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THE BUMBLEBEES OF THE ITALIAN WESTERN ALPS

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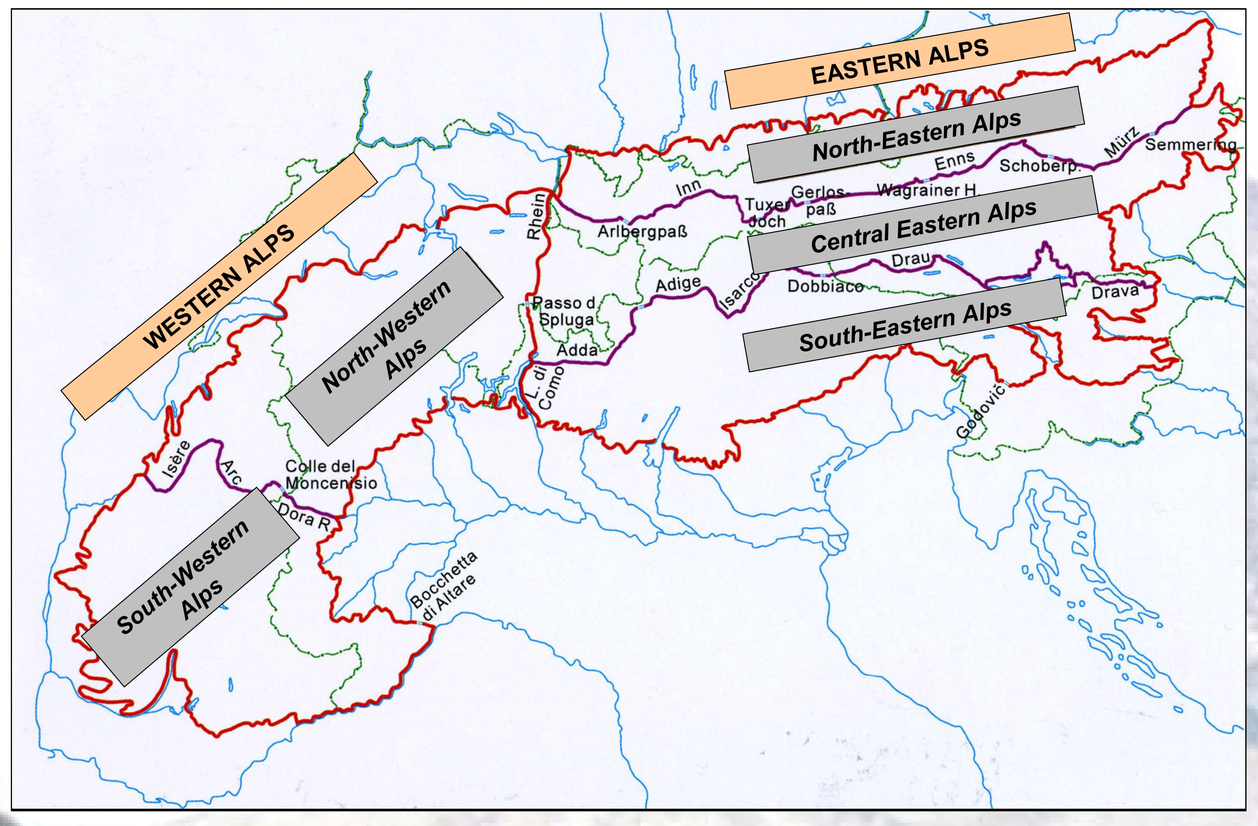
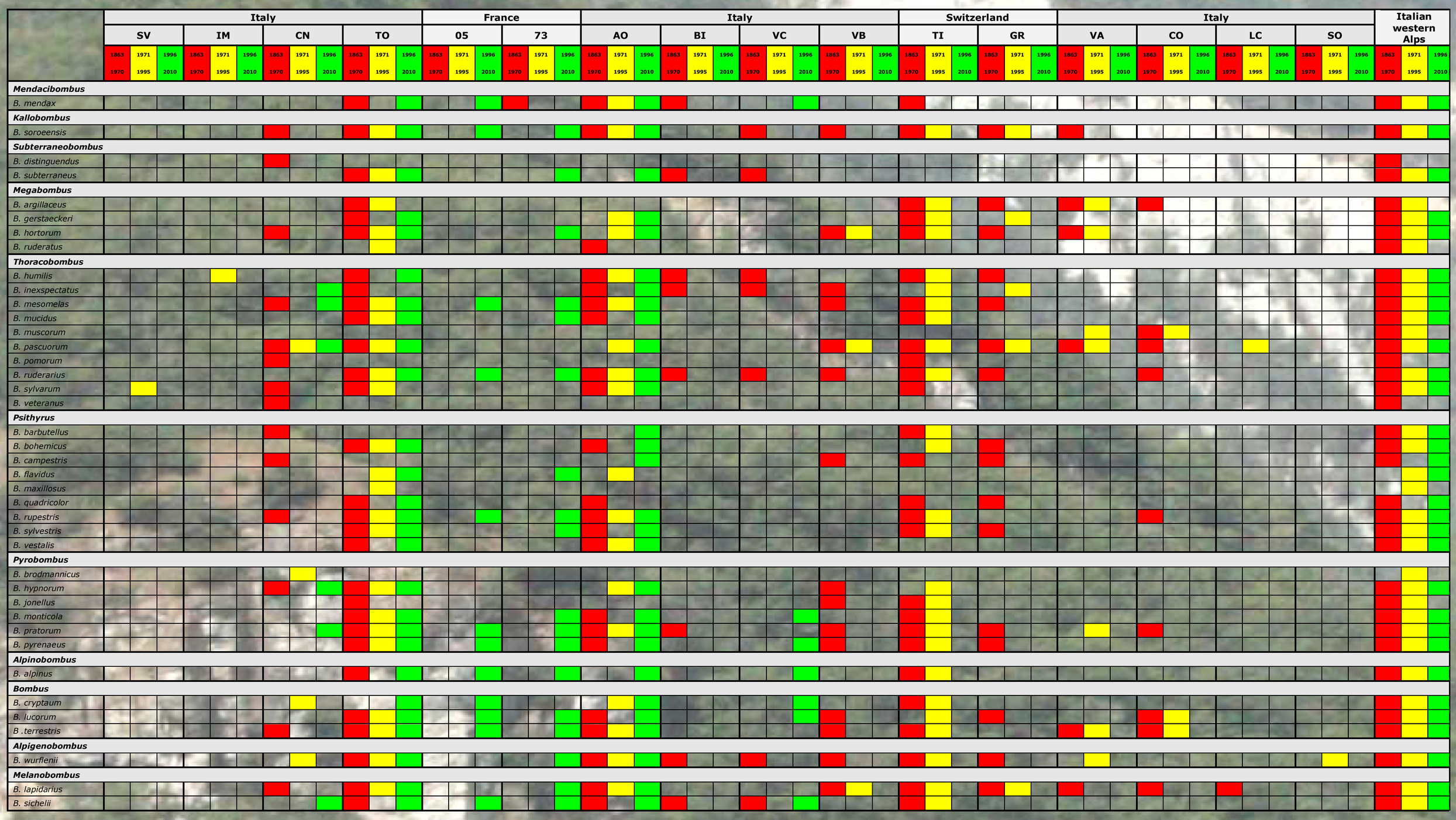


The western Alps extend from Bocchetta di Altare to the Passo dello Spluga. They belong to France and Switzerland on the outer side and to Italy on the inner one. The boundary runs mostly on the watershed between the Po basin and the Rhone and Rhine basins, except for a few small areas in the upper Susa Valley that belong to France and for the upper Ticino valley that belongs to Switzerland; in the southernmost part, the valleys of the various small rivers and streams which directly flow into the Ligurian Sea belong partly to France and partly to Italy.
The mountain part of the Po basin included in the western Alps, from watershed to plain and irrespective of country boundaries is considered in this poster.

The bumblebee faunas of France and Switzerland are much better known than the Italian one. That is especially true for the Italian western Alps, where the first available records date from 1863 and only the "Waldensian Valleys", a small area in the Turin district, were thoroughly investigated in the years 1946-1970; information on the remaining area is rather old and scanty. Therefore, in the late nineties we started a survey of bumblebees of the Italian western Alps in order to ascertain actual species distribution and, whenever possible, the changes occurred in the last decades due to anthropogenic disturbance, habitat alteration, and global warming. Until now, several localities were sampled throughout the area, but our efforts were mainly focused on the Susa valley in the years 2000-2006 and on the Aosta valley from 2009 onwards.
Available data, both from the literature and our investigations, were subdivided according to the administrative districts and grouped, in each district, on a chronological basis (until 1970, 1971-1995, 1996-today). Information appears concentrated mostly in the region Valle d'Aosta and in the province of Turin, which are located centrally in the western Alps, and rarefies moving on either side with the remarkable exception of the Canton Ticino in Switzerland.
All *Bombus* species known for Italy except *B. confusus, B. norvegicus*, and *B. perezi* are present in the Italian western Alps, but *B. distinguendus*, B. *pomorum*, and *B. veteranus* records are quite old and rather questionable; at the moment these species are probably absent from the area. Six more species (*B. argillaceus*, *B. ruderatus*, *B. muscorum*, *B. maxillosus*, *B. brodmannicus*, and *B. jonellus*) were not found since 1995 and their presence should be confirmed.



Administrative districts - **Italy** (province): **SV** Savona; **IM** Imperia; **CN** Cuneo; **TO** Torino; **AO** Aosta; **BI** Biella; **VB** Verbano Cusio Ossola; **VA** Varese; **CO** Como; **LC** Lecco; **SO** Sondrio. **France** (départementes): **05** Hautes-Alpes (Montgenèvre and Valleé Etroite only); **73** Savoie (Montcenis only). **Switzerland** (cantoni): **TI** Ticino; **GR** Graubünden (Val Mesolcina only).