

extent of preserved Cambrian deposits and the Ordovician strata overlay the eroded surface of the Cambrian to Proterozoic basement."

3. Previous work

The first note on ichnofossils from the Central Bohemian Cambrian is that of VLČEK (1902), who described and figured the "species" *Fucoides primulus* (= *Palaeophycus* isp.) from the locality Podmokly (probably in a vicinity of present locality Buchava). The same specimen was described and re-figured by FRITSCH (1908).

Brief notices on trace fossils in the monograph by ŠNAJDR (1958, p. 16) are remarkable. ŠNAJDR (op. cit.) stated that flat passages made by the locomotion of unknown organisms were found in the uppermost layers of the Chumava Member in silty shales. At present, no finds of ichnofossils from the Chumava-Baština Formation are known. Moreover, the same author stated similar finds from the non-marine Upper Cambrian Pavlovsko Formation at Lhůta village. Again, there are no ichnofossils known from the Pavlovsko Fm., neither from my own fieldwork nor from museum collections. In my opinion, it is probably that the mistakes in stratigraphical attribution of finds or in interpretation are concerned. In the first case, it is because the boundary between the Chumava-Baština Formation and the marine, fossiliferous Jince Formation is compli-

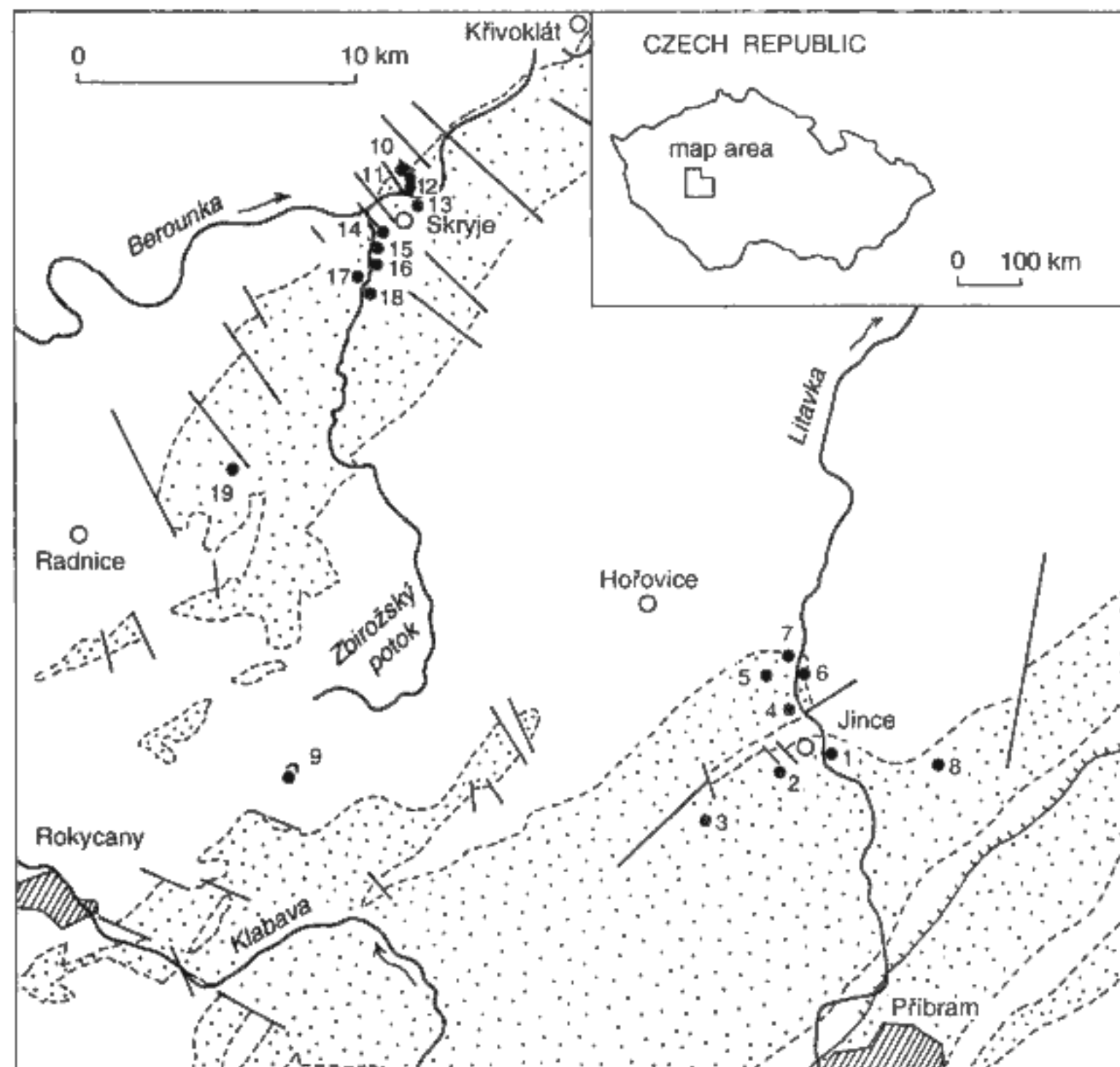
cated and not fully understood; in the second case, inorganic structures (e.g., flow rolls) might be concerned.

PROKOP (1960) stated that "traces of animal activity" and "archaeocyatha in natural life position perpendicular to bedding planes" occur in the Jince Formation along the road from Rejkovice to Felbabka. Analogical finds of "archaeocyatha" have been reported in the same paper from the Vystrkov locality.

In 1960's to 1970's, larger amount of ichnofossils from the Middle Cambrian has been collected by B. Bouček; however, he died leaving his knowledge unpublished. His collection of ichnofossils (deteriorated, unfortunately, by a lost of some data on finding places) is housed in the Czech Geological Survey, Prague, coupled with brief manuscript notes of B. Bouček. The collection was one of the material sources for the presented monograph. Concerning the Bouček's notices, the most interesting is that on the above-mentioned references of R. Prokop on archaeocyathids. After Bouček, the ichnofossils have to be concerned; Archaeocyatha are not known from the Bohemian Cambrian and the Prokop's observations can be probably attributed to vertical, finely sculptured burrows probably of inarticulate brachiopods.

During the study of the oldest Middle Cambrian fauna at the Vinice locality (FATKA et al. 1992), the ichnofossil *Diplocraterion* was found, confirming the assumption of dynamic shallow-water settings (FATKA et al. 1992, HAVLÍČEK in CHLUPÁČ et al. 1992).

CHLUPÁČ (1993) published the first ichnofacies charac-



1. Sketch map of the Central Bohemian Cambrian showing the position of the localities. 1 - Vinice; 2 - Vystrkov; 3 - Koníček; 4 - Jince - Ovčín; 5 - Felbabka - Potůček; 6 - Rejkovice; 7 - Ostrý; 8 - Písky; 9 - Medový Újezd; 10 - Kamenná hůrka; 11 - Pod tmím; 12 - Mouth of the Karáskova rokle Gorge; 13 - Luh; 14 - Slapnice - camp; 15 - Dlouhá hora; 16 - Dubinky; 17 - Jezírka; 18 - Buchava; 19 - Biskoupky. Dotted area corresponds to the present occurrence of the Cambrian rocks, including the Lower Cambrian conglomerates and sandstones and the Upper Cambrian volcanites.

teristics of the Bohemian Middle Cambrian strata – those of the Buchava locality at Skryje: “The rocks contain common ichnofossils of the rather shallow-water *Cruziana* Ichnofacies: frequent epi- and intrastratal, planar or oblique burrows mostly ranged with *Fodichnia* (feeding structures) and *Pascichnia* (grazing traces) made by deposit feeders. Even complex burrow systems of *Teichichnus* and/or *Phycodes* have been found.”

MIKULÁŠ (1994a, b) published two brief preliminary reports on the ichnological content of the Barrandian Middle Cambrian. The reports originated during the fieldwork pointing to the completion of the present paper.

CHLUPÁČ and MIKULÁŠ (1995) described a new, complex feeding trace *Amanitichnus omittus* from the locality Buchava. Contemporaneously with presentation of this paper, a study of remarkable ichnofossils obtained by the activity of fellow fossil collectors has been published (MIKULÁŠ, KORDULE, and SZABAD 1996).

4. Rock exposures of the Central Bohemian Middle Cambrian and their ichnological content

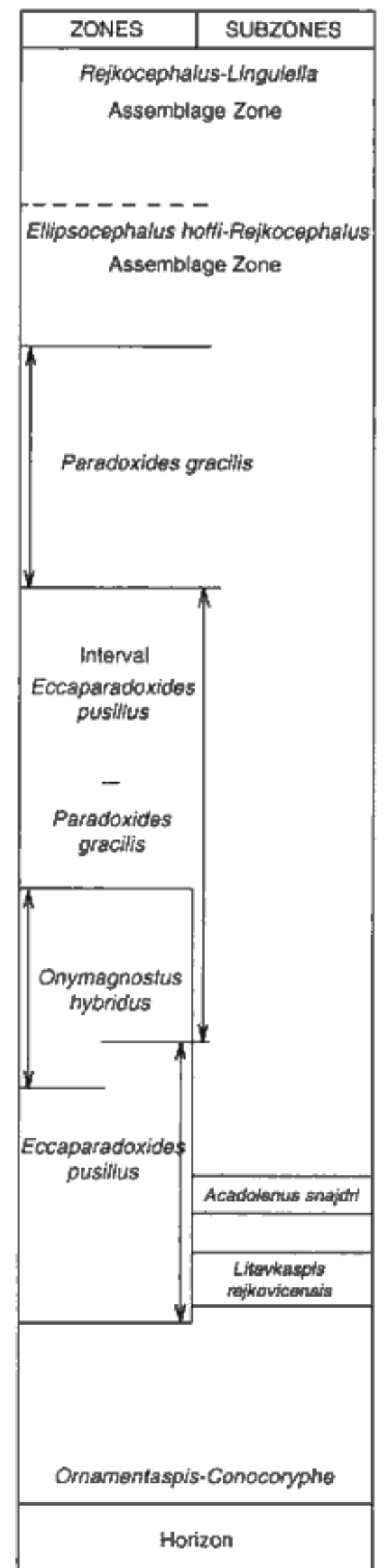
Area of the Central Bohemian Middle Cambrian is highly afforested, showing thereby a lack of natural outcrops. However, the long-lasting geological research coupled with activity of fossil collectors have gone away with this insufficiency. At present, many minute artificial outcrops, made just for collecting purposes, exist.

The most comprehensive list of fossil localities in the Central Bohemian Middle Cambrian was published by ŠNAJDR (1958); in this work, references to description of localities of older workers, namely POMPECKJ (1896), KETTNER (1923), KUŠTA (1884), and HAVLÍČEK et ŠNAJDR (1951) were also given. Several localities described by ŠNAJDR (1958) have been studied biostratigraphically in more detail later, and many new outcrops were done (e.g., FATKA et al. 1992, FATKA-KORDULE 1992, CHLUPÁČ 1993).

I have had to decide which of the existing outcrops have to be studied roughly and which of them are worth a detailed study. The first criterion was the expected importance for a general characteristics of the Central Bohemian Cambrian (e.g., conjunction with previous biostratigraphical research, completeness of the exposed profile); the second criterion consisted in a frequency of finds of trace fossils, in a way of their preservation, in a chance to obtain unique material for systematic descriptions. The field work was limited to 1993–1995. It is evident, that this research could not provide as representative material as it is in a disposal for most groups of body fossils (which have been collected by numerous fellow and professional workers for a very long time). However, I believe that the present paper will initiate the collectors of fossils to pay attention also to the traces and to help consequently to the future ichnological research.

Besides my own finds from the localities described be-

2. Biostratigraphical scheme of the Jince Formation (FATKA and KORDULE 1992).



low, I have had also older collections from other localities at a disposal (e.g., the Jince – Za hřbitovem locality in the B. Bouček’s collection). The sites where I have not made my own field research, are not stated in the following text.

4.1. Příbram-Jince area

1. Vinice

Small or larger, both natural and artificial outcrops, on the right (eastern) bank of the Litavka Brook, opposite to the