Notes on living plants from Iter Mediterraneum II cultivated in the Botanical Garden Berlin-Dahlem

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Introduction

When collecting monocots on the 2nd OPTIMA Expedition to Israel (19.3.-10.4.1992) I harvested a certain amount of bulbs and corms, either sterile and thus unidentified or identified but too few to be included in the expedition's general 10-set collection. This material was privately numbered and later incorporated into the living collection of the Botanical Garden Berlin-Dahlem for further cultivation. In the meantime many of the plants produced flowers, making determination possible. Some of the results confirm relevant data as published in the general check-list (see Danin, this volume). They are not repeated here. Others, however, represent records or taxa additional to those in the general check-list of Iter Mediterraneum II.

They are given alphabetically in the following list. For each entry site and date of original collection, collection number, accession number of the Botanical Garden (BG) Berlin-Dahlem, and - following the words "in flower" - the date of taking a voucher specimen (deposited at B) are given.

Some 30 gatherings, (representing the genera Allium, Arum, Bellevalia, Caralluma, Colchicum, Gagea, Muscari, and perhaps others) did not yet flower in cultivation. They are still unidentified, and consequently excluded from the following list.

Results

Allium dictyoprasum Kunth, Enum. Pl. 4: 390 (1843)


The Negev plants have purple anthers, whereas the collection from the Upper Jordan Valley exhibits yellow anthers, thus confirming the observations by Kollmann (in Feinbrun-Dothan, Fl. Palaest. 4: 95. 1986).
**Allium pallens** L., Sp. Pl. ed. 2: 427 (1762)


With their filaments included and their anthers shortly exserted the plants clearly key out to *A. pallens*. The colour of the anthers, however, is yellow and not purple as stated by Kollmann (in Feinbrun-Dothan, Fl. Palaest. 4: 85. 1986), which illustrates the wide range of variability within this species.

**Allium paniculatum** L., Syst. Nat. ed. 10, 2: 978 (1759), subsp. *paniculatum*


Plants similar to *A. stamineum* in habit but differing by their fully included stamens. Umbel effuse, thus matching the characters of the populations of the Judean Mts as circumscribed by Kollmann (in Feinbrun-Dothan, Fl. Palaest. 4: 84. 1986).


**Allium trifoliatum** Cyr., Pl. Rar. Neap. 2: Il, t. 3 (1792), subsp. *hirsutum* (Regel)


*Androcymbium palaestinum* Baker in *J. Linn. Soc., Bot.*, 17: 445 (1879)

Judean Desert: near Mishor Adumim (35°19′20″E - 31°48′10″N). Stony slopes with nari crusts on Senonian chalk, brown lithosol, semi-steppe batha of *Echinops polyceras* and *Phlomis brachyodon*, 250 m, 22.3.1989, *Raus* 14623 (BG Berlin-Dahlem acc. no. 138-13-89-20); Negev Highlands: Makhtesh Hazera / Makhtesh Katan (35°13′00″E - 30°57′30″N). Sandy alluvium, pebbly wadis and limestone outcrops, (-) 10 m, 30.3.1989, *Raus* 14669 (BG Berlin-Dahlem acc. no. 138-59-89-20); Kinnrot Valley (Upper Jordan Valley): 2 km NE of Kibbutz Haon (35°38′30″E - 32°44′00″N). Steep limestone and sandstone slopes, (-) 150 m, 2.4.1989, *Raus* 14671 (BG Berlin-Dahlem acc. no. 138-61-89-20).

None of the collections under cultivation in Berlin has flowered yet. The records are included here because *Androcymbium palaestinum* is the only representative of the genus known to occur in Israel (see Greuter in *Candollea* 22: 253 & fig. 2. 1967; Feinbrun-Dothan, *Fl. Palaest.* 4: 32. 1986).

*Arum dioscoridis* Sm., *Fl. Graec. Prodr.* 2: 245 (1816)


Crocus cf. damascenus Herbert in Bot. Reg. 31: 37, fig. 1, misc. 1 (1845) [C. cancellatus subsp. damascenus (Herbert) B. Mathew]

Negev Highlands: Nahal Loz and Borot Loz (34°39'30"E - 30°30'00"N). Various habitats, 960-1000 m, 27.3.1989, Raus 14653 (BG Berlin-Dahlem acc. no. 138-43-89-20; corms with coarsely netted tunics).

This is the only Crocus collection of Iter Mediterraneum II. The plants have not yet flowered under cultivation in Berlin. The field determination reported here is preliminary owing to the occurrence in Israel of several species of the genus with reticulate-fibrous corm tunics.

Cyclamen coum Miller, Gard. Dict., ed. 8: Cyclamen n° 6 (1768), subsp. coum

Golan: Odem forest, near Masaáda (35°45'15"E - 33°13'00"N). Shallow soil on basalt, 1010 m, 4.4.1989, Raus 14682 (BG Berlin-Dahlem acc. no. 138-72-89-20)


Cyclamen persicum Miller, Gard. Dict., ed. 8: Cyclamen n° 3 (1768)


Gagea reticulata (Pallas) Schultes & Schultes fil., Syst. Veg. 7: 542 (1829)

Northern Negev: 5 km N of Beer Sheva (34°47'00"E - 31°18'30"N). Brown loessial lithosol, Noaeetum mucronatae, 300 m, 26.3.1989, Raus 14633 (BG Berlin-Dahlem acc. no. 138-23-89-20; in flower 29.3.1990); Negev Highlands: 6 km SW of Dimona (34°59'00"E - 31°01'30"N). Sandy loess soil near the nature reserve of Iris petrana, 330 m, 26.3.1989, Raus 14662 (BG Berlin-Dahlem acc. no. 138-52-89-20; in flower 21.2.1990).

Ixiolirion tataricum (Pallas) Herbert, Appendix: 37, t. 2 (1821)

Negev Highlands: 8 km SW of Yerokham (34°53'10"E - 30°56'00"N). Loessial soil and stony slopes, 500 m, 27.3.1989, Raus 14665 (BG Berlin-Dahlem acc. no. 138-55-89-20).

Flowering in the field, but not yet again under cultivation in Berlin.
**Narcissus tazetta** L., Sp. Pl.: 290 (1753)


The plants from Atlit did not yet produce flowers under cultivation in Berlin but doubtlessly represent *N. tazetta*.


**Ornithogalum sorgerae** H. Wittmann in *Stapfia* 13: 80 (1985)


The collection confirms the occurrence of *O. sorgerae* in Israel, already assumed by Wittmann (in *Stapfia* 13: 83. 1985). The inflorescences are c. 25-flowered; the tepals are strongly recurved when in full flower (so that the flower may have a ball-like appearance) and differ distinctly in this character from specimens of *O. narbonense* L. (with straight tepals) collected elsewhere oniter Mediterraneum II (e.g. 05.018 !, 44.020 !).


**Scilla hyacinthoides** L., *Syst. Nat.*, ed. 12, 2: 243 (1767)


**Negev Highlands:** 6 km SW of Dimona (34°59′00″E - 31°01′30″N). Sandy loess soil near the nature reserve of *Iris petrana*, 330 m, 26.3.1989, *Raus 14664* (BG Berlin-Dahlem acc. no. 138-54-89-20); Negev Highlands: Makhtesh Hazera / Makhtesh Katan (35°13′00″E - 30°57′30″N). Sandy alluvium, pebbly wadis and limestone outcrops, (-) 10 m, 30.3.1989, *Raus 14670* (BG Berlin-Dahlem acc. no. 138-60-89-20).

Neither collection has yet flowered under cultivation in Berlin, but field determinations are safe in view of the very distinctive undulate leaves.

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