The scheme of a single major biogeographic province is the basis for the present study. The biogeographic provinces are defined by geographic regions that contain distinct zones, each of which is characterized by a unique set of species. These zones are identified by the distribution patterns of selected species, which give their name to the zone.

For the reasons stated, the biogeographic provinces are divisible into zones, each characterized by a unique set of species. The zones are defined by the distribution patterns of selected species, which give their name to the zone. These zones are characterized by a unique set of species, which give their name to the zone.

INTRODUCTION

Key words: Devonian, Caradocian, Tournaisian, Givetian.

The Devonian period is divided into three major zones, each characterized by a unique set of species. These zones are defined by the distribution patterns of selected species, which give their name to the zone.

ABSTRACT

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Miospore Biozonation in the Middle Devonian - Lower

RESEARCH NOTE
inces, allowing unequivocal correlation with interval zones based on other fossil groups.

A similar scheme composed of several succeeding interval zones, defined as concurrent range zones based on first or last occurrences of one or, more often, two selected key species was proposed by Higgs et al. (1988) for the Lower Carboniferous of the British Isles.

During the last years some palynological investigations in North Africa (Streel et al., 1988; Loboziak & Streel, 1989; Loboziak et al., 1992) and Brazil (Loboziak et al., 1988-1993) have shown that from at least Emsian to the Lower Carboniferous (Tournaisian) the succession of first occurrences of several characteristic species of the miospore biozonations developed in Western Europe was the same in those two distinct areas of the western part of Gondwana.

A quantitative approach based on the relative abundance of taxa first within Western Gondwana (Loboziak et al., 1989), then between Western Gondwana and Southern Euramerica (Streel et al., 1990) allowed the recognition of a remarkable uniformity of land plant vegetation (as deduced from the miospore record) and therefore of the climate from paleotropical to paleopolar realms during at least the Givetian and Frasnian periods. It was also demonstrated that Western Gondwana and Southern Euramerica constituted a single major phyto-geographic province during Middle and Late Devonian times.

On the other hand, those same studies have also demonstrated that certain species were found to be restricted to Western Gondwana, so indicating that some sort of provincialism was in effect in these regions. Such endemics, together with the criteria originally defined in Western Europe, represent good biostratigraphic markers in the Gondwana areas (Loboziak & Streel, 1995).

REFERENCES


