

PSEUDOFUMARIA LUTEA (L.) BORKH. (*FUMARIACEAE*) – IN THE CROATIAN FLORA, TOO

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On the walls in Zagreb – Gornji grad, *Pseudofumaria lutea* (L.) Borkh. (= *Corydalis lutea* (L.) DC.), a new species in the Croatian flora, has been discovered.

Key words: *Pseudofumaria lutea*, Croatian flora, new species

Trinajstić, I.: *Pseudofumaria lutea* (L.) Borkh. (*Fumariaceae*) – također i u hrvatskoj flori. *Nat. Croat.*, Vol. 9, No. 1., 61–65, 2000, Zagreb.

Na zidovima Gornjega grada u Zagrebu otkrivena je vrsta *Pseudofumaria lutea* (L.) Borkh., nova vrsta u hrvatskoj flori.

Ključne riječi: *Pseudofumaria lutea*, hrvatska flora, nova vrsta

INTRODUCTION

As stated by the authors of the first »Croatian flora« – *Flora Croatica* (SCHLOSSER & VUKOTINOVIĆ, 1869) *Pseudofumaria lutea*, designated *Corydalis lutea* should be represented in the Croatian flora, too. From the part of the genus *Corydalis* separated into the special genus *Pseudofumaria* Medicus, SCHLOSSER & VUKOTINOVIĆ indicate for the Croatian flora the species »*C. lutea*, *C. capnoides*, *C. acaulis* and *C. ochroleuca*« with many localities that more or less overlap. From this it can be concluded that the complex »*Pseudofumaria*« was not known very well to the authors of the »Croatian flora«. The same thing can be seen, on the basis of synonymy, in VISIANI, the author of »*Dalmatian flora*« – *Flora Dalmatica* (cf. VISIANI, 1826; 1852), as discussed previously (TRINAJSTIĆ, 1983).

When preparing his »Croatian Flora Revision« – *Revisio Florae Croaticae*, HIRC (1903) did not enter into a more detailed clarification of this issue either; instead, following SCHLOSSER & VUKOTINOVIĆ, he indicates the species *C. capnoides*, *C. acaulis* and *C. ochroleuca*, but omits *C. lutea*, without any detailed comment. A little later

HIRC (1910: 41), on the basis of his verification of all earlier statements concerning *C. lutea*, concludes that this species »ima (također) 'brisati' iz naše flore« (»(also) has to be 'deleted' from our flora«). Much later this comment was referred to by ROSSI (1930), who stated that he had not found *C. lutea* anywhere either (cf. also TRINAJSTIĆ, 1973).

In the first edition of Flora Europaea, MOWAT (1965) reports *C. lutea* for the territory of Yugoslavia (»Ju«). GREUTER *et al.* (1989) also indicate *P. lutea* within the genus *Pseudofumaria* for the territory of Yugoslavia. This information could refer to Croatia and Slovenia only. However, Slovenian authors (E. MAYER, 1952; T. WRABER, 1984, 1999; TRPIN & VREŠ, 1995) do not know this species from Slovenia either, so this datum in Flora Europaea can be considered inaccurate. In the second edition of Flora Europaea LIDÉN (1993) indicates this species again, under the name of *Pseudofumaria lutea*, for the by then former Yugoslavia (»Ju«), this being thus a double mistake. In the Atlas Florae Europaeae (JALAS & SUOMINEN, 1991), *P. lutea* is not indicated for the region that at that time was comprised by Yugoslavia.

From everything said above, it is evident that so far *P. lutea* has not been identified in Croatia.

PSEUDOFUMARIA LUTEA IN THE CROATIAN FLORA

Pseudofumaria lutea has been discovered in Croatia in the very city of Zagreb in Demetrova Street 5 in Gornji Grad. There it grows in fissures on the fence wall of the kindergarten at this address. It was noticed for the first time in the autumn of 1986 in the garden wall of the house at Demetrova Street 3, but in a sterile form, which allowed us to see that it was the genus *Pseudofumaria*. However it was impossible to find out with certainty the species involved, although according to the habitat it could be assumed to be most probably *P. lutea*.

In the following years this plant seemed to vanish without leaving a trace although the old walls of the Gornji Grad were searched several times. Then in the autumn of 1998 a well-developed plant with several rosettes and flowering stems with remnants of pedicels was noticed. In the spring of 1999, during March, the said sod was observed several times and then in the second half of April it produced yellow flowers in abundance, the most important characteristic of this species. One flowering stem has been taken as documentary material (Fig. 1). In the close vicinity of the flowering plant, another 8 young plants have emerged in the wall cracks, because the seeds are disseminated by ants.

DISCUSSION AND CONCLUSION

The said locality is the first locality of *P. lutea* in the Croatian flora. How *P. lutea* arrived in Gornji Grad in Zagreb is difficult to say. Two assumptions are realistic. First – it could have grown somewhere under natural conditions on the rocks of the area, Grič (»grič« in Croatian means steep rocks), and then moved to the secondary habitat – the building walls.



Fig. 1. Specimen of *Pseudofumaria lutea* (L.) Borkh. from Gornji Grad in Zagreb (Croatia)

The second assumption is that possibly it was cultivated and then became a wild plant. *P. lutea* has not been noticed to be a horticultural plant in Croatia, but in western and central Europe it seems to be cultivated very often, so, as stated by LIDÉN (1993), it has become naturalized in many European countries. According to the same author, it grows naturally only in Italy and Switzerland.

The habitat of *P. lutea* in the Gornji Grad in Zagreb is very endangered, because it can be destroyed by, for instance, the renovation of old walls. The question arises as to how this plant, extremely rare in Croatian flora, can be protected. Perhaps it should be cultivated from seeds somewhere on the wall of the Croatian Natural History Museum in the very same street, Demetrova, at number 1.

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SAŽETAK

Pseudofumaria lutea (L.) Borkh. (*Fumariaceae*) – također i u hrvatskoj flori

I. Trinajstić

Prema navodima pisaca prve »hrvatske flore« – Flora Croatica (SCHLOSSER & VUKOTINOVIĆ, 1869) vrsta *Pseudofumaria lutea*, imenovana kao *Corydalis lutea* trebala bi biti zastupljena i u hrvatskoj flori. Međutim, analiziramo li lokalitete koje SCHLOSSER & VUKOTINOVIĆ (1869: 201) bilježe za vrstu *C. lutea* (»In rupium fissuris et muris ad Novi, Segniam, Karlobago et alibi«), za to isto područje navedeni autori navode još i »*C. capnoides*, *C. acaulis* i *C. ochroleuca*«, pa se iz toga može razabrati da autorima »hrvatske flore« nisu bili jasni međusobni odnosi unutar navedenog kompleksa.

HIRC (1903) se prigodom »Revizije hrvatske flore« – Revisio Florae Croatiae, također, nije upuštao u detaljnije razjašnjenje navedenoga problema, pa prema Schlosseru i Vukotinoviću navodi vrste »*C. capnoides*, *C. acaulis* i *C. ochroleuca*«, ali izostavlja vrstu *C. lutea*. Nešto kasnije HIRC (1910: 41), na temelju provjere svih starih navoda koji se odnose na *C. lutea* zaključuje da se ta vrsta »ima (također) 'brisati' iz

naše flore«. Na istu primjedbu osvrće se mnogo kasnije i ROSSI (1930), uz napomenu da ni on nije nigdje našao *C. lutea*.

U prvom izdanju »europske flore« – Flora Europaea, MOWAT (1964) bilježi *C. lutea* za područje tadašnje Jugoslavije (»Ju«). GREUTER *et al.* (1989) u sklopu roda *Pseudofumaria*, također, navode *P. lutea* za područje Jugoslavije. Taj bi se podatak mogao odnositi samo na Hrvatsku i Sloveniju. Međutim, ni slovenski autori (E. MAYER, 1952; T. WRABER, 1984, 1999; TRPIN & VREŠ, 1995) ne poznaju tu vrstu iz Slovenije, pa se taj podatak u Flora Europaea može smatrati pogrešnim. I u drugom izdanju edicije Flora Europaea LIDÉN (1993) navodi ponovno tu vrstu, pod imenom *Pseudofumaria lutea* za sada već bivšu Jugoslaviju (»Ju«), što je, čak dvostruka pogreška. U Atlas Florae Europaeae (JALAS & SUOMINEN, 1991) ne navode vrstu *P. lutea* za ono područje koje je tada obuhvaćala Jugoslavija.

Iz svega navedenog može se jasno zaključiti da *P. lutea* nije dosada bila poznata s teritorija Hrvatske, niti je bila pripadnik hrvatske flore.

Pseudofumaria lutea otkrivena je u Hrvatskoj u samom gradu Zagrebu i to u Demetrovoj ulici br. 5 na Gornjem gradu. Tu ona obrašćuje pukotine u ogradnom zidu dvorišta tamošnjega »dječjeg vrtića«. Međutim, ona je po prvi puta uočena još u jesen 1986. godine u ogradnom zidu kućnoga vrta u Demetrovoj br. 3, ali u sterilnom obliku iz kojega je, doduše, bilo vidljivo da se radi o rodu *Pseudofumaria*, ali se sa sigurnošću nije moglo ustanoviti o kojoj je vrsti riječ, iako se je prema staništu moglo pretpostaviti da se najvjerojatnije radi o *P. lutea*.

U proljeće 1999. tijekom ožujka u više je navrata praćen navedeni bus i on je u drugoj polovici travnja obilno procvao izrazito žutim cvjetovima, najvažnijoj značajki te vrste. Jedna cvjetna stabljika sabrana je kao dokumentacijski materijal (Fig. 1). U neposrednoj blizini cvatućega busena niklo je u pukotinama zida još 8 mladih biljaka, jer sjemenke raznose mravi.

Navedeni lokalitet prvi je nalaz *P. lutea* u hrvatskoj flori. Kako se je *P. lutea* našla na Gornjem gradu u Zagrebu teško je reći. Realne su dvije pretpostavke: Prvo – mogla je rasti negdje u prirodnim uvjetima na stijenama Griča (»grič« u hrvatskom jeziku označava vrletne stijene), a kasnije se preselila na sekundarno stanište – zidove građevina. Druga je pretpostavka da je eventualno bila uzgajana, pa naknadno podivljala. *P. lutea* nije u Hrvatskoj uočena kao hortikulturna biljka, ali je u zapadnoj i srednjoj Europi izgleda česta u uzgoju.

Navedeno nalazište *P. lutea* na Gornjem gradu u Zagrebu vrlo je ugroženo, jer npr. obnovom starih zidova može biti uništeno. Nameće se pitanje kako sačuvati tu izuzetno rijeku biljku kao pripadnika hrvatske flore. Možda bi je trebalo sjemenom uzgojiti negdje na zidu Hrvatskoga prirodoslovnog muzeja u istoj, Demetrovoj ulici br. 1.