

First chromosome counts of *Lactuca viminea* from Cyprus

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Abstract. – Chromosome counts of *Lactuca viminea* from Cyprus revealed the diploid number $2n = 18$, which confirms results from other parts of its distribution range. Cultivation of plants corroborated the existence of two habit forms but assignment of Cypriot material to infraspecific taxa still seems to be premature.

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Introduction

Currently, seven species of *Lactuca* are known to occur in Cyprus. Hitherto, chromosome counts on Cypriot plants have been published only for three species, *L. cyprica* (Rech. f.) N. Kilian & Greuter, *L. tetrantha* B. L. Burtt & P. H. Davis and *L. tuberosa* Jacq. (see Hand & al. 2011 which includes a compilation of all known chromosome counts for Cyprus). In *L. viminea* (L.) J. Presl & C. Presl (Syn. *Scariola viminea* (L.) F. W. Schmidt) which is more or less restricted to the two mountain ranges of the island, numbers from Cyprus are unknown. This species inhabits a large distribution range from the Canary Islands and Morocco in the west to the Caucasus in the east (Meusel & Jäger 1992; erroneously not indicated for Cyprus in the map).

Material and Methods

Plants were raised from seeds and cultivated in pots in greenhouses in order to obtain root tips. The counting methods used are those described by Vogt & Aparicio (2000). Unfortunately, because of low quality no photo documentation of metaphase stages could be produced. However, all numbers have been counted and controlled by two persons independently.

Results

All counts revealed the same number: $2n = 18$.

Counted proveniences (divisions sensu Meikle 1985):

- Division 2, Moni Panagia Machaira, at the road 2 km towards Kapedes, rocky road bank, alt. c. 850 m, 18.10.2003, R. Hand 3982 (B). – 1 individual counted.
- Division 2, Pano Amiantos, Almyrolivado, near giant juniper at the road to Troodos, c. 1.5 km W of P. Amiantos, stony ground at a track, alt. c. 1600 m, 20.10.2003, R. Hand 3990 & G. Hadjikyriakou (B). – 2 individuals counted.

- Division 2, Pano Panagia, E flank of Panagia mt., at the track to Vretsia, edges of vineyards, alt. c. 1000 m, 22.10.2003, R. Hand 4022 & G. Hadjikyriakou (B). – 2 individuals counted.
- Division 2, Troodos, c. 50 m from start of Persephone Nature Trail, rocky ground in open *Robinia* forest, alt. c. 1720 m, 20.10.2003, R. Hand 3998 & G. Hadjikyriakou (B). – 1 individual counted.
- Division 6 (first record for this division), Agrokipia, Kreatos, NE side not far from Moni Agios Panteleimona, shaded rock slide below summit, alt. c. 580 m, 5.11.2002, R. Hand 3753 (B). – 3 individuals counted.

The results confirm counts from other parts of the distribution range, e. g., by Galland (1988), Letz & al. (1999) and Gemeinholzer (2005).

Morphological remarks

As a by-product, the cultivation of plants for karyological purposes has provided evidence that the habit of plants already described by Meikle (1985) is a constant character: (1) plants with long, virgate branches and long-decurrent leaves (*Hand 3982, 4022*); (2) dwarfed plants with divaricately branched shoots (*3753, 3990, 3998*). Another gathering not listed above (Division 2, Moni Panagia Machaira, NNE, at the bridge at the road to Kapedes, NNW of Skortokefalos, rocky road bank. alt. c. 675 m, 18.10.2003, R. Hand 3972, B) belongs to an intermediate type. Interestingly, populations in Cyprus show a high proportion of flowerheads with four ligules only instead of five. The former number seems to be rare outside Cyprus (after random inspection of the material at herbarium B and own experiences in S France). But no correlation between this character and the different forms of habit can be found.

The virgate plants are easily identified with the nominal subspecies *L. viminea* subsp. *viminea*. Meikle (1985) hypothesised that the other type of population may belong to *L. ramosissima* (All.) Boreau. He doubted that they may represent a homogenous entity which is confirmed by transitional populations. He also mentioned that such plants approach the Troodos endemic *L. tetrantha*, a perennial of the uppermost altitudes of the mountain range.

Recently, Tison & de Foucault (2014) argued in favour of treating *L. ramosissima* as a species whereas *L. viminea* should comprise two subspecies, *L. viminea* subsp. *chondrilliflora* (Boreau) St.-Lag. with a more western and central Mediterranean distribution range, and *L. viminea* subsp. *viminea* from more eastern parts of the distribution range. This may be a first sensible step to disentangle *L. viminea* s. l. (see also summary by Meusel & Jäger 1992 on infraspecific and related taxa). On the other hand, Mejías (2017) synonymised *L. ramosissima* with *L. viminea* subsp. *viminea* in his Flora Iberica treatment. For Turkey, Güzel & al. (2018) accepted *L. viminea* with two subspecies, the nominal taxon and subsp. *ramosissima* (All.) Arcang. respectively. However, further investigation of the complex throughout its distribution range is required (see Meikle 1985).

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