I then wrote to Deutsches Ent. Institut, Berlin-Dahlem, and asked for specimens of gagates Latr. for comparison. Director Dr. H. SACHTLEBEN generously gave me 2 55 and lent me a 5. And now I could state that I here had three species, distinctly different, F. picea Nyl. (Swedish specimens), F. gagates Latr. (Italian specimens), and a third species (Norwegian specimens), by Adlerz (1886) called gagates, later picea (Bönner 1915), and by myself once called fusca (1938 p. 78 partim). As I have recently shown 1942), SPARRE SCHNEIDER too (1909 p. 78) and SOOT-RYEN (1925 p. 9) have made the same mistake (in some cases, not always). SIEBKE's fusca from Fokstua and Hjerkinn (Siebke 1863 p. 139) also belong to this strange species.

This form unknown to me might perhaps be one of the varieties of fusca, var. lemani Bondr., or var. gagatoides Ruzsky.

The description of var. *lemani* — kindly sent me by Dr. Sachtleben, Berlin-Dahlem — showed that it could not possibly be this form, and then only var. *gagatoides* remained for consideration.

F. fusca L. var. gagatoides Ruzsky is by EMERY (1909, 1925) and STITZ (1939) regarded as a variety of picea Nyl., and by the former described as «Eine Übergangsform von fusca zu picea in Nordeuropa» (1909 p. 195).

In his monograph on the genus Formica, WHEELER (1913) described it briefly as follows: «Intermediate in its characters between picea and fusca. Northern Europe.» — Stitz (1939 p. 368) gives a better description, cited from Ruzsky (1904 and 1905—07):

«Ş (nach RUZSKY). Vorderfläche des Kopfes und des Thorax matt wie bei F. fusca, Gaster glänzend wie bei F. gagates. — Pubescenz spärlich, auf der Oberseite und Unterseite der Gaster fehlend.

♀ (nach RUZSKY). Von F. gagates unterschieden durch den matten Thorax.

Vorkommen: Nordeuropa.»

It seems clear enough that none of these authors has seen specimens of gagatoides, and the original description given by Ruzsky, has evidently been rather short and incomplete.

As I knew that at least parts of Ruzsky's collection were deposed at the Zoological Museum in Leningrad, I wrote to the museum and asked for specimens of this form.