

CYRTOMIUM FALCATUM (L. FIL.) C. PRESL (POLYSTICHACEAE) A NEWCOMER TO CROATIAN FLORA

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In this paper the locality is reported of the spontaneously spread East Asian pteridophyte *Cyrtomium falcatum* (L. fil.) C. Presl, a new species in the flora of Croatia, found in the town of Rab on the island of the same name. During several years follow-up this fern has been found to survive for more than 10 years growing wild and slowly spreading new surface areas.

Key words: *Cyrtomium falcatum*, Croatian flora.

Trinajstić, I. & Španjol, Ž.: *Cyrtomium falcatum* (L. fil.) C. Presl (Polystichaceae) nova pridošlca hrvatske flore. Nat. Croat. Vol. 3, No. 1, 87-90, 1994, Zagreb.

U radu se objavljuje nalaz spontano proširene istočnoazijske papratnjače *Cyrtomium falcatum* (L. fil.) C. Presl u gradu Rabu na istoimenom otoku, nove vrste u flori Hrvatske. Višegodišnjim praćenjem je ustanovljeno da se navedena paprat održava u slobodnoj prirodi preko 10 godina i polagano osvaja nove površne.

Ključne riječi: *Cyrtomium falcatum*, hrvatska flora.

INTRODUCTION

In the last hundred years, a number of taxon of exotic provenance have moved into Croatian flora. A great many of them have become more or less naturalized. From the discovery of the first habitats, which are generally individual and with a reduced number of specimens, to naturalization and the conquest of large areas, a certain variable time period, must elapse. However, some species do not spread on larger areas at all while others after an interval disappear. Such examples are well known in phytogeography and are designated by specific terms (comp. TRINAJSTIĆ 1977).

We would like to draw attention to the east Asian fern *Cyrtomium falcatum* (= *Polystichum falcatum*) which escaped from cultivation in the town of Rab and continued to grow for some time without any human intervention, passing winters outdoors and gradually extending to an ever larger surface area in the "Pod pjacetu" locality.



Fig. 1. *Cyrtomium falcatum* (L. fil.) C. Presl - LEAV.

MORPHOLOGICAL CHARACTERISTICS OF THE FERN CYRTOMIUM FALCATUM

We take this opportunity to give a brief description of the most important morphological characteristics of the species *Cyrtomium falcatum*.

This is a turf-like plant with short stems covered by large dark brown scales; Leaves (Fig. 1) 20-80 cm long pinnate, coriaceous, petiole 1/4-1/2 as the lamina with dark scales; pinnae 5-12 cm long and 2-4 cm wide, alternate, ovate or ovate lanceolate, long-acuminate, the upper surface glossy, margins of pinnae entire or by cv. "Butterfieldii" incised serrate; the lower pinnae rotunded or obliquely truncate at the base; sori circular, large, abundantly scattered over the lower surface.

DISCUSSION

The genus *Cyrtomium* according to BENEDICT (1947) comprises 3 species growing naturally in East Asia and by cultivation in green-houses or in warmer regions in the open air, also. Among the cultivated species, two species are mostly widely spread *C. falcatum* and, *C. fortunei*, this second species being mistaken for the first one by some authors. *C. falcatum* was only recently seen growing wild. Thus, for instance, VALENTINE (1964) in the first edition of the book Flora Europaea just indicates: "...are naturalized in few isolated localities" (VALENTINE 1964: 20), 30 years later in (AKEROYD 1993) more data are already given for this species, namely: "Cultivated for ornament, and locally naturalized in W. Europe especially by the sea (Az, Be, Br, Ga, Hb, Ho)". *C. fortunei*, is not mentioned in the first edition at all, in the second edition may be read: "has been reported to be naturalized in Azores and in S. Europe." (AKEROYD 1993: 27). It is interesting that *C. falcatum* is found in Italy (BONAFEDE & al. 1993) too.

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SAŽETAK

Cyrtomium falcatum (L. fil.) C. Presl (*Polystichaceae*) nova pridošlica hrvatske flore I. Trinajstić & Ž. Španjol

U radu se objavljuje nalaz subspontano proširene istočnoazijske papratnjače *Cyrtomium falcatum* (L. fil.) C. Presl u gradu Rabu na istoimenom otoku, nove vrste u flori Hrvatske. Višegodišnjim praćenjem je ustanovljeno da se navedena paprat održava u slobodnoj prirodi preko 10 godina i polagano osvaja nove površine na lokalitetu "Pod pjacetu" (Trg Slobode).

Rod *Cyrtomium* prema BENEDICTU (1947) obuhvaća 3 vrste rasprostranjene od prirode u istočnoj Aziji, a u uzgoju po staklenicima ili u toplijim dijelovima i u slobodnoj prirodi. U uzgoju su rasprostranjene uglavnom dvije vrste *C. falcatum* i *C. fortunei*, kojega neki autori zamjenjuju s prvom vrstom.

Očito je da je *C. falcatum* tek u novije vrijeme uočen u slobodnoj prirodi. Tako npr. VALENTINE (1964) u prvom izdanju djela *Flora Europaea* navodi samo: "... are naturalized in few isolated localities" (VALENTINE 1964) da bi 30 godina kasnije (AKEROYD 1993) za tu vrstu bilo već više podataka: "Cultivated for ornament, and locally naturalized in W. Europe especially by the sea (Az, Be, Br, Ga, Hb, Ho).", a za vrstu *C. fortunei* koja u prvom izdanju nije bila niti zabilježena, u drugom izdanju se navodi: "has been reported to be naturalized in Açores and in S. Europe." (AKEROYD 1993: 27). *C. falcatum* je također otkriven i u Italiji (BONAFEDE & al. 1993).