



Fig. 4: Map of Europe and northern Asia including all findings of *Formica fennica* SEIFERT, 2000 (green) and *Formica manchu* WHEELER, 1929 (blue) evaluated by us. Original map with permission of Microsoft®Encarta®2006©1993-2005 Microsoft Corporation. All rights reserved.



Fig. 5: Map of Europe and northern Asia including all findings of *Formica foreli* BONDROIT, 1918 evaluated by us. Original map with permission of Microsoft®Encarta®2006©1993-2005 Microsoft Corporation. All rights reserved.

the Kazak West-Tianshan to Bogda Shan in China. At least in the Alai Mountains and in the Alai Valley, the *F. exsecta* morph was also collected, and its range probably extends farther to the south into the Pamir Mountains.

***Formica fennica* SEIFERT, 2000**

West Palaearctic. – South boreal and Caucasian-montane.

Not much is known about the distribution of *Formica fennica* (Fig. 4). It is probably allopatric to its sister species, *F. manchu*. So far this species could only be found in Finland and in the Caucasus – the latter population is apparently a glacial relict. We report a new location from Azerbaijan: 41° 28' N, 47° 04' E, 1700 m a.s.l., 3.VI. 2006, leg. Etzold. Four localities are now known in Finland (including one referred to as *Formica bruni* by AGOSTI 1989 – see SEIFERT 2000) and two in the Caucasus.

***Formica foreli* BONDROIT, 1918**

[First available use of *Formica exsecta* subsp. *pressilabris* var. *foreli* EMERY, 1909. – Annotation: Original description and type specimen come from EMERY (1909) – the retrospect application of article 45.5 ICZN withdraws the authorship from Emery, 51 years after his publication.]

West Palaearctic. – Europe: Submeridional-montane, temperate-planar to temperate-submontane. Asia: South Siberian.

*Formica foreli* is a submediterranean species with a southern border described by the known localities in northern Spain, northern Italy, Anatolia, Caucasus, and Saur Mountains (Kazakhstan) (Fig. 5). Isolated populations are known from northern Denmark and southern Sweden, the northernmost located on the Swedish island of Öland. We saw specimens from 92 different locations.

***Formica forsslundi* LOHMANDER, 1949**

Panpalaearctic. – Europe: Temperate to boreal, planar to submontane. Asia: Tibetan to Central-Siberian-Daurian.

There seems to be a large gap between a more or less coherent European range from northern Germany across Fennoscandia up to 66° N in Finland, and the Asian range from the Altai and Saur Mountains to Mongolia and Tibet (Fig. 6). From a zoogeographic or biocenotic perspective, there is no reason why these populations should not be connected. We have examined samples from 16 locations in Europe and from 22 locations in Asia. CZECHOWSKI & al. (2002) suggest a distribution similar to *F. uralensis* RUZS-