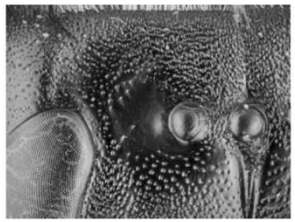


Fig. 210. - *Bombus lapponicus*. Female. Right ocellar field.

Fig. 211. - *B. monticola*. Female. Right ocellar field.

10. - Like *Bombus jonellus* except T3-5 reddish-orange; taxon endemic to the Hebrides ..... *Bombus jonellus hebridensis*
- No clearly distinct scutellar band **11**

11. - **Females.** Surface of metatibiae clearly areolate, matt appearance. **Colouration common to both sexes.** Very constant; collar wide; T1 black or yellow; T2-3 lemon yellow; T4 black; T5-6 reddish-orange varyingly interspersed with black, sometimes entirely black; rest of coat black. In the males, face and vertex yellow interspersed with a few black hairs; wide collar and scutellar band yellow, often no black hair on the thorax; T1-3 yellow; T4 black varyingly interspersed with yellow; T5 mostly black; T6-7 red; coat of ventral face light-coloured except femora which are black. South-eastern Europe, Anatolia, Caucasus, northern Iran ..... *Bombus haematurus*
- **Females.** Surface of metatibiae not or weakly areolate, smooth, glossy appearance. **Colouration common to both sexes.** Very variable, T2 and T3 never entirely lemon yellow, T3 always black; posterior margin of T4, T5 and T6

Comprehensive notes about their taxonomy, biogeography and distribution

For Novaya Zemlya, Potapov *et al.* (2019) provide the following information on the flowers foraged by *Bombus glacialis*: *Astragalus umbellatus* (2 workers), *Polemonium boreale* (1 male), *Salix arctica* (2 queens) and *Saxifraga oppositifolia* (1 queen).

***Bombus (Pyrobombus) haematurus* Kriechbaumer, 1870**
Sanguine Bumblebee (Eng.); Bourdon sanguin (Fr.)

Subspecies of *Bombus haematurus* (Fig. R213-p. 564, R214-p. 564, pl. 43.B-p. 516)
This species does not present any subspecific differentiation.

Similar species and subspecies. The specific status and identification of *haematurus* do not present any problems (Cameron *et al.* 2007). At the very most, live specimens could potentially be confused with *pratorum*, but simple examination of colouration suffices for decisive identification.

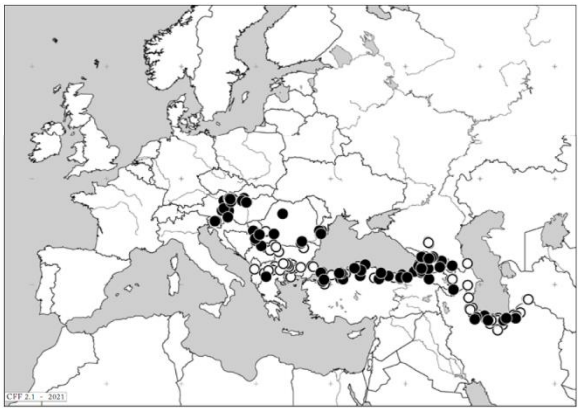


Fig. 223. - Distribution of the Sanguine bumblebee (*Bombus haematurus*) in Europe and adjacent regions. ○: before 1990 (301 specimens); ●: since 1990 (336 specimens).

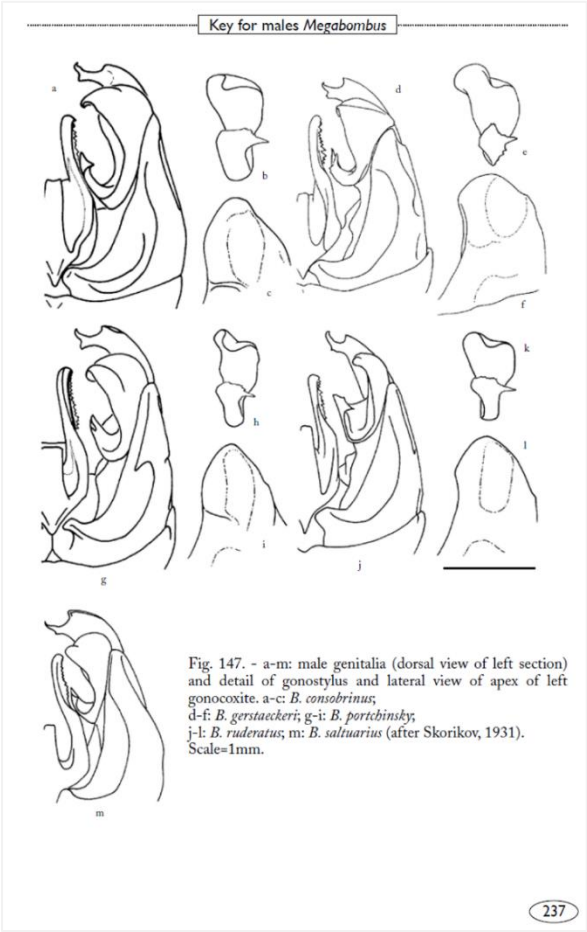
Distribution. The distribution of *Bombus haematurus* is very curious, and is largely associated with damp forest environments of south-eastern Europe and the Near East (Fig. 223). It reaches the extreme south-east of the west Palaearctic region at Kopet-dag, at the border between Iran and Turkestan (Ponomareva, 1960). In a few decades, however, *Bombus haematurus* extended its distribution enormously towards the west. Whilst, to-

Stunning pictures of all bumblebees of the West-Palearctic

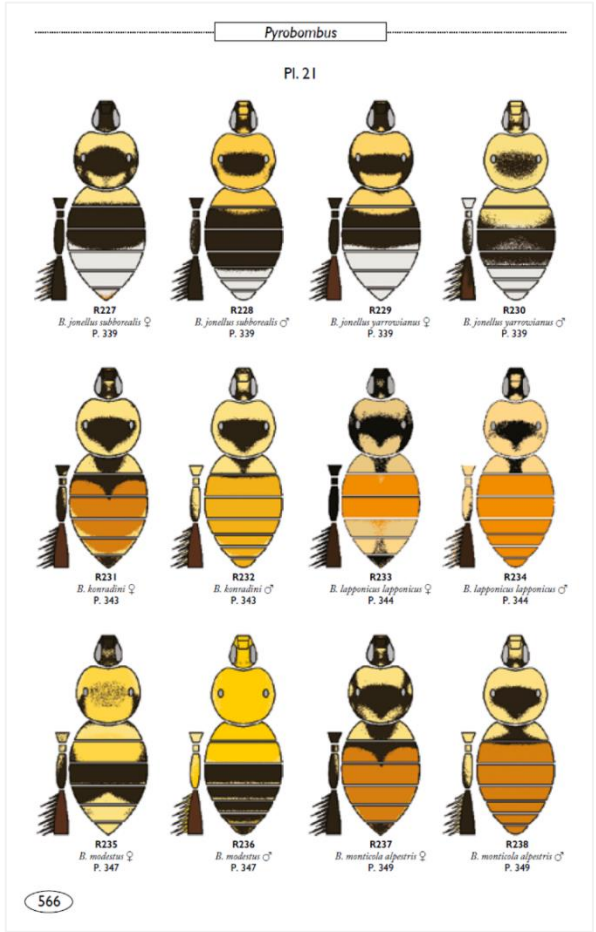
Plate 9. A - *Bombus magnus* queen, France, Ariège (photo P. Rasmont). B - *Bombus patagiatus* queen, Russia, Yakutsk (photo P. Rasmont). C - *Bombus renardi* female, France, Corsica (photo D. Genoud).

ABOUT THE BOOK

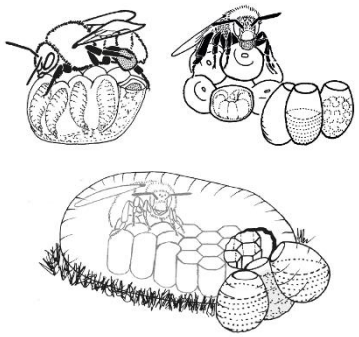
Precise morphological drawings to facilitate identification

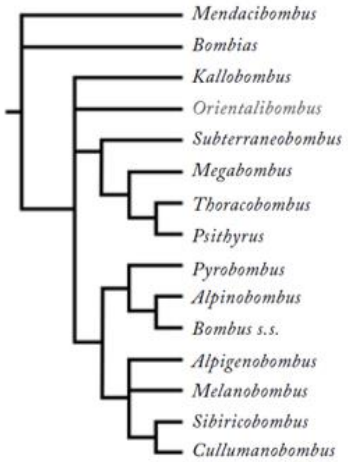


Drawings of color patterns for more than 240 subspecies and forms



And many other details about their ethology, systematics, conservation…





ABOUT THE AUTHORS

Prof. Pierre Rasmont

Pierre Rasmont holds a PhD in Agronomic Sciences from the Faculty of Agronomic Sciences of Gembloux (now University of Liège, Belgium). He has been studying the systematics and ecology of bumblebees since 1978.
He is professor at the University of Mons (Belgium) since 1989.

Dr. Guillaume Ghisbain

Guillaume Ghisbain holds a PhD in Biological Sciences from the University of Mons (Belgium). His work focuses on the conservation of bumblebees and on the ecology of other wild bees in Europe, North America and Asia.
He is presently conducting research at the Smithsonian Tropical Research Institute in Panama.

Dr. Michaël Terzo

Michaël Terzo holds a PhD in Biological Sciences from the University of Mons (Belgium). His thesis was devoted to the biogeography of the carpenter bees. Since then, he has specialized in entomological drawing.
He is a professor at the Haute Ecole de la ville de Bruxelles since 2006 and a lecturer at the University of Mons.