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Note

Distribution of oak species in the Czech Republic

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Summary — Only 4 native species of oaks were known in Czechoslovakia until 1974, namely *Quercus cerris*, *Q petraea*, *Q pubescens* and *Q robur*. In that year, Magic published a paper in which he quoted another 5 oak species from Slovakia. During my study in the Czech Republic, I have found, in addition to the above mentioned species, *Quercus dalechampii*, *Q polycarpa*, *Q virgiliana* and very rarely *Q frainetto* but not *Q pedunculiflora*. The newly discovered oak species are concentrated particularly in southern and southwestern Moravia.

Quercus dalechampii / Quercus polycarpa / Quercus virgiliana

Résumé — Répartition des chênes en République tchèque. *Quatre espèces de chênes ont été reconnues en Tchécoslovaquie jusqu'en 1974:* Quercus cerris, Q petraea, Q pubescens *et* Q robur. *La même année, Magic publia un article dans lequel il mentionna 5 espèces supplémentaires en Slovaquie. Au cours de mon étude, j'ai reconnu d'autres espèces en république tchèque, en plus de celles déjà évoquées. Il s'agit de* Quercus dalechampii, Q polycarpa, Q virgiliana, *et plus rarement* Q frainetto. Q pedunculiflora *n'a pas été rencontré. Ces espèces récemment découvertes sont concentrées dans la partie sud et sud-ouest de la Moravie.*

Quercus dalechampii / Quercus polycarpa / Quercus virgiliana

INTRODUCTION

I have been concerned with oaks since 1974. At that time only 4 native species of oak were known in Czechoslovakia, *viz Quercus cerris* L, *Q petraea* (Marruschka) Liebl, *Q pubescens* Willd and *Q robur* L. In the 1970s, however, some interesting facts appeared from neighbouring countries. Schwarz (1964) reported *Quercus dalechampii* Ten from Hungary and Austria, as well as *Q frainetto* Ten , *Q polycarpa* Schur and *Q virgiliana* Ten, from Hungary but he did not mention these species in Czechoslovakia. The same species have been recorded in Hungary, by Matyás (1970) who covered this genus for the *Flora of Hungary*. Magic (1974, 1975) mentioned 5 new oak species from Slovakia in his paper, making 9 native species of oak altogether. In addition to the 4 mentioned above there

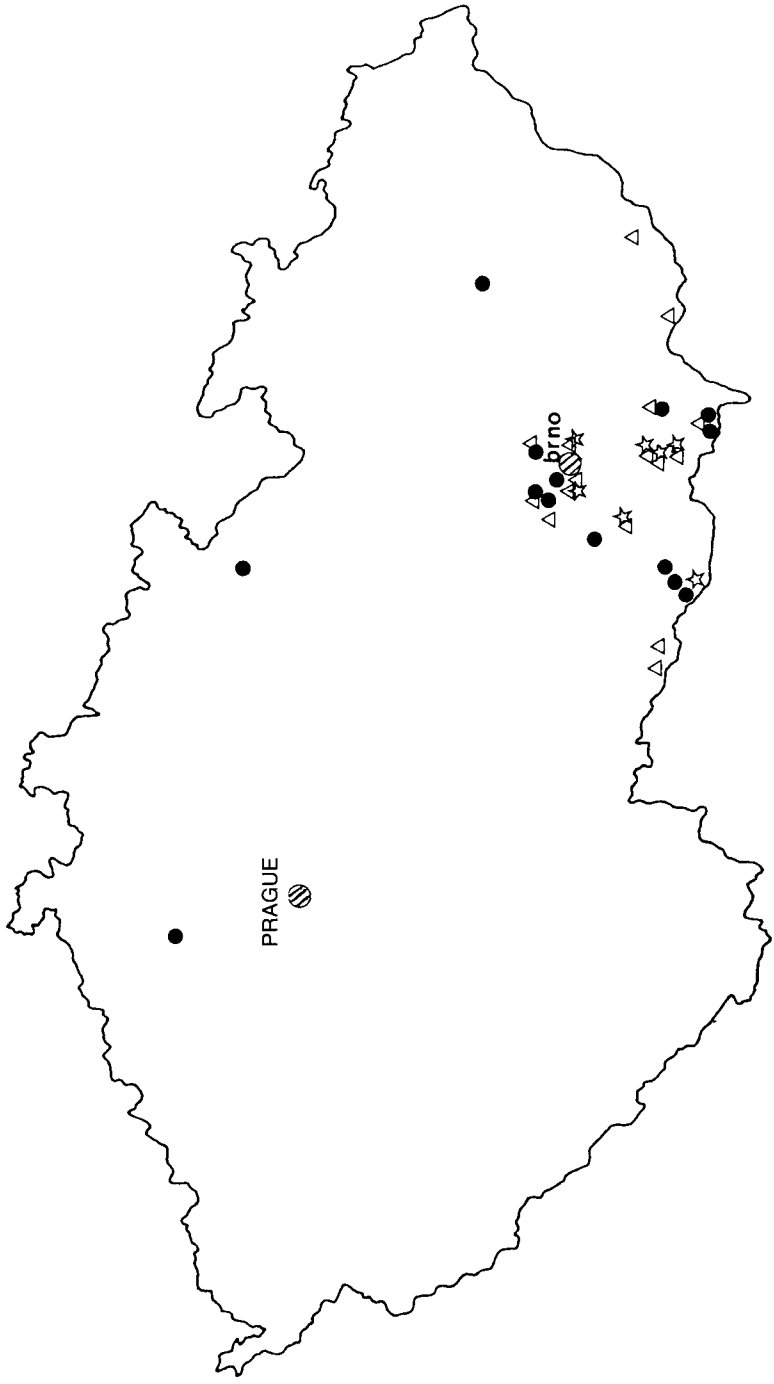

Fig 1. Distributions of *Quercus dalechampii* (△), *Q polycarpa* (☆) and *Q virgiliana* (●) in the Czech Republic.

is also *Q pedunculiflora* C Koch which is known from Romania (the closest occurrence to Czechoslovakia) but not from Hungary or Austria.

MATERIALS AND METHODS

I was assigned the task of determining whether the newly recognized oak species from Slovakia and neighbouring countries were also present in the Czech Republic for a report on the family *Fagaceae*, including the genus *Quercus* L, to be included in the second volume of the *Flora of the Czech Republic.*

After studying the literature and herbarium specimens of oaks in the Czech Republic and also in Budapest and Sopron, I undertook a study trip to slovakia with Mr Magic. Later, I carried out many excursions especially to southern Moravia and also to central Bohemia. It was time consuming work because seed years do not occur annually. Most attention was devoted to the regions with thermophilous flora because the newly discovered oak species also occur in southeastern Europe.

RESULTS AND DISCUSSION

The study was based on field research (because few specimens of oaks collected with fruits were in our herbaria) and a number of findings were obtained. In addition to *Quercus cerris*, *Q petraea*, *Q pubescens* and *Q robur*, 4 other species were found to occur in the Czech Republic, *viz Quercus dalechampii*, *Q frainetto*, *Q polycarpa* and *Q virgiliana*. Unlike Magic (1974, 1975), I do not believe that *Q pedunculiflora* occurs in Slovakia, however, I saw this species in Romania (Dobrogea) some years ago. It is quite a different oak which I did not see either in Slovakia or in the Czech Republic. As far as leaf shape is concerned, it is similar to *Q robur* but the indumentum is similar to *Q pubescens.*

The newly discovered oaks are concentrated particularly in southern and southwestern Moravia. According to phytogeographical region, these species appear in Thermophyticum (a region of thermophilous flora and vegetation where non-forest phytocoenoses with species of the submeridional vegetation zone prevail) and along the marginal areas of the Mesophyticum (a region with a flora and vegetation of the temperate zone within the limits of the oceanic climate in Central Europe, *ie,* a region of deciduous forest). The species are distributed from the lowlands to the higher hills and uplands.

A large number of hybrids and introgressants were found in most sites.

The distribution of the newly distinguished oaks in the Czech Republic is shown in figure 1 except for *Q frainetto* for which only one herbarium specimen exists. The localities of all 4 oak species shift the borders of the species natural ranges.

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