

SRGC Crocus Pages

Notes of papers where some new crocus species are described and other websites which may be of use:

***Crocus danfordiae* Maw and *C. chrysanthus* (Herbert) Herbert (Iridaceae) and some of their allies in Turkey and Iran. Jānis Rukšāns, Dr. biol.**

Received: 09-04-2014

Accepted: 12-04-2014

Published online: 25-04-2014

International Rock Gardener - Online Journal. ISSN 2053-7557

Abstract: Features of *Crocus chrysanthus* s.str. from type locality are specified. Four new species are described, status of one changed.

Key words: *Crocus brickellii*, *Crocus chrysanthus*, *Crocus danfordiae*, *Crocus henrikii*, *Crocus kurdistanicus*, *Crocus minutus*, *Crocus muglaensis*, *Crocus uschakensis*.

See all descriptions, plus photos, here:

<http://www.srgc.org.uk/logs/logdir/2014Apr241398364476IRG52April.pdf>

This issue of the IRG also includes changes made to the naming of plants published in *The Alpine Gardener*; 80 (2012) and 81 (2013). http://www.alpinegardensociety.net/pdf_files/publication/Crocus-paper-finalSmall.pdf Seven New Crocuses from the Balkans and Turkey Janis Ruksans - - names revised in IRG.

***Crocus brachyfilus* (Iridaceae), a new species from southern Turkey** Author: Schneider, Ingo Source: [Willdenowia - Annals of the Botanic Garden and Botanical Museum Berlin-Dahlem](#), Volume 44, Number 1, 5 April 2014 , pp. 45-50(6) Publisher: [Botanic Garden and Botanical Museum Berlin-Dahlem](#)

Open access here : <http://www.ingentaconnect.com/content/bgbm/will/2014/00000044/00000001>

Fourteen new species of *Crocus* (Liliiflorae, Iridaceae) from West, South-West and South-Central Turkey.

Kerndorff H, Pasche E, Blattner F R, Harpke D **STAPFIA 99 (2013): 145–158**

Key words: ***Crocus mawii*** , *Crocus karamanensis*, *Crocus abacteolus*,

Crocus antherotes , *Crocus tahtaliensis*, *Crocus mediotauricus* ,

Crocus arizelus , *Crocus lyciotauricus*, *Crocus ziyaretensis*,

Crocus oreogenus, *Crocus calanthus*, *Crocus multicarinatus*,

Crocus incognitus, *Crocus colereus*



Crocus mawii in wild and cultivation photos Jānis Rukšāns

<http://www.srgc.net/forum/index.php?topic=11230.msg291601#msg291601>



A new species of Crocus (Liliiflorae, Iridaceae) from Turkey.

Kerndorff H, Pasche E, Blattner F R, Harpke D **Stapfia 99 (2013) 141-144.**

Crocus strialatus belongs to section *Nudiscapus* but flowers in autumn.

Crocus biflorus Miller (Liliiflorae, Iridaceae) in Anatolia - Part IV.

Kerndorff H, Pasche E, Blattner F R, Harpke D **Stapfia 99 (2013) 159-186.**

https://www.researchgate.net/publication/263025613_Crocus_biflorus_MILLER_in_Anatolia_-_Part_IV

ABSTRACT In the course of our research on Turkish crocuses in areas of the Anatolian Diagonal (central east Turkey) a new understanding of the genus *Crocus* was received. Phenotypic and morphological parameters were used for comparison purposes, as well as geographical distributions of genetic groupings. Eleven new species were found and are described.

Crocus munzurense Kernd. & Pasche -- Stapfia 99: 179. 2013 [23 Dec 2013]



Crocus munzurense HKEP-9911-07



Crocus munzurense SASA- 211 -01

Seven new species of Crocus (Liliiflorae, Iridaceae) from Turkey.

Kerndorff H, Pasche E, Harpke D, Blattner F R **Stapfia 97 (2012) 3-16.**

**Crocus mersinensis, Crocus taseliensis, Crocus babadagensis, Crocus simavensis,
Crocus mysius, Crocus bifloriformis, Crocus adamioides**

Two New Taxa of Crocus (Liliiflorae, Iridaceae) from Turkey

H. Kerndorff & E. Pasche **STAPFIA 95 (2011): 2-5**

Crocus roseviolaceus, Crocus minutus

<http://www.srgc.net/forum/index.php?topic=7914.msg215335#msg215335>

Further comments on C. minutus :

<http://www.srgc.org.uk/logs/logdir/2014Apr241398364476IRG52April.pdf>



Crocus roseoviolaceus



Crocus minutus

Many photos and comments on these can be found in the SRGC Forum, Crocus Section

Three new species of Crocus (Liliiflorae, Iridaceae) from Turkey.

Kerndorff H, Pasche E, Harpke D, Blattner F R **Stapfia 95 (2011) 99-105.**

***Crocus fauseri*, *lydius*, *beydaglarensis* – photos next page....**



Crocus fauseri – far left

Crocus beydaglarensis - left



[Phylogeny of *Crocus* (Iridaceae) based on one chloroplast and two nuclear loci: Ancient hybridization and chromosome number evolution Harpke D, Meng S, Rutten T, Kerndorff H, Blattner F R Mol. Phylogenet. Evol. 66 (2013) 617-627.]

Crocus demirzianus Sp. Nov. From Northwestern Turkey

Erol O., Can L., Şik L., **NORDIC JOURNAL OF BOTANY**, vol.30, pp.665-667, 2012



Crocus demirzianus Left by Ibrahim Sozen

Right by Jānis Rukšāns

https://www.researchgate.net/publication/236177666_Crocus_demirzianus_sp._nov._from_northwestern_Turkey

Two new taxa of the Crocus biflorus aggregate from Turkey

Kerndorff H, Pasche E **Linzer biol. Beitr.** 36/1 5-10 26.3.2004

Crocus biflorus, subspecies caricus, C. biflorus subspecies ionopharynx

http://www.landesmuseum.at/pdf_frei_remote/LBB_0036_1_0005-0010.pdf



Crocus yakarianus Sp. nov. from eastern Turkey Yıldırım & O. Erol

Nordic Journal of Botany Volume 31, Issue 4, pages 426–429, August 2013

Crocus yakarianus Yıldırım & O. Erol (Iridaceae) is described as a new species. Diagnostic morphological characteristics, descriptions and detailed illustrations are given on the basis of the type material. *Crocus yakarianus* is restricted to the province of Malatya in eastern Anatolia, Turkey. It is related to and compared with *Crocus biflorus* subsp. *tauri* (Maw) B. Mathew.

Seven new taxa of Crocus L. from the Balkans and Turkey described.

Jānis Rukšāns Publ. by AGS

Crocus speciosus subsp. *sakariensis*, *Crocus speciosus* subsp. *bolensis*, *Crocus speciosus* subsp. *hellenicus*, *Crocus speciosus* subsp. *elegans*,
Crocus vaclavii, *Crocus macedonicus*, *Crocus laevigatus* subsp. *pumilus* ***

A large group of Forumists : Ibrahim Sözen, David Stephens, Johan Nilson, Henrik Zetterlund, Christopher Greenwell and Simon Silcock, Dimitry Zubov and Zhirair Basmajyan are among those thanked by Janis in the paper published by the AGS.

***N.B. For changes made by Jānis Rukšāns to these names, see here:

<http://www.srgc.org.uk/logs/logdir/2014Apr241398364476IRG52April.pdf> - these have all been given full species status.

We are fortunate in the SRGC Forum to have Janis Ruksans share with us his thoughts on many plants as well as great tales and photos of his many travels to research crocus in the wild. This means we are able to see and discuss many "new" species as they are found and learn a great deal about their individual features.

For instance, Janis first showed us the plant now named as *C. macedonicus* in the forum as *C. pallasii*:



<http://www.srgc.net/forum/index.php?topic=9820.msg261807#msg261807>

Many photos and comments on these can be found in the SRGC Forum Crocus Section, where many of Janis' photographs were first shown.

<http://www.srgc.net/forum/index.php?board=10.0>

For example : *Crocus ibrahimii* – named for Ibrahim Sözen by Henrik Zetterlund, photo Jānis Rukšāns

***Crocus chrysanthus* s. latu in Turkey** Feyza Candan & Neriman Özhatay *Annales Botanici Fennici* 50(6):423-430. 2013 New taxa in *Crocus* are described from Turkey:

C. chrysanthus subsp. *chrysanthus* var. *bicoloraceus* F. Candan & N. Özhatay var. nov. and *C. chrysanthus* subsp. *chrysanthus* var. *atroviolaceus* F. Candan & N. Özhatay var. nov.; *C. chrysanthus* subsp. *punctatus* F. Candan & N. Özhatay subsp. nov., ***C. chrysanthus* subsp. *kesercioglui*** F. Candan & N. Özhatay subsp. nov. and *C. chrysanthus* subsp. *sipyleus* F. Candan & N. Özhatay subsp. nov. A new classification of the species is based mainly on the colour of flowers and anthers, type of pollen grains, seed surface ornamentation, and chromosome numbers.



C. chrysanthus subsp. *kesercioglui* – photos Jānis Rukšāns

Crocus biflorus (Liliiflorae, Iridaceae) in Anatolia (Part Three) Linzer biol. Beitr. 38/1 165-187 21.7.2006 H.KERNDORFF & E.PASCHE

A b s t r a c t: Results of field studies of 15 populations belonging to *Crocus biflorus* sensu lato are presented from Caria and Pisidia as well as of additional populations in adjacent parts of Anatolia for comparative purposes. The evaluation considers all south-west Anatolian populations (including the 16 ones of part two from the Lycian and Pisidian Taurus) and the 14 ones for comparative purposes under morphological, statistical, taxonomical, geographical and phytogeographical aspects. New and unexpected facts were revealed concerning the relationship and distribution of *C. biflorus* taxa in this area of which two new taxa are described for. Key words: *Crocus biflorus*, south-west Anatolia, field studies, morphology, phytogeography, new subspecies **yataganensis** and **caelestis**.

Crocus biflorus subsp. *caelestis* Kernd. & Pasche Linzer Biol. Beitr. 38: 179 (2006)



C. biflorus subsp. *yataganensis*

C. biflorus subsp. *caelestis* photos Jānis Rukšāns

***Crocus flavus* subsp. *sarichinarenis* Rukšāns**

urn:lsid:ipni.org:names:77111139-1:1.1 published In *Crocuses* 157 (pl. 214-215). 2010



Two forms of *C. sarichinarenensis* photos Jānis Rukšāns

<http://www.srgc.net/forum/index.php?topic=6837.msg189741#msg189741>

[Crocus jablanicensis \(Iridaceae\), a new species from the Republic of Macedonia, Balkan Peninsula](#)

Novica Randelović, Vladimir Randelović, Nikola Hristovski *Annales Botanici Fennici* (Impact Factor: 0.66). 01/2012; 49(1-2):99-102. DOI:10.5735/085.049.0116

ABSTRACT Randelović, N., Randelović, V. & Hristovski, N. 2012: *Crocus jablanicensis* (Iridaceae), a new species from the Republic of Macedonia, Balkan Peninsula. — *Ann. Bot. Fennici* 49: 99–102. *Crocus jablanicensis* N. Randj. & V. Randj. sp. nova (Iridaceae) described from the Balkan Peninsula. It is found on Mt. Jablanica in the western part of Macedonia, where it grows in alpine grasslands around snowmelts. It is compared with the morphologically similar *C. cvijicii* and *C. veluchensis*. In contrast to these species, *C. jablanicensis* has white styles and stigmas and a glabrous, white perianth throat.



<http://www.srgc.net/forum/index.php?topic=8199.msg222341#msg222341>

The Crocus Section of the SRGC Forum contains a wealth of information on Crocus and many new species can be seen in its pages, even before formal descriptions have been made: <http://www.srgc.net/forum/index.php?board=10.0>

The SRGC Forum is fully searchable from the “search” option near the **upper left hand side** of any forum page. **

COMPILATION OF CROCUS CHRYSANTHUS/BIFLORUS CULTIVARS by Thomas Huber :
<http://www.srgc.net/forum/index.php?topic=5060.0>

Other Websites:

<http://crocusmania.blogspot.com/search/label/Crocus> İbrahim Sözen

<http://www.pacificbulbsociety.org/pbswiki/index.php/CrocusCompared> David Pilling
on PBS site.

Link for individual Stapfia papers available to buy at modest cost :

<http://www.landesmuseum.at/biophp/stapfia.php>

The IPNI site gives lists of papers: Crocus starts [here](#) and continues to [here](#)

© Copyright 2005 International Plant Names Index <http://www.ipni.org>

List of Crocus current at 19th February 2014 :

Crocus adamioides (B.Mathew) Kernd. & Pasche -- *Stapfia* 97: 11. 2012 [21 Dec 2012]

Crocus antalyensis B.Mathew subsp. *gemicii* Şik & Erol -- *Pl. Syst. Evol.* 294(3-4): 284 (fig. 1, map). 2011 [Jul 2011]

Crocus antalyensis B.Mathew subsp. *striatus* Erol & Koçyiğit -- *Nordic J. Bot.* 28(2): 187 (-188; figs. 1-3, map). 2010 [4 Apr 2010]

Crocus atticus Orph. subsp. *nivalis* (Bory & Chaub.) Rukšāns -- *Crocuses* 173. 2010

Crocus atticus Orph. subsp. *sublimis* (Herb.) Rukšāns -- *Crocuses* 171. 2010

Crocus babadagensis Kernd. & Pasche -- *Stapfia* 97: 7. 2012 [21 Dec 2012]

Crocus beydaglarensis Kernd. & Pasche -- *Stapfia* 95: 100 (-101, 104; figs.). 2011 [31 Dec 2011]

Crocus bifloriformis Kernd. & Pasche -- *Stapfia* 97: 11. 2012 [21 Dec 2012] ; nom. illeg.

Crocus demirizianus Erol & Can -- *Nordic J. Bot.* 30(6): 665. 2012 [26 Nov 2012]
[epublished]

Crocus fauseri Kernd. & Pasche -- *Stapfia* 95: 99 (-100, 103; figs.). 2011 [31 Dec 2011]

Crocus flavus Haw. subsp. *sarichinarensis* Rukšāns -- *Crocuses* 157 (pl. 214-215). 2010

Crocus ilvensis Peruzzi & Carta -- *Nordic J. Bot.* 29(1): 7 (-8; figs. 1-2). 2011 [20 Feb 2011]

Crocus jablanicensis Randjel. & V.Randjel. -- *Ann. Bot. Fenn.* 49(1-2): 99. 2012 [26 Apr 2012]

Crocus × *leonidii* Rukšāns -- *Crocuses* 162 (pl. 227-231). 2010

Crocus lydius Kernd. & Pasche -- *Stapfia* 95: 101 (-102, 105; figs.). 2011 [31 Dec 2011]

Crocus macedonicus Rukšāns -- *Seven New Crocuses Balkans Turkey* 24. 2013 [Jun 2013]

Crocus mersinensis Kernd. & Pasche -- *Stapfia* 97: 3. 2012 [21 Dec 2012]

Crocus minutus Kernd. & Pasche -- *Stapfia* 95: 3. 2011 [31 Dec 2011]

Crocus mysius Kernd. & Pasche -- *Stapfia* 97: 10. 2012 [21 Dec 2012]

Crocus roseoviolaceus Kernd. & Pasche -- *Stapfia* 95: 2 (-3). 2011 [31 Dec 2011]

Crocus simavensis Kernd. & Pasche -- *Stapfia* 97: 7. 2012 [21 Dec 2012]

Crocus speciosus M.Bieb. subsp. *archibaldiorum* Rukšāns -- *Crocuses* 59 (-60; pl. 25-26). 2010 ; nom. inval.

Crocus speciosus M.Bieb. subsp. *bolensis* Rukšāns -- *Seven New Crocuses Balkans Turkey* 16. 2013 [Jun 2013]

Crocus speciosus M.Bieb. subsp. *elegans* Rukšāns -- *Seven New Crocuses Balkans Turkey* 18. 2013 [Jun 2013]

Crocus speciosus M.Bieb. subsp. *hellenicus* Rukšāns -- *Seven New Crocuses Balkans Turkey* 17. 2013 [Jun 2013]

Crocus speciosus M.Bieb. subsp. *sakariensis* Rukšāns -- *Seven New Crocuses Balkans Turkey* 14. 2013 [Jun 2013]

Crocus taseliensis Kernd. & Pasche -- *Stapfia* 97: 6. 2012 [21 Dec 2012]

Crocus vaclavii Rukšāns -- *Seven New Crocuses Balkans Turkey* 22. 2013 [Jun 2013]

Crocus yakarianus Yıldırım & Erol -- *Nordic J. Bot.* 31(4): 426. 2013 [4 Jul 2013]
[epublished]

Kerndorf and Pasche 2013 :

Crocus abracteolus Kernd. & Pasche -- *Stapfia* 99: 147. 2013 [23 Dec 2013]

Crocus antherotes Kernd. & Pasche -- *Stapfia* 99: 147. 2013 [23 Dec 2013]

Crocus arizelus Kernd. & Pasche -- *Stapfia* 99: 151. 2013 [23 Dec 2013]

Crocus berytius Kernd. & Pasche -- *Stapfia* 99: 185. 2013 [23 Dec 2013]

Crocus calanthus Kernd. & Pasche -- *Stapfia* 99: 153. 2013 [23 Dec 2013]

Crocus coloreus Kernd. & Pasche -- *Stapfia* 99: 157. 2013 [23 Dec 2013]

Crocus incognitus Kernd. & Pasche -- *Stapfia* 99: 156. 2013 [23 Dec 2013]

Crocus kangalensis Kernd. & Pasche -- *Stapfia* 99: 182. 2013 [23 Dec 2013]

Crocus karamanensis Kernd. & Pasche -- *Stapfia* 99: 146. 2013 [23 Dec 2013]

Crocus kartaldagensis Kernd. & Pasche -- *Stapfia* 99: 174. 2013 [23 Dec 2013]

Crocus lyciotauricus Kernd. & Pasche -- *Stapfia* 99: 153. 2013 [23 Dec 2013]

Crocus malatyensis Kernd. & Pasche -- *Stapfia* 99: 179. 2013 [23 Dec 2013]

Crocus marasensis Kernd. & Pasche -- *Stapfia* 99: 175. 2013 [23 Dec 2013]

Crocus mawii Kernd. & Pasche -- *Stapfia* 99: 145. 2013 [23 Dec 2013]

Crocus mediotauricus Kernd. & Pasche -- *Stapfia* 99: 150. 2013 [23 Dec 2013]

Crocus multicostatus Kernd. & Pasche -- *Stapfia* 99: 155. 2013 [23 Dec 2013]

Crocus munzurensis Kernd. & Pasche -- *Stapfia* 99: 179. 2013 [23 Dec 2013]

Crocus oreogenus Kernd. & Pasche -- *Stapfia* 99: 155. 2013 [23 Dec 2013]

Crocus pelitensis Kernd. & Pasche -- *Stapfia* 99: 175. 2013 [23 Dec 2013]

Crocus ponticus Kernd. & Pasche -- *Stapfia* 99: 183. 2013 [23 Dec 2013]

Crocus romuleoides Kernd. & Pasche -- *Stapfia* 99: 174. 2013 [23 Dec 2013]

Crocus schneideri Kernd. & Pasche -- *Stapfia* 99: 178. 2013 [23 Dec 2013]

Crocus sivasensis Kernd. & Pasche -- *Stapfia* 99: 183. 2013 [23 Dec 2013]

Crocus striatulus Kernd. & Pasche -- *Stapfia* 99: 141. 2013 [23 Dec 2013]

Crocus tahtaliensis Kernd. & Pasche -- *Stapfia* 99: 150. 2013 [23 Dec 2013]

Crocus ziyaretensis Kernd. & Pasche -- *Stapfia* 99: 154. 2013 [23 Dec 2013]

Crocus chrysanthus Herb. var. *atroviolaceus* Candan & Özhatay -- *Ann. Bot. Fenn.* 50(6): 427. 2013 [6 Nov 2013] [epublished]

Crocus chrysanthus Herb. var. *bicoloraceus* Candan & Özhatay -- *Ann. Bot. Fenn.* 50(6): 424. 2013 [6 Nov 2013] [epublished]

Crocus chrysanthus Herb. subsp. *kesercioglu* Candan & Özhatay -- *Ann. Bot. Fenn.* 50(6): 427. 2013 [6 Nov 2013] [epublished]

Crocus chrysanthus Herb. subsp. *punctatus* Candan & Özhatay -- *Ann. Bot. Fenn.* 50(6): 427. 2013 [6 Nov 2013] [epublished]

Crocus chrysanthus Herb. subsp. *sipyleus* Candan & Özhatay -- *Ann. Bot. Fenn.* 50(6): 427. 2013 [6 Nov 2013] [epublished]

Crocus naqabensis Al-Eisawi & Kiswani -- *Arab Gulf J. Sci. Res.* 19(3): 167 (2001). (IK)

Crocus ser. *Baytopi* B.Mathew -- *Plantsman n.s.*, 8(1): 57. 2009 [Mar 2009]

Type Name: *Crocus baytopiorum* B.Mathew

Crocus brachyfilus I. Schneider - a new crocus species in series *Speciosi* B. Mathew

<http://www.ingentaconnect.com/content/bgbm/will/2014/00000044/00000001>

Crocus brickellii, *Crocus chrysanthus*, *Crocus danfordiae*, *Crocus henrikii*, *Crocus kurdistanicus*, *Crocus minutus*, *Crocus muglaensis*, *Crocus uschakensis* 25th April 2014 :

<http://www.srgc.org.uk/logs/logdir/2014Apr241398364476IRG52April.pdf>

[The genus *Crocus*, series *Crocus* \(Iridaceae\) in Turkey and 2 East Aegean islands: a genetic approach](#) *Turkish Journal of Biology* 01/2014; 38:48-62

journals.tubitak.gov.tr/biology/issues/biy-14-38-1/biy-38-1-6-1305-14.pdf

Osman Erol, Hilal Betül Kaya, Levent Şık, Metin Tuna, Levent Can, Muhammed Bahattin Tanyolaç

ABSTRACT: In this study, a total of 26 *Crocus* specimens from different locations across Turkey and 2 East Aegean islands (Chios and Samos) were analyzed using 12 amplified fragment length polymorphism (AFLP) primer combinations to obtain information on genetic diversity, population structure, and genetic relationships. A total of 369 polymorphic AFLP bands were generated and scored as binary data. Genetic similarities were determined. Cluster analysis revealed 4 major groups among the 26 genotypes examined in this study. The nuclear DNA contents (2C) of the 26 *Crocus* specimens were found to range from 5.08 pg in *C. asumaniae* to 9.75 pg in *C. sativus*. Polymorphic information content (PIC) values were used to examine the capacity of the various primer pairs to amplify polymorphisms in the *Crocus* specimens. The PIC values ranged from 0.218 (M-CAA/E-AGC) to 0.512 (M-CAT/E-AAG) and showed an average of 0.34. In sum, we herein used AFLP analysis to identify a high level of polymorphism among *Crocus* specimens collected from various locations in Turkey and Greece, and our structural analysis yielded 2 reconstructed populations. These findings provide new insight into the relationships among different *Crocus* genotypes and show that AFLP analysis can be useful for *Crocus* diversity studies.

Genetic diversity of *Crocus antalyensis* B. Mathew (Iridaceae) and a new subspecies from southern Anatolia

[Osman Erol](#), [Levent Şik](#), [H. Betül Kaya](#), [Bahattin Tanyolaç](#), [Orhan Küçüker](#)

Plant Systematics and Evolution (Impact Factor: 1.31). 01/2011; 294(3):281-287.

DOI:10.1007/s00606-011-0465-8

ABSTRACT *Crocus antalyensis* B. Mathew is a bulbous plant endemic to Turkey. It is morphologically variable within the western part of Anatolia. Amplified fragment length polymorphism (AFLP) marker system was used to detect genetic variation among the *Crocus* taxa. Twenty-two primer combinations were used to screen for polymorphism among the samples. Genetic variation ranged from 0.44 to 0.69. We demonstrated the efficiency of the AFLP marker system for discriminating between individual *C. antalyensis* specimens. A high level of genetic variation was present among *C. antalyensis* specimens collected from different locations in Turkey. We also observed that *C. antalyensis* subsp. are genetically distinct from their relative *Crocus flavus* Haw. subsp. *dissectus* Baytop & B. Mathew. A new subspecies of *C. antalyensis* B. Mathew from southern Turkey is described. It is characterized by striped outer perianth segments, waist-shaped flowers, and glabrous throat of the perianth. A composite image of the new subspecies is presented.

<https://www.researchgate.net/publication/225129930> Genetic diversity of *Crocus antalyensis* B. Mathew (Iridaceae) and a new subspecies from southern Anatolia

Phylogeny, karyotype evolution and taxonomy of *Crocus* ser. Verni (Iridaceae)

[Doerte Harpke](#), [Angelino Carta](#), [Gordana Tomovic](#), [Vladimir Randelovic](#), [Novica Randelovic](#), [Frank R. Blattner](#), [Lorenzo Peruzzi](#)

Plant Systematics and Evolution (Impact Factor: 1.31). 06/2014;

ABSTRACT The taxonomically complicated *Crocus* series Verni is characterized by high intra- and interspecific variability of karyotypes ($2n = 8$ to 23). With the aim to get more insights into complex karyotype evolution and to clarify the taxonomy of this group we combined morphological (twelve characters), molecular (chloroplast DNA: trnL-trnF, ndhF; nuclear DNA: ITS, pCOSAt103), and karyological analyses. Samples of different populations of *C. etruscus*, *C. ilvensis*, *C. kosaninii*, *C. tommasinianus*, *C. vernus sensu lato*, and *C. longiflorus* (series Longiflori) were analyzed. Quantitative karyotype parameters were calculated for all taxa involved based on available literature. For the taxon traditionally known as *C. vernus*, the analyses suggest that it should be split in five species: *C. heuffelianus*, *C. neapolitanus*, *C. neglectus* sp. nov., *C. siculus*, and *C. vernus*. The comparison of genome total haploid lengths suggests that in the evolution of the group polyploidization only played a role within the *C. vernus* species complex, where we also detected two hybridization events. In all other taxa, chromosome evolution is probably characterized by chromosome fusions and fissions, sometimes affecting the entire haploid chromosome set. Comparative cytogenetics of the group indicates that series Verni is subject to a peculiar type of unequal change in chromosome size, i.e. that not both chromosome arms gain or lose equally in DNA content. As a taxonomic consequence of our study, series Verni is newly circumscribed, now including the autumn-flowering *C. longiflorus* and excluding *C. baytopiorum*.

<https://www.researchgate.net/publication/230271622> *Crocus ilvensis* sp. nov. (sect. *Crocus*, Iridaceae), endemic to Elba Island (Tuscan Archipelago, Italy)

***Crocus ilvensis* sp. nov. (sect. *Crocus*, Iridaceae), endemic to Elba Island (Tuscan Archipelago, Italy)**

[Lorenzo Peruzzi](#)

[Angelino Carta](#)

Nordic Journal of Botany (Impact Factor: 0.6). 02/2011; 29(1):6 - 13. DOI: 10.1111/j.1756-1051.2010.01023.x

ABSTRACT A new species of *Crocus* sect. *Crocus* is described as an endemic of Elba Island (Tuscan Archipelago, Italy): *C. ilvensis* Peruzzi & Carta sp. nov. ($2n=8$). The new species was wrongly referred to *C. corsicus* Vanucchi ($2n=18$), *C. etruscus* Parl. ($2n=8$) or *C. vernus* Hill. subsp. *vernus* ($2n=8, 16$) by previous authors. Its karyotype structure, asymmetry and chromosome dimensions show affinity with *C. etruscus*, and no clear relations with other related taxa. From a morphological point of view, *C. ilvensis* appears intermediate between *C. etruscus* and *C. vernus* subsp. *vernus*, showing however a peculiar combination of character-states. The new species is completely allopatric with other *Crocus* sect. *Crocus* taxa and its possible role in the origin of tetraploid races of *C. vernus* is discussed.

https://www.researchgate.net/publication/230271622_Crocus_ilvensis_sp._nov._%28sect._Crocus_Iridaceae%29_endemic_to_Elba_Island_%28Tuscan_Archipelago_Italy%29

Crocus ilvensis sp. nov. (sect. Crocus, Iridaceae), endemic to Elba Island (Tuscan Archipelago, Italy)

[Lorenzo Peruzzi](#)

[Angelino Carta](#)

Nordic Journal of Botany (Impact Factor: 0.6). 02/2011; 29(1):6 - 13. DOI: 10.1111/j.1756-1051.2010.01023.x

ABSTRACT A new species of *Crocus* sect. *Crocus* is described as an endemic of Elba Island (Tuscan Archipelago, Italy): *C. ilvensis* Peruzzi & Carta sp. nov. ($2n=8$). The new species was wrongly referred to *C. corsicus* Vanucchi ($2n=18$), *C. etruscus* Parl. ($2n=8$) or *C. vernus* Hill. subsp. *vernus* ($2n=8$, 16) by previous authors. Its karyotype structure, asymmetry and chromosome dimensions show affinity with *C. etruscus*, and no clear relations with other related taxa. From a morphological point of view, *C. ilvensis* appears intermediate between *C. etruscus* and *C. vernus* subsp. *vernus*, showing however a peculiar combination of character-states. The new species is completely allopatric with other *Crocus* sect. *Crocus* taxa and its possible role in the origin of tetraploid races of *C. vernus* is discussed.

https://www.researchgate.net/publication/234834672_Contributo_alla_conoscenza_della_flora_vascolare_endemica_di_Toscana_ed_aree_contermini._1._Crocus_etruscus_%28Iridaceae%29

Contributo alla conoscenza della flora vascolare endemica di Toscana ed aree contermini. 1. *Crocus etruscus* (Iridaceae).

Contribution to the knowledge of the endemic vascular flora of Tuscany and neighboring areas.

[A Carta](#) [B Pierini](#) [A Alessandrini](#) [F Frignani](#) [L Peruzzi](#)

Informatore Botanico Italiano 01/2010; 42(1):47-52.

ABSTRACT ABSTRACT - Contribution to the knowledge of the vascular flora endemic to Tuscany and neighbouring areas. I. *Crocus etruscus* (Iridaceae) - The distribution of the narrow endemic *Crocus etruscus* Parl. (a name lectotypified) is reported, by the analysis of herbarium specimens, bibliographic references and records in the field. This species occurs only in a restricted range of continental Tuscany (EOO: about 1892 Km²). Many of historical signallings of this species are confirmed or were recently confirmed by other authors, but for Volterra area (Pisa). Other reports of the species for Mount Pelato (Livorno), Tuscan Archipelago (Elba, Livorno) and Emilia-Romagna are shown to be erroneous. In particular, the plants from Elba Island are referred to a unit close to *C. corsicus* (Gay) Vanucci, still under study. On the other hand, new stands are documented for *C. etruscus*, in Cornate di Gerfalco (Grosseto) and Piombino Promontory (Livorno). The extinction risk for the species is mainly due to the possible habitat degradation and reduction, leading an assessment as Nearly Threatened (NT) according to the IUCN criteria for Red List categories.

Conference Paper : **Crocus serie Verni (Iridaceae) in Italia: novità tassonomiche**

[Angelino Carta](#) [Doerte Harpke](#) [Gordana Tomovic](#) [Vladimir Randelovic](#) [Novica Randelovic](#) [Frank R. Blattner](#) [Lorenzo Peruzzi](#)

Conference: "Contributi alla ricerca floristica in Italia", Società Botanica Italiana, Gruppo per la Floristica

"Contributions to the floristic research in Italy", the Italian Botanical Society, Group for floristry

https://www.researchgate.net/publication/258433163_Crocus_serie_Verni_%28Iridaceae%29_in_Italia_novita_tassonomiche

Many photos and comments on these can be found in the SRGC Forum:

<http://www.srgc.net/forum/index.php?board=10.0>

******The Forum is fully searchable from the Search Button in the row of options along the top of each page :

[Portal](#) [Forum](#) [Help](#) [Search](#) [Calendar](#) [Links](#) [Login](#) [Register](#)