

IOPB COLUMN

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IAPT/IOPB chromosome data 7

Edited by Karol Marhold

Luis Delgado*, Enrique Rico & Francisca Gallego Martín

Department of Botany, University of Salamanca, 37007 Salamanca, Spain. *ldelsan@usal.es (author for correspondence)

All materials CHN, collected in Spain; collectors: ER = E. Rico, JA = J.A. Sánchez-Agudo, LD = L. Delgado; vouchers in SALA.

* The chromosome numbers of the marked species have been counted for the first time.

** The chromosome numbers of the marked genera have been counted for the first time.

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APIACEAE

***Hohenackeria polyodon* Coss. & Durieu, $2n = 18$; LD 298, LD 299.

ASTERACEAE

***Daveaua anthemoides* Mariz, $n = 9$, $2n = 18$; ER 7866.

DROSERACEAE

Drosophyllum lusitanicum (L.) Link, $2n = 12$; LD 173.

MALVACEAE

***Malvella sherardiana* (L.) Jaub. & Spach, $n = 12$, $2n = 24$; ER 7484, LD 765.

PLANTAGINACEAE

Lafuentea rotundifolia Lag., $n = 21$, $2n = 42$; LD 111.

SCROPHULARIACEAE

**Verbascum barnadesii* Vahl, $2n = 48$; JA 68, LD 170. $2n = 55$ –58, ca. 62; LD 311. $n = 23$ –25, $2n = 48$; LD 168.

**Verbascum prunelli* V. Rodríguez Gracia & E. Valdés, $2n = 47$, 52, 53, 55; LD 110.

Verbascum virgatum Stokes, $n = 30$, $2n = 62$ –64; LD 208. $2n =$ ca. 68; LD 166.

Karin Persson

Botanical Garden, Carl Skottsbergs gata 22A, 41319 Göteborg, Sweden. karin.persson@vregion.se

All material CHN; vouchers in GB; collectors: ABS = Archibald, Blanchard & Salmon; ARG1 = Seisums & Tenbergs; ARJA = Seisums & Ruksans; AS = Strid; BATM = Swedish-Latvian Turkey Expedition 2004; BHHR = Binder, Hagemann, Hempel & Raus; B&R = Bothmer & Runemark; F&A = Foroughi & Assadi; HKEP = Kerndorff & Pasche; HR = Runemark; HZ = Zetterlund; JJA = J. & J. Archibald; JKP = J. & K. Persson; JP = J. Persson; KP = K. Persson; KPPZ = Kammerlander, Pasche, Persson & Zetterlund; KPS = Kerndorff, Pasche & Schacht; KPW = Knoche, Pasche & Wetzel; M&P = R. & M. Mertens & Pasche; OS = Sönderhausen; PJC = Christian; R&P = Runemark & J. Persson; R&W = Runemark & Wendelbo; RRW = R. & R. Wallis; SLIZE = Swedish-Latvian-Iranian Zagros Expedition 1998; T4Z = Tjeerdsma, Zetterlund, D. & R. Zschummel; W = Wendelbo; W&A = Wendelbo & Assadi; W&F = Wendelbo & Foroughi; W&M = Wendelbo & Masoumi. In case of missing collection numbers or dates the accession number of the Göteborg Botanical Garden (GBG) is given instead.

COLCHICACEAE

Colchicum alpinum DC., $2n = 54$; Switzerland, GBG 1976-0149.

Colchicum androcymbioides (Valdés) K. Perss., $2n = 54$; Spain, *Ubera* & Valdés 291/80.

Colchicum antilibanoticum Gomb., $2n = 14$; Lebanon, Johansson 1047, RRW 99-12; Syria, ARG1 02-09.

Colchicum arenarium Waldst. & Kit., $2n = 54$; Hungary, GBG 1990-1644; Moldavia, GBG 1984-0741; Romania, Pilous s.n. (GBG 1986-0898); Serbia, KP 400, Pilous s.n. (GBG 1987-0739).

Colchicum arenasii Fridl., $2n = 162$; Italy, *Camarda* 199, KP 547.

Colchicum atticum Spruner, $2n = 54$; Greece, Hansen & Nielsen 6724, JKP 98-39, KP 314, KP 351; Turkey, JJA 5999, KP 440A, KP 452A, KP 511, KP 520, R&W 48, R&W cult. 59D, R&W cult. 68D, R&W cult. 125B, R&W cult. 129C.

Colchicum autumnale L., $2n = 36$; Bulgaria, Dresden Bot. Gard. 1977; France, KP 345, Ville Bot. Gard. 1976; Italy, Grenoble Bot. Gard. 1976, KP 232; Spain, 1963, *Wide s.n.*; Switzerland, Basel Bot. Gard. 1976.

Colchicum balansae Planch., $2n = 108$; Greece, *Jope s.n.* (GBG 1988-0642); 02 Oct 1975, *Wollin s.n.*; Turkey, JJA 6765.

All materials for the chromosome column should be submitted electronically to: Karol Marhold, karol.marhold@savba.sk (Institute of Botany, Slovak Academy of Sciences, SK-845 23 Bratislava, Slovakia, and Department of Botany, Charles University, CZ 128-01 Prague, Czech Republic). The full version of this contribution is available in the online edition of TAXON. The following citation format is recommended: Baltisberger, M. & Voelger, M. 2006. *Sternbergia sicula*. In: Marhold, K. (ed.), IAPT/IOPB chromosome data 1. *Taxon* 55: 444, E2.

- Colchicum bivonae* Guss., $2n = 48$; Croatia, *KP 376*; Greece, *AS 79-34, AS & al. 76-43-10, AS & al. 76-68-01, AS & al. 12823, AS & al. 12824, BHHR 55, BHHR 155, BHHR 840, HR & al. 20, JKP 01-10*, Apr 1984 *Jonasson s.n., JP 4414, JP 4460, KP 242, KP 243, KP 244, KP 247, KP 250, KP 254, KP 255, KP 256, KP 262, KP 265, KP 266, KP 268, KP 274, KP 316, KP 328, KP 330, Papanicolaou 919 & 957*, Oct 1979 *Pavlidis s.n., Snogerup & Gustafsson 43099*; Italy, *KP 364, KP 365, KP 390, KP 494, KP 498*; Turkey, *KP 426*.
- Colchicum bulbocodium* Ker Gawl. subsp. *bulbocodium*, $2n = 22$; France, *Hoog 8212*.
- Colchicum bulbocodium* subsp. *versicolor* (Ker Gawl.) K. Perss., $2n = 22$; Ukraine, *Savisaar s.n.* (GBG 1997-2721).
- Colchicum burttii* Meikle, $2n = 54$; Greece, *KP 558*; Turkey, *JJA 5991, HKEP 95-24, KP 440B, KP 449, KP 452B, KP 500, R&W cult. 36B, R&W cult. 122A, R&W cult. 138D*.
- Colchicum chimonanthum* K. Perss., $2n = 32$; Greece, *JKP 98-14, JKP 98-26*.
- Colchicum corsicum* Baker, $2n = 216$; France, *KP 350*.
- Colchicum cretense* Greuter, $2n = 36$; Greece, *AS 55018, JP 85-21, KP 233, Lemperg 580*.
- Colchicum crocifolium* Boiss., $2n = 14$; Iran, *Foroughi 1153, W&A 16727*; Turkey, *BATM 049, BATM 393, JJA 6200, KPPZ 90-167, KPPZ 90-173*.
- Colchicum cupanii* Guss. subsp. *cupanii*, $2n = 54$; Greece, *Aspland s.n.* (GBG 1993-2141), *Hansen 27138, HR 3982, HR 3993, HR 4338, HR 4373, HR 4409, HR 4416, HR 4420, HR 4424, HR 4429, HR & Bentzer 26764, R&P 22669*; Italy, *KP 358, KP 359, KP 360*; Malta, *JJA s.n.* (GBG 1989-0729); Tunisia, *Gustafsson Tu-08, Tu-11*.
- Colchicum cupanii* subsp. *glossophyllum* (Heldr.) Rouy, $2n = 54$; Greece, *JP 87-106, KP 320, KP 321, KP 322, KP 323, KP 325, KP 326, KP 329, KP 334, KP 335, KP 336, KP 362, KP 413, KP 419, OS 654*.
- Colchicum decaisnei* Boiss., $2n = 54$; Lebanon, 1958 *Richter s.n.*
- Colchicum doerfleri* Halácsy, $2n = 54$; FYR Macedonia, *KP 312, KP 313*; Greece, *AS & Gustavsson 76-90-01, BHHR 760, KP 318, KP 338, KP 339, KP 340*.
- Colchicum eichleri* (Regel) K. Perss., $2n = 18$; Russian Fed., N. Ossetia, *Cuba 90-296*.
- Colchicum fasciculare* (L.) R.Br., $2n = 14$; Syria, *ARGI 02-116*.
- Colchicum feinbruniae* K. Perss., $2n = 22$; Lebanon, *RRW 99-32, RRW 99-33, RRW 99-46*.
- Colchicum figlalii* (Varol) Parolly & Eren, $2n = 54$; Turkey, *AS & al. 23350*.
- Colchicum filifolium* (Cambess.) Stef., $2n = 54$; Morocco, *Aldén & al. EAC 022*; Spain, *Holmdahl 1676*; Majorca, *Mathew 6961*.
- Colchicum freynii* Bornm., $2n = 54$; Armenia, 13 Apr 1978 *Gabrielian s.n.*, 11 Jun 1978 *Gabrielian s.n.*; Iran, *W&A 19186, W & al. 19048, W&M 19058, W&M 19063, W&M 19080*.
- Colchicum gonarei* Camarda, $2n = 180$; Italy, *KP 543, KP 544*.
- Colchicum graecum* K. Perss., $2n = 44$; Greece, *KP 548*.
- Colchicum haynaldii* Heuff., $2n = 96$; Greece, *AS & al. 98-77-03*.
- Colchicum hirsutum* Stef., $2n = 14$; Turkey, *KPPZ 90-179, KPPZ 90-183*.
- Colchicum hissaricum* (Regel) Stef., $2n = 54$; Tajikistan, *Seisums s.n.* (GBG 1992-2007).
- Colchicum hungaricum* Janka, $2n = 54$; Bosnia & Herzegovina, *KP 308, KP 309, KP 310*; Croatia, *KP 306, KP 307*; Hungary, *GBG 1990-1623*.
- Colchicum kesselringii* Regel, $2n = 54$; Afghanistan, *Furse 6207, W & Ekberg 9654*; Kirgizstan, *ARJA 97-27*; Tajikistan, *Böhme s.n.* (GBG 1988-0478), *Kosa s.n.* (GBG 1990-1246), *Polivka PK 22/75, Seisums s.n.* (GBG 1997-2606); Uzbekistan, *Seisums & Veerus 94-42, Seisums & Veerus 94-90*.
- Colchicum kesselringii* Regel \times *C. luteum* Baker, $2n = 54$; Tajikistan, *Seisums s.n.* (GBG 1995-2245).
- Colchicum kotschyi* Boiss., $2n = 20$; Iran, *F&A 19768A, 1972 Ingham s.n., Kashkouli 8207E, Klein 1266, Rechinger 42520, SLIZE 002, W&A 16488B, W&A 27916, W & al. 11804, 23 May 1975 W s.n., 1976 W s.n.*
- Colchicum kurdicum* (Bornm.) Stef., $2n = 20$; Turkey, *M&P 85-125, OS 927*.
- Colchicum leptanthum* K. Perss., $2n = 18$; Turkey, *BATM 188*.
- Colchicum longifolium* Castagne, $2n = 144$ (or ca. 140); France, *KP 344, KP 346, KP 347, KP 348, PJC 259*; Italy, *JKP 9930, KP 542*; Morocco, *Jury & al. 8870, KPW 94-44*; Spain, *Majorca, Rossello 96-1640*.
- Colchicum lusitanum* Brot., $2n = 108$; Italy, *KP 367, KP 545*; Spain, *Eide s.n.* (GBG 1990-2142), *JJA 12133, KP 530, KP 531, KP 534*, Apr 1981 *Lidén s.n.* $2n = 162$; Spain, *Eide s.n.* (GBG 1990-2143), *KP 532, KP 535, KP 538, KP 539, Lidén 81-10*.
- Colchicum luteum* Baker, $2n = 54$; India, *Kashmir, McBeath 1596*; Tajikistan, *Böhme s.n.* (GBG 1986-0509), *Cuba GG87VV*; Uzbekistan, *ARJA 97-65*.
- Colchicum macedonicum* Košanin, $2n = 54$; FYR Macedonia, *HZ 85-65*.
- Colchicum macrophyllum* B.L. Burtt, $2n = 54$; Greece, *HR & al. 45143, KP 551*, 28 Mar 1970 *R&W s.n., Snogerup & Gustafsson 42266*; Turkey, *HKEP 01-19, R&W cult. 144*.
- Colchicum manissadjianii* (Azn.) K. Perss., $2n = 22$; Turkey, *A. & T. Baytop ISTE 48474*.
- Colchicum micranthum* Boiss., $2n = 54$; Turkey, *T. Baytop ISTE 31546*.
- Colchicum montanum* L., $2n = 54$; Portugal, *PJC 365*; Spain, *HZ 00-003, KP 528*, 1964 *Nitzelius s.n.*
- Colchicum multiflorum* Brot., $2n = 144$; Spain, 27 May 1990 *Lidén s.n.*
- Colchicum neapolitanum* (Ten.) Ten., $2n = 90, 92$; Italy, *KP 391, KP 392, KP 396, KP 487, KP 488, KP 489, KP 490, KP 495, KP 496*.
- Colchicum parlatoris* Orph., $2n = 54$; Greece, *KP 248, KP 253, KP 357, KP 361, PJC 159, PJC 190, Young 397, Young 625*.
- Colchicum parnassicum* Sartori, Orph. & Heldr., $2n = 54$; Greece, *AS & al. 98-83-03*.
- Colchicum peloponnesiacum* Rech. f. & P.H. Davis, $2n = 44$; Greece, *JKP 98-99, KP 356, KP 417*.
- Colchicum persicum* Baker, $2n = 54$; Iran, *Bokhari & W 17, Bokhari & W 226, F&A 15099, F&A 17941, JJA 1914, SLIZE 155, SLIZE 169, SLIZE 180, SLIZE 267, SLIZE 275, SLIZE 298, Tehran Bot. Gard. s.n.* (GBG 1987-0890), *W&A 16690, W&A 16743, W & Shirdelpur 14956, 1976 W s.n.*; Turkey, *KPPZ 90-127, KPPZ 90-134*.
- Colchicum polyphyllum* Boiss. & Heldr., $2n = 22$; Turkey, *HKEP 92-09, KP 443, KP 446, KP 462, KP 463, KP 464, KP 466, KPPZ 90-106, OS 1072, T. Baytop ISTE 56870*.
- Colchicum psaridis* Heldr. ex Halácsy, $2n = 54$; Greece, *KP 414, KP 415, Young 399*.
- Colchicum pusillum* Sieber, $2n = 54$; Greece, *KP 352, KP 353, KP 354, KP 355, KP 472*.
- Colchicum raddeanum* (Regel) K. Perss., $2n = 20$; Armenia, *Cuba 86-306, 15 May 1978 Gabrielian s.n.*, 12 May 1978 *Manakian s.n., Prasil s.n.* (GBG 1983-0493); Georgia, *Cuba 90-038*; Iran, *F&A 19777, SLIZE 034, W&A 19247, W&A 27803*; Turkey, *JJA 6598, OS 897, OS 1113, OS 1245*.

- Colchicum ritchii* R. Br., $2n = 14$; Israel, Eggers 87-G-674, *Feinbrun s.n.* (GBG 1982-0187); Saudi-Arabia, *Collenette 5704*; Syria, *ARGI 02-133*.
- Colchicum robustum* (Bunge) Stef., $2n = 54$; Afghanistan, *W & al. 7369a*; Iran, *Furse 7391*, *Furse 7459*, *Furse 7523*, *Furse 7526*, *T4Z 1145*, *W&A 29604*, *W&A 29770*, May 1978 *W&A s.n.*; *W & al. 19046*, *W&M 19024*; Pakistan, *Nasir & Ali 3537*; Turkmenistan, *GBG 1980-0073 & 1982-0081*, *Tuniyev s.n.* (GBG 1993-1598).
- Colchicum sanguicolle* K. Perss., $2n = 22$; Turkey, *HKEP 93-68*, *HKEP 96-17*, *HKEP 01-16*.
- Colchicum schimperii* Janka, $2n = 14$; Iran, *Bokhari & W 319*, *Bokhari & W 320*, *F&A 17903*, *SLIZE 264*, *W&F 15297*; Jordan, *KPS 95-07*, *KPS 95-17*; Syria, *ARGI 02-039*.
- Colchicum serpentinum* Woronow ex Miscz., $2n = 18$; Turkey, *HKEP 96-01*, *HKEP 00-03*, *HKEP 01-09*, *JJA 6707*, 20 Apr 1992 *Jonasson s.n.* (GBG 1992-1971), *JP 88-29*, *KPPZ 90-27*, *KPPZ 90-51*, *KPPZ 90-77*, *KPPZ 90-139*, *KPPZ 90-311*, *KPPZ 90-330A*, *OS 858*. $2n = 18-20$; Turkey, *JJA 6657A*, *KP 441*, *KP 444*. $2n = 20$; Turkey, *HKEP 93-52*. $2n = 20-22$; Turkey, *T. Baytop ISTE 46240*.
- Colchicum soboliferum* (Fisch. & C.A. Mey.) Stef., $2n = 54$; Iran, *W & al. 11815*, *W&F 19037*; Romania, *GBG 2000-0264*; Turkey, *BATM 083*.
- Colchicum speciosum* Steven, $2n = 38$; Russian Fed., *Cuba 89-116*. $2n = 40$; Iran, *W&A 27766*, *W&A 29670A*. $2n = 40, 42, 44$; Iran, *JJA 2486A*, 1975, *W s.n.*
- Colchicum stevenii* Kunth, $2n = 54$; CHN. Palestine Terr., *Hallerlander s.n.* (GBG 1986-0689); Turkey, *HKEP 93-71*, *HKEP 93-75*, *HKEP 95-49*, *HKEP 98-29*, *KP 471*, *Leep L78/T50*.
- Colchicum szovitsii* Fisch. & C.A.Mey. subsp. *szovitsii*, $2n = 18$; Armenia, 14 Apr 1978 *Gabrielian s.n.* (GBG 1978-0042); Bulgaria, *GBG 1983-0244*; Iran, 1978, *HR & al.*, *W&A 19214*, *W&M 19107*, *W&M 19111*; Turkey, *JJA 6474*, *JJA 6515*, *Jonasson s.n.* (GBG 1993-1454), *KP 510*, *KPPZ 90-216*, *M&P 85-115*, *OS 801*. $2n = 36$; Iran, *W s.n.* (GBG 1978-0102).
- Colchicum szovitsii* subsp. *brachyphyllum* (Boiss. & Hausskn.) K. Perss., $2n = 18$; Turkey, *HKEP 99-07*, *Jonasson s.n.* (GBG 1990-2186), *OS 1030*, *OS 1033*, *OS 1058*.
- Colchicum trigynum* (Steven ex Adams.) Stearn, $2n = 18$; Armenia, 08 Mar 1978 *Gabrielian s.n.*, 08 May 1978 *Gabrielian s.n.*, *Prasil 117*, *Prasil s.n.* (GBG 1983-494); Georgia, *Cuba 90-088*; Iran, *Rechinger 33038a*, *W&A 19257*, *W&A 19416*, *W&A 27832*, 18 May 1978 *W&A s.n.*, *W&M 19108*, 10 Apr 1976 *W&M s.n.*; Turkey, *JJA 6358*, *JJA 6374*. $2n = 20$; Turkey, *JJA 6323*, *JJA 6587B*.
- Colchicum triphyllum* Kunze, $2n = 40$; Iran, *W&A 19195*; Turkey, *KP 434*, *R&W 338*, *R&W cult. 132A*. $2n = 40, 45, 50-54$; Turkey, *KP 438*, *KP 499*, *KP 503*, *KPPZ 330B*, *R&W cult. 69C*. $2n = 50$; Morocco, *KPW 94-28*, *Tattersfield DMT 91/45*; Spain, 09 Apr 1979 *Holmdahl s.n.*, *Strindberg & Holmberg s.n.* (GBG 1991-1791). $2n = 50-54$; Turkey, *JJA 6688*, *KP 436*, *OS 1214*. $2n = 60, 62$; Bulgaria, 1976 *Dresden Bot. Gard. s.n.*; Greece, *KP 327*, *KP 333*, *KP 549*; Italy, *KP 366*; Romania, *Pilous s.n.* (GBG 1986-0899).
- Colchicum troodi* Kotschy, $2n = 54$; Cyprus, 1980 *Kugelberg s.n.*, *Strindberg s.n.* (GBG 1985-0676).
- Colchicum tunicatum* Feinbrun, $2n = 54$; Jordan, *KPS 95-22*.
- Colchicum turcicum* Janka, $2n = 54$; Bulgaria, *AS & al. 51184*; Turkey, 1966 *Nitzelius & Dahlbeck s.n.*, *T. Baytop ISTE 42421*.
- Colchicum tuviae* Feinbrun, $2n = 14$; Palestine Terr., 01 Dec 1981 *Shmida s.n.*
- Colchicum umbrosum* Steven, $2n = 24$; Georgia, *Cuba 91-068*; Russian Fed., *Bondarenko s.n.* (GBG 1999-0795), *Zurowetz 04-046*; Turkey, *JJA 6956*, *KP 425*, *M&P 85-107*, *M&P 88-05B*, *T. Baytop ISTE 49641*; Ukraine, *GBG 1984-440*, *GBG 1976-0196*.
- Colchicum varians* (Frey & Bornm.) Dyer, $2n = 46$; Iran, *Bokhari & W 323*, *SLIZE 105*, *T4Z 020*, *T4Z 063*, *T4Z 150*, *T4Z 153*, *W 16377y*, *W&A 16362z*, *W&A 16363x*, *W&M 19032*, *W&M 19040*.
- Colchicum variegatum* L., $2n = 54$; Greece, 24 Apr 1974 *B&R s.n.*, 25 Apr 1974 *B&R s.n.* (4 collections), *HR & al. 40130*, 25 Mar 1970 *R&W s.n.* (2 collections); Turkey, *JJA 6046*, *JJA 6050*, *KP 427*, *KP 429*, *OS 1157*, *R&W 14*, *R&W 101D*, *R&W 112B*, *R&W cult. 2B*, *R&W cult. 15A*, *R&W cult. 31A*, *R&W cult. 55C*, *R&W cult. 58A*, *R&W cult. 72A*, *R&W cult. 99B*, *R&W cult. 142B*, 12 Apr 1969 *Wollin s.n.*
- Colchicum wendelboi* K. Perss., $2n = 24$; Iran, *SLIZE 129*, *SLIZE 225*, *T4Z 134*, *T4Z 167*.

Katarína Olšovská^{1,2*} & Marián Perný^{1,2}

¹ Institute of Botany, Slovak Academy of Sciences, Dúbravská cesta 14, 845 23 Bratislava, Slovak Republic.

*katarina.olsavska@savba.sk (author for correspondence)

² Faculty of Natural Sciences, Matej Bel University, Tajovského 40, 974 01, Banská Bystrica, Slovak Republic

All materials collected in France; chromosome numbers counted and ploidy level estimated by K. Olšovská; collectors: *DD* = D. Dítě, *KO* = K. Olšovská, *MP* = M. Perný, *VK* = V. Kolarčík; vouchers in SAV.

Accepting *Cyanus* as a genus separate from *Centaurea* as presented in the Euro+Med PlantBase (Greuter in Willdenowia 33: 49–61. 2003 and at <http://www.emplantbase.org>, 2008) requires the new combination, *Cyanus graminifolius*, because Greuter (in Willdenowia 35: 229. 2005 and at <http://www.emplantbase.org>, 2008) did not recognise this taxon as a separate species from *C. triumfettii* (All.) Á. Löve & D. Löve.

ASTERACEAE

- Cyanus graminifolius* (Lam.) Olšovská, **comb. nov.** Basionym: *Jacea graminifolia* Lam., Fl. Franç. 3: 638. 1779 ≡ *Centaurea axillaris* Willd., Sp. Pl. 3: 2290. 1803, nom. illeg. ≡ *C. variegata* Lam., Encycl. 1: 668. 1785, nom. illeg. ≡ *C. montana* subsp. *axillaris* Čelak., Prodr. Fl. Böhmen: 252. 1871 ≡ *Cyanus triumfettii* subsp. *axillaris* (Čelak.) Štěpánek in Slavík & Štěpánková, Květena České Republ. 7: 455. 2004.
- = *Centaurea seusana* Chaix in Vill., Hist. Pl. Dauphiné. 1: 365. 1786.
- $2n = 40$, CHN. *KO*, *MP* & *DD 65/4*. $2n \sim 4x \sim 40$, FCM. *KO*, *MP* & *DD 65/1*, *KO*, *MP* & *DD 65/4*, *KO*, *MP* & *DD 65/7*, *KO*, *MP* & *DD 65/9*, *KO*, *MP* & *DD 65/10*, *KO*, *MP* & *VK 101/2*, *KO*, *MP* & *VK 101/3*, *KO*, *MP* & *VK 101/10*, *KO*, *MP* & *VK 101/11*, *KO*, *MP* & *VK 101/15*, *KO*, *MP* & *VK 101/18*, *KO*, *MP* & *VK 101/19*, *KO*, *MP* & *VK 102/3*.

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Department of Botany, University of Salamanca, 37007 Salamanca, Spain. *ldelsan@usal.es (author for correspondence)

All materials CHN, collected in Spain; vouchers in SALA.

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APIACEAE

***Hohenackeria polyodon* Coss. & Durieu

$2n = 18$; Spain, Arévalo, castle slopes, 41°03' N, 4°43' W, 820 m, slopes with subnitrophylous shrub, 8 May 2000, *L. Delgado, M. Martínez-Ortega, J.A. Sánchez-Agudo & E. Rico, LD 298* [Fig. 1A] (SALA 129506); Spain, Segovia, Martín Muñoz de la Dehesa, 41°03' N, 4°42' W, 820 m, clearing in subhalophytic grassland near the road, 8 May 2000, *L. Delgado, M. Martínez-Ortega, J.A. Sánchez-Agudo & E. Rico LD 299* (SALA 129505) [Fig. 1B].

These are the first chromosome number counts for this taxon, endemic to the Iberian Peninsula and NW of Africa, and the first chromosome number counts for *Hohenackeria*, genus with two species distributed in the Mediterranean region and adjacent part of SW Asia. The chromosomes are small (<2 μ m) and similar in size.

ASTERACEAE

***Daveaua anthemoides* Mariz

$n = 9$; $2n = 18$; Spain, Cáceres, Logrosán, “las Chamizas”, 41°03' N, 4°42' W, 420 m, stream bank, rush pastures, 16 Jun 2004, *E. Rico ER 7866* (SALA 129507) [Figs. 1C, D].

This is the first chromosome number count for this taxon and for the monotypic genus *Daveaua*, endemic to Morocco and SW Iberian Peninsula. The haploid number ($n = 9$) has been counted in meiotic metaphase I in embryo-sac mother cell (Fig. 1C). The chromosome size range between 1.6–5.8 μ m, and the karyotype is mainly composed of metacentric and some submetacentric chromosomes.

DROSERACEAE

Drosophyllum lusitanicum (L.) Link

$2n = 12$; Spain, Cáceres, Santiago de Alcántara, road of Vica de Barreros, 39°34' N, 7°13' W, 500 m, clearing of pine wood with *Cistus ladanifer* shrub, 22 May 1999, *L. Delgado & J.A. Sánchez-Agudo LD 173* (SALA 129509) [Fig. 1E].

MALVACEAE

***Malvella sherardiana* (L.) Jaub. & Spach

$n = 12$, $2n = 24$; Spain, Arévalo, 39°24' N, 5°34' W, 830 m, fallow land, mudstone, 20 Jun 2000, *L. Delgado & E. Rico ER 7484* (SALA 101819) [Fig. 1F]; Spain, Arévalo, W of “la Mesilla”, near river Adaja, 41°04' N, 4°42' W, 26 May 2001, *L. Delgado & A. González-Talaván LD 765* (SALA 105672) [Fig. 1G].

This is the first chromosome number count for this taxon and for the genus *Malvella*; the genus comprises four species, one native to the Mediterranean region (*M. sherardiana*) and the remaining ones to the American continent. Our chromosome count ($2n = 24$) differs from “probably $2n = 32$ ” by Bayer & Kubitzki (2003). The haploid number ($n = 12$) has been counted in meiotic metaphase I in pollen mother cell (Fig. 1F).

PLANTAGINACEAE

Lafuentea rotundifolia Lag.

$n = 21$, $2n = 42$; Spain, Almería, Pechina, Baños de Sierra de Alhamilla, 36°57' N, 2°23' W, 650 m, slopes near to road, 26 Apr 1999 *F., Amich, S. Bernardos, L. Delgado, E. Rico & J. Sánchez-Rodríguez LD 111* (SALA 108135) [Fig. 1H].

Our chromosome counts agree with the only known report for this species given by Baltisberger & Charpin (1989). The haploid number ($n = 21$) has been counted in meiotic metaphase I in pollen mother cell (Fig. 1H).

SCROPHULARIACEAE

**Verbascum barnadesii* Vahl

$2n = 48$; Spain, Huelva, Villanueva de los Castillejos, 37°25' N, 7°19' W, 174 m, fallow land, 21 Apr 2000, *J.A. Sánchez-Agudo JA 68* (SALA 130224) [Figs. 1I, J]; Spain, Cáceres, Monroy, 39°39' N, 6°14' W, 420 m, roadside, 22 May 1999, *L. Delgado & J.A. Sánchez-Agudo LD 170* (SALA 129511).

$2n = 55$ –58, ca. 62; Spain, Salamanca, Carpio de Azaba, 40°34' N, 6°36' W, 640 m, roadside, 5 Jun 2000, *L. Delgado LD 311* (SALA 129518).

All materials for the chromosome column should be submitted electronically to: Karol Marhold, karol.marhold@savba.sk (Institute of Botany, Slovak Academy of Sciences, SK-845 23 Bratislava, Slovakia, and Department of Botany, Charles University, CZ 128-01 Prague, Czech Republic). The full version of this contribution is available in the online edition of TAXON. The following citation format is recommended: Baltisberger, M. & Voelger, M. 2006. *Sternbergia sicula*. In: Marhold, K. (ed.), IAPT/IOPB chromosome data 1. *Taxon* 55: 444, E2.

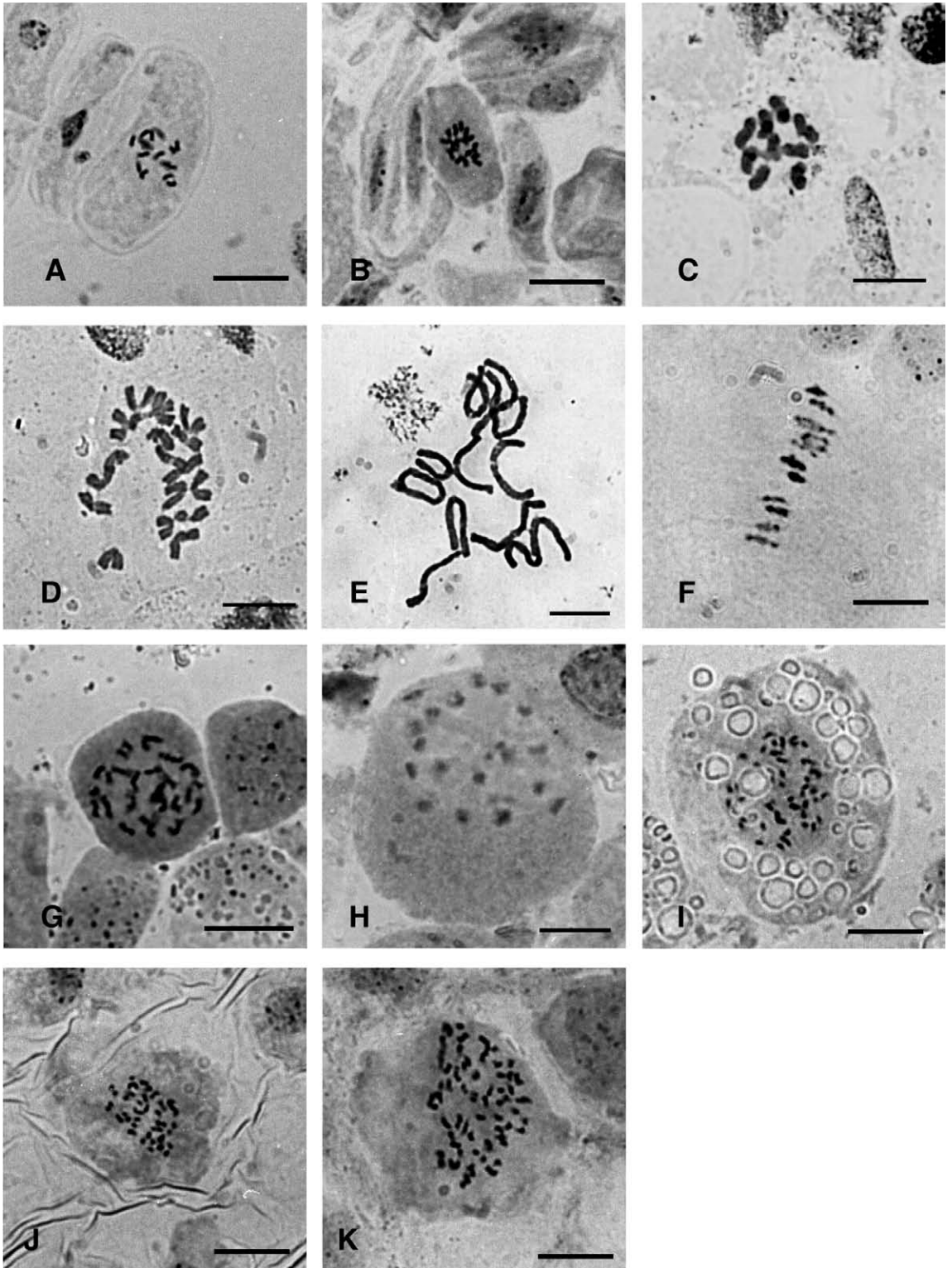


Fig. 1. A–B, *Hohenackeria polyodon*; A, mitotic metaphase, $2n = 18$ (SALA 129506); B, mitotic metaphase, $2n = 18$ (SALA 129505). C–D, *Daveaua anthemoides*; C, meiotic metaphase I in embryo-sac mother cell, $n = 9$; D, mitotic metaphase, $2n = 18$ (SALA 129507). E, *Drosophyllum lusitanicum*, mitotic metaphase, $2n = 12$ (SALA 129509). F–G, *Malvella sherardiana*; F, meiotic metaphase I in pollen mother cell, $n = 12$ (SALA 101819); G, mitotic metaphase, $2n = 24$ (SALA 105672). H, *Lafuentea rotundifolia*, meiotic metaphase I in pollen mother cell (SALA 108135). I–J, *Verbascum barnadesii*, mitotic metaphase, $2n = 48$ (SALA 130224). K, *Verbascum virgatum*, mitotic metaphase, $2n = 62-64$ (SALA 129513). Scale bar = 10 μm .

$n = 23-25$, $2n = 48$; Spain, Cáceres, Malpartida de Plasencia 39°54' N, 6°13' W, 380 m, roadside, 22 May 1999, *L. Delgado & J.A. Sánchez-Agudo* LD 168 (SALA 129510).

These are the first chromosome number counts for this Iberian Peninsula endemic. The karyotype is composed of small chromosomes (0.4–1.6 μm), mostly smaller than 1 μm .

**Verbascum prunelli* V. Rodr. & Valdés Berm.

$2n = 47, 52, 53, 55$; Spain, Almería, Pechina, Baños de Sierra de Alhamilla, 36°57' N, 2°23' W, 650 m, slopes near to road, 26 Apr 1999, *F. Amich, S. Bernardos, L. Delgado, E. Rico, J. Sánchez-Rodríguez* LD 110 (SALA 129514).

These are the first chromosome number counts for this Iberian Peninsula endemic. The chromosomes are small (<1 μm) and similar in size. The variation in the chromosomal number represents an aneuploid series.

Verbascum virgatum Stokes

$n = 30$; $2n = 62-64$; Spain, Asturias, Lena, roadside near to Pajares, 43°00' N, 5°46' W, 1,100 m, 26 Jun 1999, *L. Delgado, M. Martínez-Ortega* LD 208 [Fig. 1K] (SALA 129513). $2n = \text{ca. } 68$; Spain, Cáceres, Malpartida de Plasencia, 39°54' N, 6°14' W, 380 m, roadside, 22 May 1999, *L. Delgado & J.A. Sánchez-Agudo* LD 166 (SALA 129512).

The karyotype is composed of small chromosomes (0.5–2.6 μm), most of them less than 1 μm long.

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- Bayer, C. & Kubitzki, K.** 2003. Malvaceae. Pp. 225–311 in: Kubitzki, K. & Bayer, C. (eds.), *The Families and Genera of Vascular Plants*, vol. 5, *Malvales, Capparales, and Non-betalain Caryophyllales*. Springer-Verlag, Berlin.

Karin Persson

Botanical Garden, Carl Skottsbergs gata 22A, 41319 Göteborg, Sweden. karin.persson@vgregion.se

Abbreviations of collectors: *ABS* = Archibald, Blanchard & Salmon; *ARGI* = Seisums & Tenbergs; *ARJA* = Seisums & Ruksans; *AS* = Strid; *BATM* = Swedish-Latvian Turkey Expedition 2004; *BHHR* = Binder, Hagemann, Hempel & Raus; *B&R* = Bothmer & Runemark; *F&A* = Foroughi & Assadi; *HKEP* = Kerndorff & Pasche; *HR* = Runemark; *HZ* = Zetterlund; *JJA* = J. & J. Archibald; *JKP* = J. & K. Persson; *JP* = J. Persson; *KP* = K. Persson; *KPPZ* = Kammerlander, Pasche, Persson & Zetterlund; *KPS* = Kerndorff, Pasche & Schacht; *KPW* = Knoche, Pasche & Wetzel; *M&P* = R. & M. Mertens & Pasche; *OS* = Sønnerhousen; *PJC* = Christian; *R&P* = Runemark & J. Persson; *R&W* = Runemark & Wendelbo; *RRW* = R. & R. Wallis; *SLIZE* = Swedish-Latvian-Iranian Zagros Expedition 1998; *T4Z* = Tjeerdsma, Zetterlund, D. & R. Zschummel; *W* = Wendelbo; *W&A* = Wendelbo & Assadi; *W&F* = Wendelbo & Foroughi; *W&M* = Wendelbo & Masoumi. In case of missing collection numbers or dates the accession number of the Göteborg Botanical Garden (GBG) is given instead.

* First chromosome count for the species/subspecies.

- ** Chromosome number reported earlier as new by the author but without specified locality and citation of voucher.
! New chromosome number for the species/subspecies.

More chromosome counts by the present author for the genus *Colchicum* are found in Persson (1988–2008). The relevant taxonomy and nomenclature for the genus is presented in Persson (2007).

COLCHICACEAE

Colchicum alpinum DC.

$2n = 54$, CHN. Switzerland, Valais, 1,650 m, 1976, GBG 1976-0149 (GB).

Colchicum androcymbioides (Valdés) K. Perss.

* $2n = 54$, CHN. Spain, Málaga, 6 km of Ronda, 1980, *Ubera & Valdés* 291/80 (GB).

Colchicum antilibanoticum Gomb.

Earlier reports from Syria for *C. tauri* Siehe probably refer to this species.

! $2n = 14$, CHN. Lebanon, Bekaa, Hazerta, Apr 1999, *RRW 99-12* (GB); Lebanon, North Lebanon, 15 km above Bcharré, ca. 2,000 m, 2004, *Johansson 1047* (GB); Syria, Damascus, Antilebanon range above Bloudan, 1,500–1,600 m, 2002, *ARGI 02-09* (GB).

Colchicum arenarium Waldst. & Kit.

Previous reports by other authors for *C. fominii* Bordz. refer to this species.

$2n = 54$, CHN. Hungary, Pest, Foti-Somlyo, GBG 1990-1644 (GB); Moldavia, Anenii Noi, Chekur-Minzhir, GBG 1984-0741 (GB); Romania, Tulcea, Dobrudja, Cheia gorge, 1986, *Pilous s.n.*, GBG 1986-0898 (GB); Serbia, Vojvodina, Deliblatska peščara, Devojački Bunar, 100 m, 28 Sep 1984, *KP 400* (GB); Serbia, Vojvodina, Deliblatska peščara, Devojački Bunar, 1987, *Pilous s.n.*, GBG 1987-0739 (GB).

Colchicum arenasii Fridl.

* $2n = 162$, CHN. Italy, Sardegna, Stintino, Coscia di Donna, 29 Sep 1976, *Camarda 199* (GB); Italy, Sardegna, SW of Stagno di Casaraccio, 40 m, 04 Oct 1992, *KP 547* (GB).

Colchicum atticum Spruner.

Previous reports by other authors for *Merendera attica* (Spruner) Boiss. & Spruner or *M. rhodopea* Velen. refer to this species.

$2n = 54$, CHN. Greece, Attiki, Mt. Pendeli, S of the top, 600 m, 29 Nov 1978, *KP 351* (GB); Greece, Evvia, 2 km of Psachna-Kamaritsa road to Stavros, 250 m, 15 Mar 1998, *JKP 98-39* (GB); Greece, Drama, along road from Drama to Neurokopion, 275 m, 16 Mar 1976, *KP 314* (GB); Greece, Lesvos, above Karionas, 500–650 m, 1992, *Hansen & Nielsen 6724* (GB); Turkey, Antalya, 31 km from Korkuteli to Elmali, 1,350 m, 22 Apr 1987, *KP 440A* (GB); Turkey, Antalya, W of Avlan Gölü, 1,500 m, 26 Apr 1972, *R&W cult. 59D* (GB); Turkey, Burdur, 10 km of Sögüt to Fethiye, 1,400 m, 18 Apr 1991, *KP 511* (GB); Turkey, Burdur, Burdur, 1,000 m, 28 Apr 1972, *R&W cult. 68D* (GB); Turkey, Burdur, Burdur to Tefenni, 2 km after turn to Yeşilova, 1,150 m, 29 Apr 1987, *KP 452A* (GB); Turkey, Burdur, foothills of Eşler Dağı above Salda Gölü, 800 m, 27 Apr 1985, *JJA 5999* (GB); Turkey, Denizli, Baba Dağ above pass, 1,100–1,500 m, 23 Apr 1991, *KP 520* (GB); Turkey, İsparta, Hoyran Gölü, 950 m, 06 May 1972, *R&W cult. 129C* (GB); Turkey, İzmir, Samsun Dağı, 750 m, 14 Apr 1972, *R&W 48* (GB); Turkey, Konya, 5 km SE of Akşehir, 1,400 m, 06 May 1972, *R&W cult. 125B* (GB).

Colchicum autumnale L.

$2n = 36$, CHN. Bulgaria, Blagoevgrad, Pirin Mts., Bansko, 1977, *Dresden Bot. Gard.* ("C. borisii") (GB); France, Alpes-Maritimes, Cassols, Saint Lambert, 1,100 m, 01 May 1978, *KP 345* (GB); France, Doubs, Besançon, 1976, *Ville Bot. Gard.* (GB); Italy, Alto Adige, Kreuzberg, 1,550 m, 17 Jun 1977, *KP 232* (GB); Italy, Emilia-Romagna, Monte Ragola, 1,700 m, 1976, *Grenoble Bot. Gard.* (GB); Spain, Navarra, Pirineo, Panticosa, 1963, *Wide s.n.* (GB); Switzerland, Neuchâtel, Neuenburger Jura, 1976, *Basel Bot. Gard.* (GB).

Colchicum balansae Planch.

$2n = 108$, CHN. Greece, Attiki, Poros, Kalavria, 15 m, Sep 1984, *Jope s.n.*, GBG 1988-0642 (GB); Dodekanisos, Rodos, 6 km S of Kameros, 800 m, 02 Oct 1975, *Wollin s.n.* (GB); Turkey, İçel, 14 km from Gülnar to Mut, 1,200 m, 25 Jun 1985, *JJA 6765* (GB)

Colchicum bivonae Guss.

Previous reports by other authors for *C. latifolium* Sm. refer to this species.

$2n = 48$, CHN. Croatia, Lika-Senj, Velebit, Rača 9 km S of Senj, 250 m, 26 Sep 1982, *KP 376* (GB); Greece, Achaia, Mt. Erimanthos, 2 km SE of Kalentzion, 1,400 m, 21 Sep 1970, *JP 4414* (GB); Greece, Achaia, Mt. Erimanthos, above Kalentzion, 1,000 m, 21 Sep 1974, *KP 255* (GB); Greece, Achaia, Mt. Panachaïkon, 0.5–1 km E of Pournarokastron, 900–1,130 m, 22 Sep 1970, *JP 4460* (GB); Greece, Arkadia, N of Vourvoura to Astros, 1,150 m, 23 Mar 1976, *KP 328* (GB); Greece, Arkadia, near road from Kapsia to Levidion, 850 m, 20 Sep 1974, *KP 254* (GB); Greece, Chalkidiki, Athos peninsula, SW part, above the Skiti of Agias Annas, 700–1,500 m, 02 Oct 1977, *Papanicolaou 919 & 957* (GB); Greece, Chalkidiki, Mt. Athos, S-side, 1,500 m, 27 Jul 1979, *AS 79-34* (GB); Greece, Chalkidiki, Mt. Cholomon, S-side, 15 km WSW of Arnea, 500–700 m, 16 Mar 1976, *KP 316* (GB); Greece, Evritania, between Karpenission and Kalesmenon, 1,250 m, 28 Sep 1974, *KP 265* (GB); Greece, Evritania, Mt. Timfristos, 1,350 m, 29 Sep 1974, *KP 266* (GB); Greece, Evritania, Mt. Timfristos, above Karpenission, 1,300 m, 27 May 1971, *HR & al. 20* (GB); Greece, Evvia, 2 km from Ag. Anna–Istiea road to Kerasia, 430 m, 02 Apr 2001, *JKP 01-10* (GB); Greece, Fokida, Malandrion to Amfissa, 500 m, 27 Sep 1974, *KP 262* (GB); Greece, Fthiotida, Mt. Othris, Yerakovouni, 1,100 m, 13 Sep 1980, *BHHR 155* (GB); Greece, Fthiotida, Southern Mt. Othris, foothill (Loutsia) SE of Yerakovouni, 1,200 m, 13 Sep 1980, *BHHR 55* (GB); Greece, Iliis, between Andritsena and Kallithea, 550 m, 26 Mar 1976, *KP 330* (GB); Greece, Ioannina, between Pedini and Dodoni, 700 m, 01 Oct 1974, *KP 274* (GB); Greece, Karditsa, 1 km W of Loutropigi to Rendina, 800 m, 29 Sep 1974, *KP 268* (GB); Greece, Korinthia, Mt. Killini, above Ano Trikala, 1,200 m, 23 Sep 1974, *KP 256* (GB); Greece, Lakonia, between old and new village of Karie, 900 m, 16 Sep 1974, *KP 247* (GB); Greece, Lakonia, E of Vresthena, 800 m, 17 Sep 1974, *KP 250* (GB); Greece, Lesvos, near Agiassos, 700–800 m, Apr 1984, *Jonasson s.n.* (GB); Greece, Magnisia, Isle of Skopelos, E slope of Mt. Delfi 0.5–1.5 km NNW of the top, 400–600 m, 21 Apr 1972, *Snogerup & Gustafsson 43099* (GB); Greece, Magnisia, Mt. Pilion above Portaria, 800 m, 27 Sep 1980, *BHHR 840* (GB); Greece, Magnisia, Mt. Pilion, Portaria to Zagora, 850 m, 12 Sep 1974, *KP 244* (GB); Greece, Pieria, Mt. Olimbos, above Litochoron on road to Prionia, 850 m, 11 Sep 1974, *KP 242* (GB); Greece, Pieria, Mt. Olimbos, near Prionia, 1,100 m, 11 Sep 1974, *KP 243* (GB); Greece, Pieria, Mt. Olimbos, Enipevs valley near Prionia, 1,000 m, 14 Oct 1976, *AS & al. 12823* (GB); Greece, Pieria, Mt. Olimbos, E side, near Stavros, 900 m, 14 Oct 1976, *AS & al. 12824* (GB); Greece, Pieria, Mt. Olimbos, valley parallel to Enipevs valley, 700 m, 26

Jun 1976, *AS & al. 76-68-01* (GB); Greece, Pieria, Mt. Olimbos, N foothills, near chapel Agia Kori, 350 m, 18 Jun 1976, *AS & al. 76-43-10* (GB); Greece, Thessaloniki, Mt. Vertiskos, 800 m, Oct 1979, *Pavlidis s.n.* (GB); Italy, Basilicata, 5 km from Stigliano to Accettura, 975 m, 05 Oct 1990, *KP 498* (GB); Italy, Calabria, E side of Pollino massif S of Plátaci, 875 m, 30 Sep 1990, *KP 494* (GB); Italy, Campania, W of Serre to Eboli, 150 m, 09 May 1984, *KP 390* (GB); Italy, Sicilia, Madonie, Monte dei Cervi, 1,500 m, 22 Mar 1981, *KP 365* (GB); Italy, Sicilia, Passo d'Inferno, 1,250 m, 18 Mar 1981, *KP 364* (GB); Turkey, Bolu, above Abant Gölü, 1,400 m, 14 Sep 1986, *KP 426* (GB);

Colchicum bulbocodium Ker Gawl. subsp. *bulbocodium*

Previous reports by other authors for *Bulbocodium vernum* L. refer to this species.

$2n = 22$, CHN. France, Alpes-Maritimes, N of Gréolières, 1,400 m, 1982, *Hoog 8212* (GB).

Colchicum bulbocodium subsp. *versicolor* (Ker Gawl.) K. Perss.

Previous reports by other authors for *Bulbocodium versicolor* (Ker Gawl.) Spreng. refer to this species.

$2n = 22$, CHN. Ukraine, Dnipropetrovs'ka Oblast', *Savisaar s.n.*, GBG 1997-2721 (GB).

Colchicum burtii Meikle

* $2n = 54$, CHN. Greece, Chios, Near Metochi (S of Sidirounda), 50 m, 23 Apr 1996, *KP 558* (GB); Turkey, Antalya, 31 km from Korkuteli to Elmalı, 1,350 m, 22 Apr 1987, *KP 440B* (GB); Turkey, Burdur, Burdur–Tefenni, 2 km after turn to Yeşilova, 1,150 m, 29 Apr 1987, *KP 452B* (GB); Turkey, Denizli, Honaz Dağ, Kazıkbeli Geçidi above Çukurköy, 1,250 m, 27 Apr 1985, *JJA 5991* (GB); Turkey, Denizli, Honaz Dağ, W side, 1,250–1,400 m, 08 May 1972, *R&W cult. 138D* (GB); Turkey, Eskişehir, S of Seyitgazi, 1,000 m, 23 Mar 1995, *HKEP 95-24* (GB); Turkey, İsparta, Davras Dağı, 4 km fr. İsparta–Eğridir road to Bademli, 1,250 m, 16 Apr 1991, *KP 500* (GB); Turkey, Konya, 7 km from Sarkikaraağaç to Beysehir, 1,250 m, 29 Apr 1987, *KP 449* (GB); Turkey, Konya, 15 km E of Saiteli (Kadınhanı), 1,150 m, 06 May 1972, *R&W cult. 122A* (GB); Turkey, Muğla, mountain E of Muğla, 1,200 m, 22 Apr 1972, *R&W cult. 36B* (GB).

Colchicum chimonanthum K. Perss.

$2n = 32$, CHN. Greece, Chalkidiki, 1 km NW of Nea Triglia, 150 m, 11 Mar 1998, *JKP 98-26* (GB); Greece, Serres, SE of Nea Zichni, 200 m, 09 Mar 1998, *JKP 98-14* (GB).

Colchicum corsicum Baker

* $2n = 216$, CHN. France, Corse, Col d'Illarata, 1,000 m, 07 May 1978, *KP 350* (GB).

Colchicum cretense Greuter

* $2n = 36$, CHN. Greece, Crete, Chania, Xiloskala S of Omalos, 1,200–1,300 m, 12 Apr 1974, *KP 233* (GB); Greece, Crete, Chania, Lefka Ori, Gingilos, 1,500 m, 19 Apr 1985, *JP 85-21* (GB); Greece, Chania, Agia Pnevma, 1,800 m, 1937, *Lemperg 580* (GB); Greece, Crete, Lasithi, Psari Madara, 1,800–2,000 m, 24 May 2004, *AS 55018* (GB).

Colchicum crocifolium Boiss.

* $2n = 14$, CHN. Iran, Bakhtaran, Kuh-e Parou, 1,700–2,100 m, 07 May 1975, *W&A 16727* (GB); Iran, Fars, Neiriz, Palangan, 1,670 m, 01 Mar 1971, *Foroughi 1153* (GB); Turkey, Maraş, 22 km from Göksun to Elbistan, 04 Jun 2004, *BATM 393* (GB);

Turkey, Mardin, N of Mardin to Diyarbakır, 1,200 m, 12 May 1985, *JJA 6200* (GB); Turkey, Mardin, Hop pass, 10 km from Mardin to Savur, 1,200 m, 09 Apr 1990, *KPPZ 90-167* (GB); Turkey, Mardin, 15 km from Mardin to Diyarbakır, 1,200 m, 09 Apr 1990, *KPPZ 90-173* (GB); Turkey, Siirt, Siirt to Baykan, 6 km S of junction Silvan–Tatvan road, 950 m, 25 May 2004, *BATM 049* (GB).

Colchicum cupanii Guss. subsp. *cupanii*

$2n = 54$, CHN. Greece, Crete, Lasithi, 1993, *Aspland s.n.*, GBG 1993-2141 (“*C. cousturieri*”) (GB); Greece, Dodekanisos, Kalimnos, Islet of Koutsomiti SE of Astipalea, 11 Apr 1966, *R&P 22669* (GB); Greece, Dodekanisos, Islet of Megalo Sofrano, 05 May 1967, *HR 3993* (GB); Greece, Dodekanisos, Islet of Mikro Sofrano (Mikro Zafora), 08 Apr 1966, *HR 4424* (GB); Greece, Karpathos, Ouinianisia (Divounia), E-island, 05 Jun 1967, *HR 3982* (GB); Greece, Kiklades, Kea, Ag. Theodori, 15 Apr 1969, *HR 4420* (GB); Greece, Kiklades, Kithnos, Yavalido Bay, 01 Jun 1968, *HR 4338* (GB); Greece, Kiklades, Milos, Akraithia, W-island, 21 Apr 1967, *HR & Bentzer 26764* (GB); Greece, Kiklades, Milos, Islet of Kitriani S of Sifnos, 0–50 m, 13 Apr 1967, *HR 4429* (GB); Greece, Kiklades, Siros, Strongilo, Didymi, 03 Apr 1969, *HR 4416* (GB); Greece, Kiklades, Thira, between Pargos and Ilias, 300–600m, 18 Apr 1967, *Hansen 27138* (GB); Greece, Kiklades, Thira, Anafi, Drepanon, 23 Apr 1969, *HR 4373* (GB); Greece, Kiklades, Thira, Anafi, Mt. Kalamos, 23 Apr 1969, *HR 4409* (GB); Italy, Sicilia, below Forza d’Agró, 200 m, 23 Oct 1979, *KP 359* (GB); Italy, Sicilia, Forza d’Agró, 400m, 23 Oct 1979, *KP 358* (GB); Italy, Sicilia, Monte Veneri near Taormina, 600 m, 25 Oct 1979, *KP 360* (GB); Malta, 1989, *JJA s.n.*, GBG 1989-0729 (GB); Tunisia, Tunis, Mt. Bou Kornine, 400–500m, 11 Oct 1976, *Gustafsson Tu-08* (GB); Tunisia, Zaghuan, Mt. Zaghuan, 800–900 m, 11 Oct 1976, *Gustafsson Tu-11* (GB).

Colchicum cupanii subsp. *glossophyllum* (Heldr.) Rouy

* $2n = 54$, CHN. Greece, Argolida, 2 km WSW of Prosimni, 100 m, 09 Nov 1985, *KP 419* (GB); Greece, Argolida, between Mili and Achladokambos, 600 m, 22 Mar 1976, *KP 326* (GB); Greece, Argolida, between Mili and Astros, 1 km S of Kiverion, 100 m, 22 Mar 1976, *KP 325* (GB); Greece, Attiki, 1 km S of Keratea, 150 m, 19 Mar 1976, *KP 322* (GB); Greece, Attiki, Mt. Imittos, road to summit, 500–1,000 m, 20 Mar 1976, *KP 323* (GB); Greece, Etolia-Akarnania, 3 km from Kombotion to Floriada, 250 m, 03 Nov 1987, *JP 87-106* (GB); Greece, Evvia, on the shore S of Chalkida, 5–10 m, 1979, *OS 654* (GB); Greece, Evvia, 1 km W of Pissonas to Nea Artaki, 200 m, 18 Mar 1976, *KP 320* (GB); Greece, Fokida, 7 km SSW of Amfissa, 500 m, 29 Mar 1976, *KP 334* (GB); Greece, Kefallinia, N part of Mt. Enos, 1,100 m, 14 Apr 1980, *KP 362* (GB); Greece, Lakonia, outside Molai, 100 m, 25 Mar 1976, *KP 329* (GB); Greece, Lefkas, W of Asprogerakata to Vasiliki, 600 m, 31 Mar 1976, *KP 335* (GB); Greece, Messinia, valley near convent of Velanidia NE of Kalamata, 300 m, 06 Nov 1985, *KP 413* (GB); Greece, Thesprotia, Nikopolis to Igoumenitsa, NW of Morfion, 200 m, 01 Apr 1976, *KP 336* (GB); Greece, Viotia, 3 km from Chalkida to Thive, 200 m, 19 Mar 1976, *KP 321* (GB).

Colchicum decaisnei Boiss.

$2n = 54$, CHN. Lebanon, 800 m, 1958, *Richter s.n.* (GB).

Colchicum doerfleri Halácsy

$2n = 54$, CHN. FYR Macedonia, 10 km NW of Skopje, near Nikištane, 300 m, 15 Mar 1976, *KP 312* (GB); FYR Macedonia, 5 km NNW of Titov Veles, near Otavica, 200 m, 15 Mar 1976, *KP 313* (GB); Greece, Imathia, Kozani to Veria, just S of Chadovas pass, 1,400 m, 03 Apr 1976, *KP 340* (GB); Greece, Kozani,

Mt. Vellia, between Siatista and Kozani, 3 km SW of Xerolimni, 700 m, 03 Apr 1976, *KP 338* (GB); Greece, Kozani, Mt. Vermion, Kozani to Veria, between Polimilos and Chadovas pass, 1,000 m, 03 Apr 1976, *KP 339* (GB); Greece, Larisa, summit of Mt. Ossa, 1,800–1,978 m, 23 Sep 1980, *BHHR 760* (GB); Greece, Larisa, W foothills of Mt. Olimbos, between Kallithea and Katerini near road to Kokkinopolis, 750 m, 17 Mar 1976, *KP 318* (GB); Greece, Pieria, Mt. Olimbos, N-side, ridge between Xerolakki and Papa Rema, 1,800 m, 03 Jul 1976, *AS & Gustavsson 76-90-01* (GB).

Colchicum eichleri (Regel) K. Perss.

Previous reports by other authors for *Merendera eichleri* (Regel) Boiss. refer to this species.

$2n = 18$, CHN. Russian Fed., N Ossetia, Fiagdon, near Dzighis, 1,800 m, 1990, *Cuba 90-296* (GB).

Colchicum fasciculare (L.) R. Br.

* $2n = 14$, CHN. Syria, Halab, near Rajo, 2002, *ARGI 02-116* (GB).

Colchicum feinbruniae K. Perss.

$2n = 22$, CHN. Lebanon, Liban-Nord, Bcharré, Apr 1999, *RRW 99-46* (GB); Lebanon, Mont-Liban, near Laqlouq, 1,750 m, Apr 1999, *RRW 99-32 & 33* (GB).

Colchicum figlalii (Varol) Parolly & Eren

* $2n = 54$, CHN. Turkey, Muğla, Sandras Dağ, W side of the summit area, 2,100–2,200 m, 07 Jul 1984, *AS & al. 23350* (GB).

Colchicum filifolium (Cambess.) Stef.

$2n = 54$, CHN. Morocco, Chaouen, C Rif Mts., Jebel Lakraa near Tallasemtane, 1,650–1,700 m, 04 Oct 1990, *Aldén & al. EAC 022* (GB); Spain, Cadiz, near Facinas on Puerto de Ojén road, 20 Oct 1980, *Holmdahl 1676* (GB); Spain, Majorca, Palma Nova, *Mathew 6961* (GB).

Colchicum freynii Bornm.

* $2n = 54$, CHN. Armenia, Syunik, Meghri, Shvanidzor near the ruins of village Gimarants, 11 Jun 1978, *Gabrielian s.n.* (GB); Armenia, Syunik, Meghri, left bank of river Arax near Agarak, 1,100 m, 13 Apr 1978, *Gabrielian s.n.* (GB); Iran, Azarbayegan-e Sharqi, 8 km from Mianeh to Tabriz, 1,150 m, 21 Apr 1976, *W&A 19186* (GB); Iran, Gilan, Qazvin to Rasht, 12 km NW of Loushan, 390 m, 08 Apr 1976, *W&M 19080* (GB); Iran, Tehran, Mardabad SW of Karaj, 1,200 m, 30 Mar 1976, *W & al. 19048* (GB); Iran, Zanjan, Qasvin–Rasht, Gardaneh Kuhin, 1,600 m, 08 Apr 1976, *W&M 19058* (GB); Iran, Zanjan, 11 km N of Gardaneh Kuhin, 08 Apr 1976, *W&M 19063* (GB).

Colchicum gonareii Camarda

$2n = 180$, CHN. Italy, Sardegna, Orani below Nostra Signora di Gonari, 1,070 m, 26 Sep 1992, *KP 543* (GB); Italy, Sardegna, Monti del Gennargentu, ESE of Arcu Correboi pass, 1,200m, 26 Sep 1992, *KP 544* (GB).

Colchicum graecum K. Perss.

$2n = 44$, CHN. Greece, Achaia, Mt. Panachaiko, N-side, 1,300 m, 03 May 1994, *KP 548* (GB).

Colchicum haynaldii Heuff.

Previous reports by some other authors for *C. visianii* Parl. refer to this species.

$2n = 96$, CHN. Greece, Achaia, W of Kalavrita, 27 Apr 1998, *AS & al. 98-77-03* (GB).

Colchicum hirsutum Stef.

* $2n = 14$, CHN. Turkey, Diyarbakır, Elaziğ to Diyarbakır, 1 km N of Ergani, 1,150 m, 10 Apr 1990, *KPPZ 90-179* (GB); Turkey, Elaziğ, 30 km S of Elaziğ to Diyarbakır, by Hazar Gölü, 1,300–1,350 m, 10 Apr 1990, *KPPZ 90-183* (GB).

Colchicum hissaricum (Regel) Stef.

* $2n = 54$, CHN. Tajikistan, Dushanbe, Hissar Mts., valley of Karatag river, 1992, *Seisums s.n.*, GBG 1992-2007 (GB).

Colchicum hungaricum Janka

$2n = 54$, CHN. Bosnia & Herzegovina, S of Mostar between Tasovčići and Domanovići, 100 m, 12 Mar 1976, *KP 308* (GB); Bosnia & Herzegovina, SE of Stolac near Dragovilje, 500 m, 12 Mar 1976, *KP 309* (GB); Bosnia & Herzegovina, Stolac to Trebinje, between Ljubinj and Kotezi, 600 m, 12 Mar 1976, *KP 310* (GB); Croatia, Šibenik-Knin, Šibenik to Drniš, near Gulin, 12 Mar 1976, *KP 307* (GB); Croatia, Zadar, near (SE of) Biograd, 20 m, 12 Mar 1976, *KP 306* (GB); Hungary, Baranya, Mt. Harsányhegy near Villány, GBG 1990-1623 (GB).

Colchicum kesselringii Regel

$2n = 54$, CHN. Afghanistan, Badakhshan, Faizabad, 1,050 m, 21 May 1964, *Furse 6207* (GB); Afghanistan, Laghman, Alishang, upper part of Darrah Rastyon, 2,900 m, 15 Jul 1969, *W & Ekberg 9654* (GB); Kirgizstan, Jalal-Abad, Fergana Range, Kugart, 2,400–3,250 m, 1997, *ARJA 97-27* (GB); Tajikistan, Dushanbe, Hissar Mts., Anzob pass, 2,300 m, *Kosa s.n.*, GBG 1990-1246 (GB); Tajikistan, Kulyabskaya Oblast', Darwas Mts., near Tavildara, 1997, *Seisums s.n.*, GBG 1997-2606 (GB); Tajikistan, Gorno-Badakhshan, Pamir, Sangon-Dara, 2,900 m, 1988, *Böhme s.n.*, GBG 1988-0478 (GB); Tajikistan, Pendzhikent, near Pendzhikent, 700 m, 01 May 1975, *Polivka PK 22/75* (GB); Uzbekistan, Fergana, Alay Mts., river Shakhimardan, 40–50 km S of Fergana city, 1994, *Seisums & Veerus 94-42* (GB); Uzbekistan, Angren, Kuraminskii Mts., vicinity of Kotch-Bulak, near Angren city, 1994, *Seisums & Veerus 94-90* (GB).

Colchicum kesselringii Regel × *C. luteum* Baker

* $2n = 54$, CHN. Tajikistan, Kulyabskaya Oblast', near Tavildara, 1995, *Seisums s.n.*, GBG 1995-2245 (GB).

Colchicum kotschyi Boiss.

$2n = 20$, CHN. Iran, Azarbayegan-e Gharbi, W of Rezayieh, Targavar valley, 2,400 m, 23 May 1976, *F&A 19768A* (GB); Iran, Azarbayegan-e Sharqi, pass 20 km S of Ahar to Tabriz, 1,700–1,800 m, 31 May 1978, *W&A 27916* (GB); Iran, Fars, Shiraz to Kazerun, Khaneh-e Zenyan, 1976, *W s.n.* (GB); Iran, Fars, Kakun, *Kashkouli 8207E* (GB); Iran, Kordestan, foothills of Mt. Hamzeh Arab, SE of Bijar, 2,000 m, 01 Jul 1971, *Rechinger 42520* (GB); Iran, Markazi, Arak area, Kuh-e Barfkhaneh, 2,300–2,800 m, 04 May 1975, *W&A 16488B* (GB); Iran, Mazandaran, Lar valley near Rudkhaneh Alarm, 2,500 m, 28 May 1974, *W & al. 11804* (GB); Iran, Tehran, Kelvan, 2,980 m, 21 Jun 1971, *Klein 1266* (GB); Iran, Tehran, Tochal, 2,000 m, 08 May 1998, *SLIZE 002* (GB); Iran, Tehran, Shemshak, near the type locality, 23 May 1975, *W s.n.* (GB); Iran, Tehran, Elborz Mts., Dizan, 1,800 m, 1972, *Ingham s.n.* (GB).

Colchicum kurdicum (Bornm.) Stef.

** $2n = 20$, CHN. Turkey, Hakkâri, first pass E of Uludere, 2,200 m, 03 Jun 1985, *OS 927* (GB); Turkey, Van, Karabel Geçidi above Bahçesaray, 2,900 m, 09 Jul 1985, *M&P 85-125* (GB).

Colchicum leptanthum K. Perss.

$2n = 18$, CHN. Turkey, Erzurum, 70 km from Erzurum to Artvin, 1,270 m, 29 May 2004, *BATM 188* (GB).

Colchicum longifolium Castagne.

Previous reports by other authors for *C. neapolitanum* (Ten.) Ten. from France and N Italy refer to this species.

$2n = 144$ (or ca. 140), CHN. France, Alpes-de-Haute-Provence, between Gréoux-les-Bains and Manosque, 300 m, 03 May 1978, *KP 346* (GB); France, Alpes-Maritimes, Col du Pilon NW of Grasse, 780 m, 01 May 1978, *KP 344* (GB); France, Corse, road to Serra di Pigno W of Bastia, 06 May 1978, *KP 347 & 348* (GB); France, Var, W side of Pourriers to Puits de Rians road, 400 m, 07 Apr 1979, *PJC 259* (GB); Italy, Liguria, E of Colle San Bernardo di Mendatica, 1,260 m, 29 Sep 1999, *JKP 9930* (GB); Italy, Sardegna, Catena del Marghine, Burgos to Padru Mannu, 1,000 m, 25 Sep 1992, *KP 542* (GB); Morocco, El Haouz, Great Atlas 72 km S of Marrakech, Oukaïmeden, 2,700 m, 03 Jul 1987, *Jury & al. 8870* (GB); Morocco, El Haouz, Great Atlas, Oukaïmeden, 2,600 m, 09 Apr 1994, *KPW 94-44* (GB); Spain, Majorca, Puig Major, 1,400 m, 1996, *Rosselló 96-1640* (GB).

Colchicum lusitanum Brot.

$2n = 108$ (or ca. 105–110), CHN. Italy, Sardegna, Dorgali to Baunei, S of Rifugio Genna Silana, 1,010 m, 30 Sep 1992, *KP 545* (GB); Italy, Toscana, Pratolino, 400 m, 17 Sep 1981, *KP 367* (GB); Spain, Cádiz, Sierra de Lijar, between Algodonales and Coripe, Apr 1981, *Lidén s.n.* (GB); Spain, Cádiz, 11 km from Algodonales to Coripe, 530 m, 22 Oct 1991, *KP 530* (GB); Spain, Cádiz, 2 km E of Grazalema, 780 m, 23 Oct 1991, *KP 531* (GB); Spain, Cádiz, 9 km from Jimena de la Frontera to Ronda, 150 m, 24 Oct 1991, *KP 534* (GB); Spain, Granada, Sierra Nevada, N-side, 1990, *Eide s.n.*, GBG 1990-2142 (GB); Spain, Jaen, Sierra de Cazorla, *JJA 12133* (GB).

! $2n = 162$ (or ca. 160–165), CHN. Spain, Cádiz, between Ubrique and El Bosque, 275 m, 23 Oct 1991, *KP 532* (GB); Spain, Cádiz, 9 km from Los Barrios to Alcalá, 100 m, 24 Oct 1991, *KP 535* (GB); Spain, Cádiz, 9 km N of Santuario de Nuestra Señora de la Luz N of Tarifa, 125 m, 26 Oct 1991, *KP 538* (GB); Spain, Malaga, Serranía de Ronda, 1990, *Eide s.n.*, GBG 1990-2143 (GB); Spain, Malaga, Serranía de Ronda, 1 km of Cartajima, 875 m, 27 Oct 1991, *KP 539* (GB); Spain, Malaga, 14 km from Ronda to San Pedro, 1,100 m, 10 Apr 1981, *Lidén 81-10* (GB).

Colchicum luteum Baker

! $2n = 54$, CHN. India, Kashmir, 2,700 m, 1984, *McBeath 1596* (GB); Tajikistan, Dushanbe, Hissar Mts., 2,800 m, *Cuba GG87VV*, GBG 1991-3849 (GB); Tajikistan, Gorno-Badakhshan, Pamir, Chobu-Robot pass, 2,600 m, 1986, *Böhme s.n.*, GBG 1986-0509 (GB); Uzbekistan, Samarkand, Zerevshan Mts. range, Zaamin between Supa and Tashbulak passes, 2,600–2,700 m, 1997, *ARJA 97-65* (GB).

Colchicum macedonicum Košanin

$2n = 54$, CHN. FYR Macedonia, Mt. Karadžica, just S of Patiška, 2,150 m, 30 Jun 1985, *HZ 85-65* (GB).

Colchicum macrophyllum B.L. Burt

$2n = 54$, CHN. Greece, Crete, Sfakia, gorge of Anopolis, 600 m, 05 May 1973, *HR & al. 45143* (GB); Greece, Dodekanisos, Rodos, Profitis Ilias, 28 Mar 1970, *R&W s.n.* (GB); Greece, Evvia, 1.5–3 km NW of Platanistos, 11 Apr 1971, *Snogerup & Gustafsson 42266 & 05 May 1994, KP 551* (GB); Turkey, Muğla, Bozburun,

19 Apr 1972, *R & W cult.* 144 (GB); Turkey, Muğla, Baba Dağ, 1,100 m, 08 Mar 2001, *HKEP 01-19* (GB).

Colchicum manissadjianii (Az.) K. Perss.

* $2n = 22$, CHN. Turkey, Amasya, Akdağ, 1,680 m, 12 Apr 1982, A. & T. Baytop *ISTE 48474* (GB).

Colchicum micranthum Boiss.

$2n = 54$, CHN. Turkey, İstanbul, Yakacık, foot of Aydos Dağ, T. Baytop *ISTE 31546* (GB).

Colchicum montanum L.

Previous reports for *Merendera montana* (L.) Lange, *M. bulbocodium* Ramond and *M. pyrenaica* (Pourr.) P. Fourn. by other authors refer to this species.

$2n = 54$, CHN. Portugal, Beira Alta, Serra de Caramulo, summit of Caramulinho, *PJC 365* (GB); Spain, Avila, Sierra de Gredos, 1964, *Nitzelius s.n.* (GB); Spain, Granada, Sierra Nevada, road from Granada to Pico del Veleta, 2,000 m, June 2000, *HZ 00-003* (GB); Spain, Jaén, pass between Tiscar and Quesada, 1,150 m, 20 Oct 1991, *KP 528* (GB).

Colchicum multiflorum Brot.

$2n = 144$, CHN. Spain, Madrid, Sierra de Guadarrama near El Paular, 1,100 m, 27 May 1990, *Lidén s.n.* (GB).

Colchicum neapolitanum (Ten.) Ten.

Previous reports of $2n = ca. 140$ for this species by other authors generally refer to *C. longifolium* Castagne.

! $2n = 90, 92$, CHN. Italy, Basilicata, W-side of Monte Li Foi di Picerno, 1,200 m, 09 May 1984, *KP 391* (GB); Italy, Basilicata, 3 km from Atena Lucana to Brienza, 850 m, 09 May 1984, *KP 392* (GB); Italy, Campania, Monte Taburno NE-side, 850 m, 27 Sep 1990, *KP 490* (GB); Italy, Campania, Monte Faito, 1,050 m, 17 May 1984, *KP 396 & 26 Sep 1990, KP 489* (GB); Italy, Campania, road to Monte Faito near Centro Sportivo, 930 m, 26 Sep 1990, *KP 487* (GB); Italy, Campania, Monte Cerasuolo, N-side at Campo del Pero, 1,100 m, 26 Sep 1990, *KP 488* (GB); Italy, Campania, 9.6 km from Acerno to Montecorvino, 600 m, 02 Oct 1990, *KP 496* (GB); Italy, Campania, Passo della Sentinella, 930 m, 02 Oct 1990, *KP 495* (GB).

Colchicum parlatoris Orph.

* $2n = 54$, CHN. Greece, Kefallinia, Argostoli to Sami, pass near mountain road to Mt. Enos, 600 m, 14 Apr 1980, *KP 361* (GB); Greece, Lakonia, foothills of N. Mt. Parnon, Karie, 900 m, 16 Sep 1974, *KP 248* (GB); Greece, Messinia, Kardamili Kastro, 30 m, 15 Nov 1976, *Young 397* (GB); Greece, Messinia, 13 km from Kalamata on Areopolis road, 04 Apr 1978, *PJC 159* (GB); Greece, Messinia, 10 km from Kalamata to Sparti, 400 m, 20 Sep 1974, *KP 253* (GB); Greece, Messinia, NE of Pilos, 50 m, 08 Dec 1978, *KP 357* (GB); Greece, Messinia, 1.5 km from Pilos to Methoni, *PJC 190* (GB); Greece, Zakynthos, *Young 625* (GB).

Colchicum parnassicum Sartori, Orph. & Heldr.

$2n = 54$, CHN. Greece, Fokida, Mt. Giona, N-side, above Kaloskopis, 1,800 m, 02 May 1998, *AS & al. 98-83-03* (GB).

Colchicum peloponnesiacum Rech.f. & P.H. Davis

* $2n = 44$, CHN. Greece, Achaia, near Platanos just N of Kalamias, 475 m, 25 Mar 1998, *JKP 98-99* (GB); Greece, Achaia, in gorge between Diakofto and Megaspoleon, 3 km from Diakofto, 70–80 m, 07 Dec 1978, *KP 356 & 10 Nov 1985, KP 417* (GB).

Colchicum persicum Baker

* $2n = 54$, CHN. Iran, Bakhtaran, Kuh-e Parou, 1,700–2,100 m, 07 May 1975, *W&A 16743* (GB); Iran, Bakhtaran, Nawa Kuh (Kuh-e Nevoh), 2,200 m, 14 May 1966, *JJA 1914* (GB); Iran, Bushehr, 50 km from Bushehr to Borazjan, 40 m, 18 Mar 1976, *Bokhari & W 17* (GB); Iran, Bushehr, form Bushehr to Bandar Lengeh, 16 km of Taheri, 600–650 m, 21 Mar 1976, *Bokhari & W 226* (GB); Iran, Chaharmahal-va-Bakhtiyari, near Dashtak, 15 May 1998, *SLIZE 169* (GB); Iran, Chaharmahal-va-Bakhtiyari, Bazoft valley, Chamangoli to Chebd, 1,650 m, 15 May 1998, *SLIZE 155* (GB); Iran, Chaharmahal-va-Bakhtiyari, Lordegan to Sarghon, Tange Nafon, 1,700 m, 16 May 1998, *SLIZE 180* (GB); Iran, Fars, Shiraz, Takht-e Jamshid (Persepolis), 1,580 m, 11 Oct 1974, *F&A 15099* (GB); Iran, Fars, Shiraz, Kuh-e Barfi, 1976, *W s.n.* (GB); Iran, Kordestan, 90 km N of Bakhtaran to Sanandaj, 1,450 m, 25 Oct 1974, *W & Shirdelpur 14956* (GB); Iran, Lorestan, Kuh-e Sefid, Tang-e Farah Kash, 1,800–1,900 m, 06 May 1975, *W&A 16690* (GB); Iran, Markazi, 33 km from Arak to Khomein, 2,200 m, 1987, *Tehran Bot. Gard. s.n.*, GBG 1987-0890 (GB); Iran, Markazi, Kuh Barf-Sefid WSW of Arak, 2,200–2,800 m, 24 May 1998, *SLIZE 298* (GB); Iran, Yazd, Deh-Bala, Shir Kuh, 3,300 m, 21 Jun 1975, *F&A 17941* (GB); Iran, Yazd, Shir Kuh area, Kuh Lakhese, 1,950 m, 20 May 1998, *SLIZE 267* (GB); Iran, Yazd, Kuh Barfkhan, S of Shir Kuh proper, 2,600–2,800 m, 20 May 1998, *SLIZE 275* (GB); Turkey, Gaziantep, 48 km from Gaziantep to Killis, 600 m, 07 Apr 1990, *KPPZ 90-127* (GB); Turkey, Şanlıurfa, Aratdağı pass between Birecik and Aligör, 800 m, 07 Apr 1990, *KPPZ 90-134* (GB).

Colchicum polyphyllum Boiss. & Heldr.

* $2n = 22$, CHN. Turkey, Adana, Bahçe pass, 1,100 m, 10 Apr 1987, *OS 1072* (GB); Turkey, Adana, Osmaniye to Fevzipaşa, 6 km of Bahçe road, 700 m, 27 Oct 1988, *KP 463* (GB); Turkey, Adana, Nur Dağı Geçidi, W-side, 1,000 m, 27 Oct 1988, *KP 464* (GB); Turkey, Gaziantep, 42 km from Gaziantep to Nur Dağ, Akyokus pass, 1,100 m, 06 Apr 1990, *KPPZ 90-106* (GB); Turkey, Hatay, NW of Bedirge, Erikli Yaylası, 955 m, 20 Mar 1992, *HKEP 92-09* (GB); Turkey, Hatay, 5 km S of Harbiye, 450 m, 28 Oct 1988, *KP 466* (GB); Turkey, İçel, Silifke to Anamur, 4 km SW of Taşucu, 30 m, 26 Apr 1987, *KP 446* (GB); Turkey, İçel, Kuzucubelen, 600 m, 20 Apr 1986, T. Baytop *ISTE 56870* (GB); Turkey, İçel, Mersin to Arslanköy, 10 km of Gözne road, 850 m, 25 Apr 1987, *KP 443* (GB); Turkey, İçel, 1 km N of Gülek to Pozantı, 1,250 m, 26 Oct 1988, *KP 462* (GB).

Colchicum psaridis Heldr. ex Halácsy

* $2n = 54$, CHN. Greece, Lakonia, Mani peninsula, between Tsikalía and Lagia, 100 m, 06 Nov 1985, *KP 415* (GB); Greece, Messinia, near Kardamili, 30 m, 15 Nov 1976, *Young 399* (GB); Greece, Messinia, between Kambos and Kardamili, just S of Stavropigio, 400 m, 06 Nov 1985, *KP 414* (GB).

Colchicum pusillum Sieber

Previous reports for *C. hiemale* Freyn from Cyprus refer to this species.

$2n = 54$, CHN. Greece, Crete, Chania, Akrotiri peninsula, 2 km NE of Chordaki, 400 m, 24 Mar 1989, *KP 472* (GB); Greece, Crete, Iraklion, hills surrounding the Minoan harbour of Amnisos, 40–50 m, 03 Dec 1978, *KP 355* (GB); Greece, Iraklion, between Panagia and Embaros, 500 m, 01 Dec 1978, *KP 352* (GB); Greece, Rethimnon, Melambes to Akoumia, 450 m, 02 Dec 1978, *KP 353* (GB); Greece, Rethimnon, Panormos to Rethimnon, 1 km W of mouth of river Milopotamos, 50 m, 02 Dec 1978, *KP 354* (GB).

Colchicum raddeanum (Regel) K. Perss.

Previous reports for *Merendera raddeana* Regel by other authors refer to this species.

** $2n = 20$, CHN. Armenia, Gegharkunik, near Lake Sevan, 1983, *Prasil s.n.*, GBG 1983-0493 (GB); Armenia, Gegharkunik, near Lake Sevan, 2,700 m, 1986, *Cuba 86-306* (GB); Armenia, Syunik, Sisiyan, Bargushat mountain range, near Akhlatian, 2,500–2,700 m, 15 May 1978, *Gabrielian s.n.* (GB); Armenia, Syunik, Sisiyan, Bargushat mountain range, near Tolors, 2,350 m, 12 May 1978, *Manakian s.n.* (GB); Georgia, Kartli, Mt. Ukanapshkhari, 3,000 m, 1990, *Cuba 90-038* (GB); Iran, Azarbayegan-e Gharbi, 13–15 km on road from SE of Bazargan to Arab-Dizeh, 1,950 m, 23 Apr 1976, *W&A 19247* (GB); Iran, Azarbayegan-e Gharbi, W of Rezaieyeh, Targevar valley W of Anbi, 2,200 m, 23 May 1976, *F&A 19777* (GB); Iran, Gilan, Asalem to Khalkhal, Almas pass, 2,300 m, 29 May 1978, *W&A 27803* (GB); Iran, Tehran, 1 km S of Amam Zada Hashim (ENE of Tehran), 2,500 m, 10 May 1998, *SLIZE 034* (GB); Turkey, Erzurum, pass 20 km N of Hınıs, 2,300 m, 27 May 1988, *OS 1113* (GB); Turkey, Kars, Ardahan to Posof, 11 km N of Damal, 2,500 m, 1984, *OS 897* (GB); Turkey, Kars, 12 km N of Damal, 2,550 m, 09 Jun 1990, *OS 1245* (GB); Turkey, Van, N. slopes of Çuh pass (Güzeldere Geçidi), 2,700 m, 01 May 1985, *JJA 6598* (GB).

Colchicum ritcii R. Br.

$2n = 14$, CHN. Israel, Central Negev, *Feinbrun s.n.*, GBG 1982-0187 (GB); Israel, Arad, 4 km N of K'sseife, E of road to Har Amassah, 1987, *Eggers 87-G-674* (GB); Saudi Arabia, An Nafud, NW of Hail, between Qalbah and Jubbah, 914 m, 08 Mar 1986, *Collenette 5704* (GB); Syria, Deir-es-Zur, Jabal al Bishri, 700 m, 2002, *ARGI 02-133* (GB).

Colchicum robustum (Bunge) Stef.

Previous reports for *Merendera robusta* Bunge by other authors refer to this species.

$2n = 54$, CHN. Afghanistan, Parwan, Tob Darrah, 3 km SW of Charikar, 2,200 m, 28 Apr 1969, *W & al. 7369a* (“*C. aitchisonii*”) (GB); Iran, Khorasan, Bojnurd, 1966, *Furse 7391* (GB); Iran, Khorasan, Bajgiran, 1,770 m, 24 Apr 2003, *T4Z 1145* (GB); Iran, Khorasan, Kopet Dagh, 1,200 m, 17 May 1966, *Furse 7459* (GB); Iran, Khorasan, Kopet Dagh, 1,950 m, 17 May 1966, *Furse 7526* (GB); Iran, Khorasan, Kopet Dagh, 2,100 m, 17 May 1966, *Furse 7523* (GB); Iran, Mazandaran, 49 km from Shahpassand to Sharud, Tilabad, 1,000 m, 17 May 1978, *W&A 29604* (GB); Iran, Semnan, Khosh-e Yeilagh, W-side, 1,900 m, May 1978, *W&A s.n.* (GB); Iran, Tehran, Mardabad SW of Karaj, 1,200 m, 30 Mar 1976, *W & al. 19046* (GB); Iran, Tehran, 43 km from Tehran to Qom, 1,120 m, 04 Apr 1976, *W&M 19024* (GB); Iran, Tehran, highest pass between Semnan and Firouz-Kuh, 2,450 m, 20 May 1978, *W&A 29770* (GB); Pakistan, Jhelum, Kattas, 1979, *Nasir & Ali 3537* (“*C. aitchisonii*”) (GB); Turkmenistan, Ahal, Kopet Dagh, GBG 1980-0073 & 1982-0081 (“*C. jolantae*”) (GB); Turkmenistan, Ahal, Kopet Dagh, near Kaahka, 1993, *Tuniyev s.n.*, GBG 1993-1598 (GB).

Colchicum sanguicolle K. Perss.

$2n = 22$, CHN. Turkey, Antalya, Gögübeli (Gülübeli Geçidi) to Seki, 1,750 m, 07 Nov 1993, *HKEP 93-68* (GB); Turkey, Antalya, Tahtali Dağ, 1,350 m, 05 Oct 1996, *HKEP 96-17* (GB); Turkey, Muğla, Baba Dağ above Ovacık, 1,560 m, 08 Mar 2001, *HKEP 01-16* (GB).

Colchicum schimperi Janka

Some previous reports for *C. guessfeldtianum* Asch. & Schweinf. by other authors refer to this species.

$2n = 14$, CHN. Iran, Kerman, Kuh-e Lalehzar, Baghabad, 2,600 m, 19 Jun 1975, *F&A 17903* (GB); Iran, Yazd, Taft to Abarqu, before Aliabad, 2,200 m, 31 Mar 1975, *W&F 15297* (GB); Iran, Yazd, SE of Yazd, 1,700 m, 20 May 1998, *SLIZE 264* (GB); Iran, Yazd, 14 km SW of Mehriz, 1,450 m, 25 Mar 1976, *Bokhari & W 319* (GB); Iran, Yazd, 32 km SW of Mehriz, 2,000 m, 25 Mar 1976, *Bokhari & W 320* (GB); Jordan, Amman, 2 km W of Jiza, near Nihil, 800 m, 08 Feb 1995, *KPS 95-07* (GB); Jordan, Ma'an, Jebel Mubrak, 1,500 m, 10 Feb 1995, *KPS 95-17* (GB); Syria, Damascus, Anti-Lebanon range, N of Hosh Arab, 2002, *ARGI 02-039* (GB).

Colchicum serpentinum Woronow ex Miscz.

* $2n = 18$, CHN. Turkey, Adiyaman, 37 km NE of Gölbaşı SW of Erkenek, 20 Apr 1992, *Jonasson s.n.*, GBG 1992-1971 (GB); Turkey, Artvin, W of Savşat, 600 m, 12 Feb 1996, *HKEP 96-01* (GB); Turkey, Gaziantep, Nizip–Gaziantep towards Salkin, 880 m, 14 Feb 2000, *HKEP 00-03* (GB); Turkey, İçel, just N of Yapanti (N of Mut), 100 m, 04 Apr 1990, *KPPZ 90-77* (GB); Turkey, Karaman, 10 km from Ermenek to Anamur, 700 m, 02 Apr 1990, *KPPZ 90-27* (GB); Turkey, Karaman, Kara Dağ (N of Karaman), road to TV-station, 2,000 m, 1983, *OS 858* (GB); Turkey, Karaman, Kara Dağ (N of Karaman), 1,650–1700m, 04 Apr 1990, *KPPZ 90-51* (GB); Turkey, Karaman, Oyuklu Dağ, above Bucakkisla, 1,600 m, 05 Mar 2001, *HKEP 01-09*; Turkey, Kayseri, between Pinarbaşı and Sarız, above Aşağı Beyçayırı, 1,200 m, 11 Jun 1985, *JJA 6707* (GB); Turkey, Niğde, 1 km NW of Elmali to Niğde, 1,550 m, 26 Nov 1988, *JP 88-29* (GB); Turkey, Niğde, Çaykavak Geçidi NE of Ulukışla, 1,600 m, 16 Apr 1990, *KPPZ 90-330A* (GB); Turkey, Niğde, Demirkazık Dağ, 1,600–1,700 m, 16 Apr 1990, *KPPZ 90-311* (GB); Turkey, Şanlıurfa, 17 km from Hilvan to Şanlıurfa, 770 m, 08 Apr 1990, *KPPZ 90-139* (GB).

* $2n = 18–20$, CHN. Turkey, Bitlis, 20 km from Hizan to Tatvan, 1,800 m, 11 Jun 1985, *JJA 6657A* (GB); Turkey, İçel, 10 km from Gülnar to Aydıncık, 775 m, 24 Apr 1987, *KP 441* (GB); Turkey, İçel, 2 km from Uzuncaburç to Silifke, 1,200 m, 26 Apr 1987, *KP 444* (GB).

* $2n = 20$, CHN. Turkey, Erzincan, Cimento Geçidi, 1,480 m, 24 Apr 1993, *HKEP 93-52* (GB).

* $2n = 20–22$, CHN. Turkey, Amasya, Akdağ, 1,800 m, 19 May 1981, *T. Baytop ISTE 46240* (GB).

Colchicum soboliferum (Fisch. & C.A. Mey.) Stef.

Previous reports by other authors for *Merendera sobolifera* Fisch. & C.A. Mey. refer to this species.

$2n = 54$, CHN. Iran, Markazi, 19 km from Arak to Khomein, 1,910 m, 04 Apr 1976, *W&F 19037* (GB); Iran, Tehran, Lar valley, below Rudkhaneh Alarm, 2,300 m, 28 May 1974, *W & al. 11815* (GB); Romania, Constanța, Istria, GBG 2000-0264 (GB); Turkey, Van, 10 km from Hoşap to Başkale, 2,150 m, 26 May 2004, *BATM 083* (GB).

Colchicum speciosum Steven

$2n = 38$, CHN. Russian Fed., Krasnodar, Sochi, Matsesta, 100 m, 1989, *Cuba 89-116* (GB).

** $2n = 40$, CHN. Iran, Gilan, Asalem to Khalshal, E side of Almas pass, 1,750 m, 29 May 1978, *W&A 27766* (GB); Iran, Semnan, Shahpassand to Shahrud, Kuh-e Abr, S-side, 1,800–1,950 m, 18 May 1978, *W&A 29670A* (GB).

! $2n = 40, 42, 44$, CHN. Iran, Mazandaran, Elborz Mts., N of Kandavan pass, 2,860 m, *JJA 2486A* (GB); Iran, Mazandaran, Kandavan pass, 1975, *W s.n.* (GB).

Colchicum stevenii Kunth

$2n = 54$, CHN. Palestine Terr., 2 km N of Bethlehem, Nov 1986, *Hallander s.n.*, GBG 1986-0689 (GB); Turkey, Antalya, 10 km from Kaş to Elmalı, 575 m, 04 Nov 1988, *KP 471* (GB); Turkey, Antalya, above Kale, 150 m, 14 Nov 1995, *HKEP 95-49* (GB); Turkey, Antalya, between Kale (Demre) and Kaş, Oct 1978, *Leep L78/T50* (GB); Turkey, Antalya, Kalkan to Sidek, 600 m, 08 Nov 1993, *HKEP 93-71* (GB); Turkey, Antalya, near Kekova, 350 m, 15 Dec 1998, *HKEP 98-29* (GB); Turkey, Muğla, Babadağ, 630 m, 09 Nov 1993, *HKEP 93-75* (GB).

Colchicum szovitsii Fisch. & C.A. Mey. subsp. *szovitsii*

Previous reports for *C. diampolis* Delip. & Cheshm. from Bulgaria refer to this species.

$2n = 18$, CHN. Armenia, Azizebekov, Daralaghez, between Martiros and Sevs, 14 Apr 1978, *Gabrielian s.n.* (“*C. ninae*”), GBG 1978-0042 (GB); Bulgaria, Stara Zagora, GBG 1983-0244 (“*C. diampolis*”) (GB); Iran, Azarbayejan-e Gharbi, Sardasht to Piranshar, 10 km N of Mir Abad, 1978, *HR & al.* (GB); Iran, Azarbayejan-e Sharqi, 16 km from Marand to Tabriz, 1,650 m, 21 Apr 1976, *W&A 19214* (GB); Iran, Azarbayejan-e Sharqi, Khalkhal to Ardabil, 55 km from Kivi, 1,750 m, 10 Apr 1976, *W&M 19111* (GB); Iran, Azarbayejan-e Sharqi, 6 km from Khalkhal to Asalem, 1,900 m, 10 Apr 1976, *W&M 19107* (GB); Turkey, Antalya, Bakirladağı above Saklıkent, 2,000 m, 18 Apr 1991, *KP 510* (GB); Turkey, Hakkâri, 1 km NE of Hakkâri, 1,800 m, 1982, *OS 801* (GB); Turkey, Sivas, 59.5 km S of Sivas, 1,500 m, Apr 1993, *Jonasson s.n.*, GBG 1993-1454 (GB); Turkey, Trabzon, Zigana Dağ, 2,000 m, 30 Jun 1985, *M&P 85-115* (GB); Turkey, Trabzon, Zigana pass, 2,300 m, 22 May 1985, *JJA 6474* (GB); Turkey, Tunceli, 57 km of Tunceli, just before Ovacık, 1,200 m, 11 Apr 1990, *KPPZ 90-216* (GB); Turkey, Van, 30 km NNW of Van, 1,700 m, 24 May 1985, *JJA 6515* (GB).

** $2n = 36$, CHN. Iran, Semnan, Kuh-e Abr (Kuh-e Ghatrî), N of Sharud, 2,450 m, 1978, *W s.n.*, GBG 1978-0102 (GB).

Colchicum szovitsii subsp. *brachyphyllum* (Boiss. & Hausskn.) K. Perss.

* $2n = 18$, CHN. Turkey, Adiyaman, Gerger to Taraksu, 950 m, 23 Mar 1999, *HKEP 99-07* (GB); Turkey, Antalya, 78 km from Beyşehir to Aydıncık, 15 Apr 1990, *Jonasson s.n.*, GBG 1990-2186 (GB); Turkey, Gaziantep, 18-20 km E of İslâhiye to Çınar, 1,000 m, 08 Apr 1987, *OS 1058* (GB); Turkey, Gaziantep, W of Musabeyli (NW of Kilis), 1,050–1,150 m, 31 Mar 1987, *OS 1033* (GB); Turkey, Gaziantep, 32 km S of Gaziantep to Kilis, 30 Mar 1987, *OS 1030* (GB).

Colchicum trigynum (Steven ex Adams) Stearn

Previous reports for *Merendera trigyna* (Steven ex Adams) Stapf or *M. candidissima* Misch. ex Grossh. by other authors refer to this species.

$2n = 18$, CHN. Armenia, Aragatsotn, Mt. Aragats, Nor Hambord, 2,000 m, 08 May 1978, *Gabrielian s.n.* (GB); Armenia, Aragatsotn, Oshakan (near Erevan), 08 Mar 1978, *Gabrielian s.n.* (GB); Armenia, Gegharkunik, Lake Sevan, 1983, *Prasil s.n.*, GBG 1983-494 (GB); Armenia, Kotayk, between Gokht and Garni, 2,000 m, 1976, *Prasil 117* (“*Merendera trigyna* var. *ketzkhoveli*”) (GB); Georgia, Abashis, Beveti, 600 m, 1990, *Cuba 90-088* (GB); Iran, Azarbayejan-e Gharbi, 36 km from Qara Ziya ud-Din to Khoy, 1,900 m, 23 Apr 1976, *W&A 19257* (GB); Iran, Azarbayejan-e Sharqi, Marand to Sofian, 1,900 m, 13 Apr 1967, *Rechinger 33038a* (GB); Iran, Azarbayejan-e Sharqi, Tabriz to Ahar pass ca. 20 km SW of Ahar, 1,700 m, 25 Apr 1976, *W&A 19416* (GB); Iran,

Azarbayejan-e Sharqi, 9 km W of Kivi, 10 Apr 1976, *W&M s.n.* (GB); Iran, Azarbayejan-e Sharqi, Mts. SW of Khalkhal on road to Kivi, 1,800 m, 30 May 1978, *W&A 27832* (GB); Iran, Azarbayejan-e Sharqi, 6 km from Khalkhal to Asalem, 1,900 m, 10 Apr 1976, *W&M 19108* (GB); Iran, Semnan, Shahpassand to Shahrud, Kuh-e Abr, S-side, 2,200 m, 18 May 1978, *W&A s.n.* (GB); Turkey, Erzurum, near Aras SE of Horasan, 1,800 m, 18 May 1985, *JJA 6374* (GB); Turkey, Kars, between Kağızman and Paşlı Geçidi, 1,700 m, 17 May 1985, *JJA 6358* (GB).

! $2n = 20$, CHN. Turkey, Hakkâri, NW of Şemdinli ca. 25 km from Yüksekova, 1,500 m, 31 May 1985, *JJA 6587B* (GB); Turkey, Van, E of Gürpınar to Hoşap, 1,700 m, 13 May 1985, *JJA 6323* (GB).

Colchicum triphyllum Kunze

! $2n = 40$, CHN. Iran, Azarbayejan-e Sharqi, 62 km from Miyaneh to Tabriz, 1,700 m, 21 Apr 1976, *W&A 19195* (GB); Turkey, Antalya, Elmalı to Finike, above Avlan Gölü, 1,300 m, 21 Apr 1987, *KP 434* (GB); Turkey, Antalya, Bey Dağları, NW part, 1,800 m, 27 Apr 1972, *R&W 338* (GB); Turkey, Isparta, Barla Dağı, N-side, 1,800 m, 07 May 1972, *R&W cult. 132A* (GB).

! $2n = 40, 45, 50-54$ (mixed populations), CHN. Turkey, Antalya, Elmalı to Akçay, Çiğlikara Ormanı road, 1,550 m, 21 Apr 1987, *KP 438* (GB); Turkey, Burdur, pass W of Ağlasun, 1,450 m, 28 Apr 1972, *R&W cult. 69C* (GB); Turkey, Isparta, Sultan Dağları, pass 20 km from Akşehir to Bağkonak, 1,800 m, 16 Apr 1991, *KP 499* (GB); Turkey, Konya, 7 km from Gencek to Aydıncık, 1,200 m, 17 Apr 1991, *KP 503* (GB); Turkey, Niğde, Caykavak Geçidi NE of Ulukışla, 1,600 m, 16 Apr 1990, *KPPZ 330B* (GB).

! $2n = 50$, CHN. Morocco, Ifrane, S of Timahdite, 2,000 m, *KPW 94-28* (GB); Morocco, Marrakech, Great Atlas, Ait Mizane valley, 3,100 m, 1991, *Tattersfield DMT 91/45* (GB); Spain, Granada, Sierra Nevada, 1,800 m, 09 Apr 1979, *Holmdahl s.n.* (GB); Spain, Granada, Sierra Nevada, Trevenque, 1991, *Strindberg & Holmberg s.n.*, GBG 1991-1791 (GB).

! $2n = 50-54$, CHN. Turkey, Antalya, Kaş to Elmalı, 2 km N of turn to Kalkan, 1,450 m, 21 Apr 1987, *KP 436* (GB); Turkey, Kütahya, 38 km W of Kütahya, 1,000 m, 07 Apr 1990, *OS 1214* (GB); Turkey, Sivas, Ziyaret pass, 2,100 m, 11 Jun 1985, *JJA 6688* (GB).

** $2n = 60, 62$, CHN. Bulgaria, Sofia, Pirin Mts., Bansko, 1976, *Dresden Bot. Gard. s.n.* (GB); Greece, Achaia, Mt. Panachaiko, N-side, 1,350–1,400 m, 03 May 1994, *KP 549* (GB); Greece, Arkadia, Mt. Menalon, 5 km NW of Kardaras, 1,600 m, 22 Mar 1976, *KP 327* (GB); Greece, Fokida, Mt. Parnassos, above Arachova, 1,200 m, 28 Mar 1976, *KP 333* (GB); Italy, Sicilia, Madonie, Piano Battaglia, 1,600 m, 22 Mar 1981, *KP 366* (GB); Romania, Tulcea, Dobrudja, Cheia gorge, 100 m, *Pilous s.n.*, GBG 1986-0899 (GB).

Colchicum troodi Kotschy

* $2n = 54$, CHN. Cyprus, Famagusta, 1 km E of Agia Napa, 1980, *Kugelberg s.n.* (GB); Cyprus, Limassol, Mt. Troodos, 1985, *Strindberg s.n.*, GBG 1985-0676 (GB).

Colchicum tunicatum Feinbrun

$2n = 54$, CHN. Jordan, Ma'an, Ras An Naqb, 1,400 m, 10 Feb 1995, *KPS 95-22* (GB).

Colchicum turcicum Janka

$2n = 54$, CHN. Bulgaria, Haskovo, E Rodopi Mts., E of Kardjalik, 150 m, 13 Oct 2000, AS & al. 51184 (GB); Turkey, Istanbul, Terkos, T. Baytop ISTE 42421 (GB); Turkey, Istanbul, Belgrad Ormani, 1966, Nitzelius & Dahlbeck s.n. (GB).

Colchicum tuviae Feinbrun

$2n = 14$, CHN. Palestine Terr., Judean Desert NE of Bethlehem, Khizbet Tla'a between Mshash and Theodosius monastery, 600 m, 01 Dec 1981, Shmida s.n. (GB).

Colchicum umbrosum Steven

$2n = 24$, CHN. Georgia, near Tbilisi, 1,000 m, 1991, Cuba 91-068 (GB); Russian Fed., Krasnodar, near Psada, 07 Jun 2004, Zurowetz 04-046 (GB); Russian Fed., Krasnodar, near Sochi, 1999, Bondarenko s.n., GBG 1999-0795 (GB); Turkey, Amasya, Gündes köyü, Topçu tepesi, 03 Jul 1982, T. Baytop ISTE 49641 (GB); Turkey, Artvin, 33 km SW of Artvin, 1,350 m, 23 Jun 1988, M&P 88-05B (GB); Turkey, Bolu, slopes above Abant Gölü, 1,000–1800m, 15 Jul 1985, JJA 6956 (GB); Turkey, Bolu, above Abant Gölü, 1,350 m, 14 Sep 1986, KP 425 (GB); Turkey, Bolu, above Abant Gölü, 1,050 m, 22 Jun 1985, M&P 85-107 (GB); Ukraine, Krym, Jalta Bot. Gard. s.n., GBG 1984-440 (GB); Ukraine, S Krym, St. Petersburg Bot. Gard. s.n., GBG 1976-0196 (GB).

Colchicum varians (Freyn & Bornm.) Dyer

** $2n = 46$, CHN. Iran, Chaharmahal-va-Bakhtiari, Shahr-e Kord to Chadegan, 2,300 m, 03 May 2002, T4Z 150 (GB); Iran, Esfahan, between Khomein and Saidabad, 2,000 m, 01 May 1975, W 16377y (GB); Iran, Esfahan, Kuh-e Dalan, above Analujeh, 2,750 m, 04 May 2002, T4Z 153 (GB); Iran, Esfahan, near Sahman, between Sharipur and Tiran, 13 May 1998, SLIZE 105 (GB); Iran, Fars, S of Eqlid, 2,400 m, 25 Apr 2002, T4Z 063 (GB); Iran, Fars, Esfahan to Shiraz, 14 km N of Dehbid, 2,460 m, 25 Mar 1976, Bokhari & W 323 (GB); Iran, Fars, Kuh-e Kataban, 2,600 m, 21 Apr 2002, T4Z 020 (GB); Iran, Markazi, 55 km E of Arak, Godar Sorkhe, 1,850 m, 01 May 1975, W&A 16362z (GB); Iran, Markazi, 55 km from Arak to Qom, 1,990 m, 04 Apr 1976, W&M 19032 (GB); Iran, Markazi, ESE Arak, 1750m, 01 May 1975, W&A 16363x (GB); Iran, Markazi, 11 km from Khomein, 2,200 m, 04 Apr 1976, W&M 19040 (GB).

Colchicum variegatum L.

The number $2n = 44$ reported in earlier publications without localities (Levan 1940, Satô 1942) probably refers to $\times C. agripinum$ Baker.

* $2n = 54$, CHN. Greece, Dodekanisos, Kalimnos, Faradonisia NW of Leros, the large island, 25 Apr 1974, B&R s.n. (GB); Greece, Dodekanisos, Kalimnos, Tripiti N of Leros, the northern island, 25 Apr 1974, B&R s.n. (GB); Greece, Dodekanisos, Kalimnos, Agia Kiriaki E of Leros, 25 Apr 1974, B&R s.n. (GB); Greece, Dodekanisos, Kalimnos, Telendos W of Kalimnos, 0–200 m, 24 Apr 1974, B&R s.n. (GB); Greece, Dodekanisos, Kalimnos, Agia Kiriaki W of Kalimnos, S of Telendos, 25 Apr 1974, B&R s.n. (GB); Greece, Rodos, Ataviros, 25 Mar 1970, R&W s.n. (GB); Greece, Rodos, Kalopetras, 25 Mar 1970, R&W s.n. (GB); Greece, Kiklades, Siros, Agia Varvaras, 50–200 m, 04 Apr 1969, HR & al. 40130 (GB); Turkey, Antalya, E side of Lycian Ak Dağ, 1,500 m, 1989, OS 1157 (GB); Turkey, Antalya, W of Tekirova, 25 Apr 1972, R&W cult. 55C (GB); Turkey, Antalya, pass over Karakol, 26 Apr 1972, R&W cult. 58A (GB); Turkey, Antalya, Manavgat to Akseki, S of Geriş, 540 m, 04 May 1972, R&W 112B (GB); Turkey, Antalya, Akseki to Beyşehir, N of Cevizli, 01 May 1985, JJA 6050 (GB); Turkey,

Akseki, Akseki to Beyşehir, N of Cevizli, 1,250 m, 02 May 1972, R&W 101D (GB); Turkey, Antalya, S of Cevizli, 1,200 m, 30 Apr 1985, JJA 6046 (GB); Turkey, Antalya, 10 km from Gündoğmuş to Manavgat, 19 Apr 1987, KP 429 (GB); Turkey, Antalya, 4 km from Güzelbağ to Güney, 850 m, 18 Apr 1987, KP 427 (GB); Turkey, Aydın, Atburgazı, 50 m, 09 May 1972, R&W cult. 142B (GB); Turkey, Isparta, above Savköy, 1,200–1,300 m, 28 Apr 1972, R&W cult. 72A (GB); Turkey, İzmir, Kuşadası, 12 Apr 1969, Wollin s.n. (GB); Turkey, İzmir, Söke to Güzelçamlı, 5 km W of Davutlar, 13 Apr 1972, R&W cult. 2B (GB); Turkey, İzmir, Samsun Dağı, N-side, 250 m, 14 Apr 1972, R&W 14 (GB); Turkey, Konya, N of Kireliköy, 1,400 m, 02 May 1972, R&W cult. 99B (GB); Turkey, Muğla, pass N of Marmaris, 22 Apr 1972, R&W cult. 31A (GB); Turkey, Muğla, 5 km S of Yalıkavak, 16 Apr 1972, R&W cult. 15A (GB).

Colchicum wendelboi K. Perss.

** $2n = 24$, CHN. Iran, Chaharmahal-va-Bakhtiari, Kuh-e Zarde, Kuhrang valley, 14 May 1998, SLIZE 129 (GB); Iran, Chaharmahal-va-Bakhtiari, Bazoft valley, 1,900 m, 01 May 2002, T4Z 134 (GB); Iran, Esfahan, Kuh Pasmaku W of Semiro, 2,400–2,850 m, 17 May 1998, SLIZE 225 (GB); Iran, Lorestan, Kuh-e Ali, pass between Aligudarz and Shulabad, 2,500–2,600 m, 05 May 2002, T4Z 167 (GB).

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Katarína Olšovská^{1,2*} & Marián Perný^{1,2}

¹ Institute of Botany, Slovak Academy of Sciences, Dúbravská cesta 14, 845 23 Bratislava, Slovak Republic.

*katarina.olsavska@savba.sk (author for correspondence)

² Faculty of Natural Sciences, Matej Bel University, Tajovského 40, 974 01, Banská Bystrica, Slovak Republic

Cyanus graminifolius occurs in southeastern France in the Hautes Alpes, Alpes de Hte. Provence and in the Alpes Maritimes. The chromosome number $2n = 40$ is new for this species. The only chromosome number previously reported for *Cyanus graminifolius* was $2n = 44$ (Guinochet, 1957, as for *Centaurea triumfettii* var. *seusana* Gugler) from Pic de Fourneuby in the Alpes de Hte. Provence. This was not confirmed by the analyses of plants from the same locality published here.

The base chromosome number and ploidy level in *Cyanus graminifolius* ($x = 10$; $2n = 4x = 40$) are distinct from those in *Cyanus triumfettii* (All.) Dostál ex Á. Löve & D. Löve ($x = 11$; $2n = 2x = 22$), which supports the separate position of these two species. *Cyanus graminifolius* is more closely related to other perennial knapweeds with the base chromosome number $x = 10$ and with similar morphology, e.g. *Cyanus lingulatus* (Lag.) Holub (with $2n = 20$).

The classification of the widely conceived genus *Centaurea* L. has remained unsettled, in spite of increasing knowledge on phylogeny and evolution of this plant group. Morphological, karyological and molecular data as well as pollen types argue for separate position of the *Cyanus* taxa within *Centaurea* s.l., and thus, depending on the point of view, they are either classified within the distinct genus *Cyanus* Mill. (e.g., Bancheva & Greilhuber, 2006), or included in *Centaurea* s.str. (e.g., Garcia-Jacas & al., 2001). Here we follow the generic concept as presented in the Euro+Med PlantBase (Greuter, 2003, 2008), where *Cyanus* is classified as a separate genus. As the taxon corresponding to *Cyanus graminifolius* is not recognised by Greuter (2008) as a separate species from *C. triumfettii* (All.) Á. Löve & D. Löve., a new combination is needed. According to the rules of the Code (Art 11.4, McNeill & al., 2006), “*graminifolius*” has to be used as the final epithet of the earliest legitimate name of the taxon in the same rank.

Chromosome numbers were counted and ploidy levels estimated by K. Olšovská. Plants used for karyological analyses were transferred from the field and cultivated in the experimental garden at Višňové (49°09'40" N, 18°47'13" E, 470 m, Žilina district, NW Slovakia); vouchers are kept in SAV.

Authors thank to K. Marhold for discussion on nomenclature and B. Šingliarová for help with flow-cytometric analyses.

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ASTERACEAE

Cyanus graminifolius (Lam.) Olšovská

Basionym: *Jacea graminifolia* Lam., Fl. Franç. 3: 638. 1779

Synonyms: *Centaurea variegata* Lam., Encycl. 1: 668. 1785, nom. illeg.; *Centaurea seusana* Chaix in Vill., Hist. Pl. Dauphiné. 1: 365. 1786.

FCM: DAPI. Samples of *C. graminifolius* were prepared from young leaves from cultivated plants. Internal standard: *Bel-*

lis perennis L., 2C DNA = 3.38 pg (Schönswetter & al., 2007). Fluorescence intensity (against *Bellis perennis* with unit value) for analysed plants varied between 1.11–1.14 (mean 1.13). CVs of samples and internal standard were 1.41%–2.21% (mean 1.73%) and 1.36%–2.07% (mean 1.61%), respectively.

$2n = 40$, CHN. France, Hautes Alpes, Montagne de Céüse, 44°31'02" N, 05°52'08" E, 1,572 m, 15 Jun 2007, K. Olšovská, M. Perný & D. Dítě 65/4 (SAV).

$2n \sim 4x \sim 40$, FCM. France, Hautes Alpes, Montagne de Céüse, 44°31'02" N, 05°52'08" E, 1,572 m, 15 Jun 2007, K. Olšovská, M. Perný & D. Dítě 65/1, K. Olšovská, M. Perný & D. Dítě 65/4, K. Olšovská, M. Perný & D. Dítě 65/7, K. Olšovská, M. Perný & D. Dítě 65/9, K. Olšovská, M. Perný & D. Dítě 65/10 (SAV).

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$2n \sim 4x \sim 40$, FCM. France, Alpes de Hte. Provence, Stade de neige Vauplane, 43°53'14.1" N, 06°37'53.1" E, 1,686 m, 7 Jul 2008, K. Olšovská, M. Perný & V. Kolarčík 102/3 (SAV).

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