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## Chromosome numbers counted by the late Gilbert Bocquet

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### RÉSUMÉ

BALTISBERGER, M., D. AESCHIMANN, A. CHARPIN & D. JEANMONOD (2006). Nombres chromosomiques comptés par feu Gilbert Bocquet. *Candollea* 61: 61-70. En anglais, résumés français et anglais.

Les nombres chromosomiques de 19 taxa (51 localités) effectués par Gilbert Bocquet († 1986) sont communiqués. Les nombres pour *Silene heterodonta* subsp. *heterodonta* ( $n = 12$ ) et *Silene reiseri* ( $n = 12$ ,  $2n = 24$ ) sont nouveaux. Les références des dénombrements précédemment publiés sont ajoutés, et des aspects taxonomiques et phytogéographiques sont commentés.

### ABSTRACT

BALTISBERGER, M., D. AESCHIMANN, A. CHARPIN & D. JEANMONOD (2006). Chromosome numbers counted by the late Gilbert Bocquet. *Candollea* 61: 61-70. In English, French and English abstracts.

The chromosome numbers of 19 taxa (51 sites) investigated by Gilbert Bocquet (†1986) are presented. The numbers of *Silene heterodonta* subsp. *heterodonta* ( $n = 12$ ) and *Silene reiseri* ( $n = 12$ ,  $2n = 24$ ) are presented for the first time. Previous counts are given, and taxonomic and phytogeographic aspects are discussed.

**KEY-WORDS:** Angiosperms – Chromosome numbers – Gilbert Bocquet

Moving an institute is a tremendous load of work and consumes a huge amount of time especially when a library, laboratories, and herbaria are included to be moved. The Geobotanical Institute of ETH Zürich had to perform such a move in late summer 2005. Although such a move disturbs the life of the institute and the progress of scientific work it nevertheless is a chance to take on some work which would not have been done otherwise (at least not at this time). When preparing things to be moved and bringing order in materials not touched for years herbarium specimens collected by the late Gilbert Bocquet arose. Some of these specimens were annotated with chromosome numbers (a few even with drawings of metaphase plates; see Fig. 1). These notes, sometimes written in the handwriting of Bocquet, have never been published.

Gilbert Bocquet grew up and studied biology in Geneva. From 1969 to 1979 he was curator at the herbaria of ETH in Zürich and returned in 1979 as director of Conservatoire et Jardin Botaniques de la Ville de Genève and as professor for systematic botany at the university. Due to these facts of his CV specimens of Bocquet are deposited at the herbaria either of ETH Zürich (ZT)

or at Geneva (G). In 1986 Bocquet died on a field trip in Corse, his most favorite area for sampling plants (BURDET, 1986). He left back a large amount of specimens which most were sorted out shortly after his dead. Some of these specimens were annotated with not published chromosome numbers investigated by Bocquet. These counts have been published earlier (BALTISBERGER & AESCHIMANN, 1988; BALTISBERGER & CHARPIN, 1989).

Sorting out materials for the move in summer 2005 the recently arisen specimens of Bocquet with notes on chromosome numbers have been determined by the authors (all curators of Geneva resp. Zürich). The specimens consist mostly of plants sampled by Bocquet himself on a journey with R. Borel and A. Reist to Morocco and the Iberian peninsula. The numbers investigated and documented by Bocquet are made available here. *Medicago*, the first count in the list, is the only species which does not belong to the family *Caryophyllaceae* on which Bocquet focused his main interest.

Taxa are arranged in alphabetical order. Nomenclature usually follows *Flora Europaea*. After the indications of the site, altitude, date, number of herbarium specimen, and the respective chromosome number(s) are listed. Specimens are deposited at Z-ZT, duplicates (where possible) in G. The chromosome numbers are commented and the literature with previous published indications is given.

### Fabaceae

*Medicago orbicularis* (L.) Bartal.

FRANCE: Peninsula near Sidrière de Fitou, 14.V.1971, G. Bocquet, R. Borel & A. Reist 9896;  $n = 8$ .

*Medicago orbicularis* is a widespread species in the Mediterranean area. The plants investigated by Bocquet are diploid with the gametophytic number of  $n = 8$  confirming the many indications in literature (e.g. OBERPRIELER & VOGT, 1996, as well as citations in the compilations by GOLDBLATT, 1981, 1984, 1985; GOLDBLATT & JOHNSON, 1994, 1996).

### Caryophyllaceae

*Petrocoptis pyrenaica* subsp. *glaucofolia* (Lag.) P. Monts. & Fern. Casas

SPAIN: Ascent to refuge Veronica, Picos de Europa, 2200 m, 8.VIII.1971, G. Bocquet, R. Borel & A. Reist 11446;  $2n = 24$ .

*Petrocoptis pyrenaica* is an endemic species of the Pyrenees and the mountains of North Spain. The systematics of the group around *P. pyrenaica* seems not to be clear as ROTHMALER (1964), JALAS & SUOMINEN (1986), and WALTERS (1993) use different combinations of names and authors and correlate them in different combinations of synonymy. Following the treatment by WALTERS (1993) the plants of Bocquet are here named *Petrocoptis pyrenaica* subsp. *glaucofolia*. There are two indications in literature which could match with the plants from Bocquet, viz. *Lychnis* (*Petrocoptis*) *lagascae* by Sugiura (1938; cited in the list in DARLINGTON & WYLIE, 1955, but not contained in the references!) and *P. glaucofolia* (Lag.) Boiss. by TALAVERA (1978). Both indicate the same number as found by Bocquet.

Recently the genus *Petrocoptis* has been included as subgenus *Petrocoptis* within the genus *Silene* (MAYOL & ROSSELLO, 1999). The plants investigated by Bocquet have then to be named as *Silene glaucofolia* Lag.

***Silene boryi* Boiss.**

**SPAIN:** Stony place, Veleta, in the garden of the University hostel, above the Parador, Sierra Nevada, 2500 m, 28.VII.1971, *G. Bocquet, R. Borel & A. Reist 11264*;  $n = 12$ . – Scree, surroundings of the Parador, Sierra Nevada, 2450 m, 29.VII.1971, *G. Bocquet, R. Borel & A. Reist 11265*;  $n = 12$ .

**MOROCCO:** Calcarous rocks in the gorge of Dadès, 2300 m, 20.VI.1971, *G. Bocquet, R. Borel & A. Reist 10795*;  $n = 12$ .

*Silene boryi* is a variable species and occurs on the Iberian Peninsula and in North Africa (as well as in Iran; KÜPFER, 1974). It has been divided into several subspecies (compilation of the relevant literature see JALAS & SUOMINEN, 1986) but according to CHATER & al. (1993) at least some of them are weakly differentiated and therefore not accepted. Within *S. boryi* several ploidy levels (based on  $x = 12$ ) are known viz. diploid, tetraploid, and hexaploid (comments on and compilation of the literature see GALLAND, 1988). With  $n = 12$  the plants investigated by Bocquet showed the same basic chromosome number and were all diploid. These diploid plants have the same origin as other diploids namely mountains in the southern part of Spain and in Morocco.

***Silene ciliata* Pourr.**

**SPAIN:** Scree in the gorge of Aliva, Picos de Europa, 1450 m, 9.VIII.1971, *G. Bocquet, R. Borel & A. Reist 11426*;  $2n = 48$ . – Gorge of Aliva, Picos de Europa, 1500 m, 9.VIII.1971, *G. Bocquet, R. Borel & A. Reist 11432*;  $2n = 48$ .

*Silene ciliata* is a very variable species growing in mountains of southern Europe from Bulgaria to Portugal. It shows an extraordinary range of ploidy levels ( $2n = 2x$  up to  $20x$ ; CHATER & al., 1993). With  $2n = 48$  the plants investigated by Bocquet were all tetraploid which is a common ploidy level within *S. ciliata* (KÜPFER, 1974).

***Silene corrugata* Ball**

**MOROCCO:** Roadside on the road from Fès to Azrou, 1500 m, 5.VI.1971, *G. Bocquet, R. Borel & A. Reist 11528*;  $n = 12$ .

*Silene corrugata* is a polymorphic species endemic in northern Africa (MAIRE, 1963). It once was found in South Spain, and it is related to *S. obtusifolia* Willd. (GALIANO & SILVESTRE, 1977) which occurs in the southern part of the Iberian Peninsula, NW Africa and the Canary Islands. The chromosome number of *S. corrugata* is  $2n = 24$  and was established only once many years ago (BLACKBURN, 1928). With  $n = 12$  the plants investigated by Bocquet were also diploid and showed the same chromosome number.

***Silene gallica* L.**

**SPAIN:** Roadside near Albulol, Granada, 250 m, 18.V.1971, *G. Bocquet, R. Borel & A. Reist 9958*;  $2n = 24$ .

*Silene gallica* is widespread in western and southern Europe. It is homogenously diploid with  $2n = 24$  chromosomes. The number found by Bocquet confirms the numerous indications in literature (compilations in GOLDBLATT, 1981, 1984, 1988; GOLDBLATT & JOHNSON, 1990, 1991, 1998, 2000).

***Silene heterodonta* F. N. Williams, subsp. *heterodonta***

**MOROCCO:** Alpine meadow, Tizi-n-Tichka, 2150 m, 23.VI.1971, *G. Bocquet, R. Borel & A. Reist 10802*;  $n = 12$ .

*Silene heterodonta* is a mountain species endemic to the Atlas Mountains, and few subspecies are recognized (MAIRE, 1963). The chromosome number of two subspecies is known viz. subsp. *parvula* (Coss.) Maire & Weiller (QUEZEL, 1957; FAVARGER & al., 1979; GALLAND, 1988) and subsp.

*platycalyx* Emb. & Maire (GALLAND, 1988), both are diploid with  $n = 12$  resp.  $2n = 24$  chromosomes. The plants investigated by Bocquet belong to subsp. *heterodonta* of which the chromosome number was not known. With  $n = 12$  subsp. *heterodonta* shows the same chromosome number and ploidy level as the other two subspecies.

***Silene legionensis* Lag.**

**SPAIN:** Roadside, Villarroya, 1700 m, 21.VII.1971, G. Bocquet, R. Borel & A. Reist 11205;  $n = 12$ .

*Silene legionensis* is an endemic species of the Iberian Peninsula and related to *S. ciliata* (see above). Two ploidy levels ( $2n = 2 \times = 24$  and  $2n = 4 \times = 48$ ) are given in literature (KÜPFER, 1974; TALAVERA & BOCQUET, 1976; VALDES-BERMEJO & CASTROVIEJO, 1979; FERNANDEZ CASAS & al., 1980; CASTROVIEJO, 1982). With  $n = 12$  the plants investigated by Bocquet were diploid which is the more common ploidy level within *S. legionensis* (KÜPFER, 1974).

***Silene mekinensis* Coss.**

**MOROCCO:** Roadside on the road from Fès to Azrou, 1500 m, 5.VI.1971, G. Bocquet, R. Borel & A. Reist 11525;  $n = 12$ .

*Silene mekinensis* is an endemic species of the Atlas Mountains growing from the lowlands up to 2200 metres (MAIRE, 1963). The chromosome number of *S. mekinensis* is  $2n = 24$  and was established only once many years ago (BLACKBURN, 1928). With  $n = 12$  the plants investigated by Bocquet were also diploid and showed the same chromosome number.

***Silene nocturna* L., subsp. *nocturna***

**MOROCCO:** Gorge of La Moulouya, Tazensout, 1100 m, 13.VI.1971, G. Bocquet, R. Borel & A. Reist 10689;  $2n = 24$ .

Within the Mediterranean *Silene nocturna* many taxa have been described (see MAIRE, 1963) but only two subspecies are generally recognized (CHATER & al., 1993), subsp. *nocturna* growing throughout the whole range of the species, and subsp. *neglecta* (Ten.) Arcangeli occurring only in South France and Italy (JALAS & SUOMINEN, 1986). *Silene nocturna* is homogenously diploid with  $2n = 24$  chromosomes. The number found by Bocquet confirms the numerous indications in literature (compilations in FEDEROV, 1974; GOLDBLATT, 1981, 1984; GOLDBLATT & JOHNSON, 1990, 1991, 1994, 1996, 2000, 2003).

***Silene portensis* L., subsp. *portensis***

**SPAIN:** Roadside between Saldana and Guardo, on the road from Palencia to Carrion-Guardo, 1100 m, 6.VIII.1971, G. Bocquet, R. Borel & A. Reist 11317;  $n = 12$ .

*Silene portensis* is divided into two subspecies, subsp. *portensis* occurring in West Europe (Spain, Portugal, and France), and subsp. *maura* Emb. & Maire representing the species in North Africa (JALAS & SUOMINEN, 1986). *Silene portensis* is diploid, and the chromosome number is  $2n = 24$  (FERNANDES & LEITAO, 1971; TALAVERA & BOCQUET, 1976; DEGRAEVE, 1980) which is confirmed by the count of Bocquet.

***Silene uniflora* Roth, subsp. *uniflora***

**SPAIN:** Ruderal place, Cabo Corrubede, SW of Noya, prov. La Coruna, 22.V.1971, Blaser 1003B;  $2n = 24$ .

*Silene uniflora* is closely related to *S. vulgaris* (see below), the separation and treatment of the two taxa still seems not to be very clear. Some authors treat *S. uniflora* as subspecies of *S. vulgaris* (CHATER & WALTERS, 1964), some separate the two taxa (JALAS & SUOMINEN, 1986), and other authors include the two subspecies *glareosa* and *prostrata* into *S. uniflora* nevertheless the two subspecies are mostly regarded as subspecies of *S. vulgaris* (see below; CHATER & al., 1993).

The close relationship is also expressed in *Med-Checklist* (GREUTER & al., 1984a) unifying the two species in one single aggregate (*S. uniflora* aggr.). *Silene uniflora* is a species growing on coastal rocks in W Europe. Two subspecies are recognized (JALAS & SUOMINEN, 1986), and the plants investigated by Bocquet belong to subsp. *uniflora*. It is diploid with  $2n = 24$  chromosomes, the number counted by Bocquet confirms the numerous indications in literature (compilations see JALAS & SUOMINEN, 1986; GOLDBLATT, 1988; GOLDBLATT & JOHNSON, 1998, 2003).

***Silene vulgaris* (Moench) Garcke s.l.**

*Silene vulgaris* is a widespread taxon in Europe, North Africa, and temperate Asia. It is very variable, and many infraspecific taxa have been described at various taxonomic levels which are now mostly treated as subspecies (e.g. AESCHIMANN, 1983, 1984, 1985a, 1985b; AESCHIMANN & BOCQUET, 1980, 1983; CHATER & al., 1993; GREUTER, 1997; JALAS & SUOMINEN, 1986; MEUSEL & MÜHLBERG, 1959-1979). The infraspecific taxonomy of *S. vulgaris* is still insufficiently known, and quite recently new subspecies have been described (GREUTER & al., 1984b; GREUTER, 1995). Most of the subspecies are diploid with  $2n = 24$  chromosomes (compilation see BALTISBERGER & AESCHIMANN, 1988). As *S. vulgaris* was one of Bocquet's favourite species he sampled many populations and asked colleagues to collect at any site. So it is not surprising that the main part of specimens with cytological data was from the group around *S. vulgaris*.

***Silene vulgaris* subsp. *angustifolia* Hayek**

**ITALY:** Scree on the inner side of Vesuv, 1250 m, 8.V.1970, *G. Bocquet* 8403;  $n = 12$ . – W facing side of Vesuv above Herculaneum, 200 m, 8.V.1970, *G. Bocquet* 8421;  $n = 12$ .

*Silene vulgaris* subsp. *angustifolia* grows on coastal sands and rocks in the Mediterranean area and in Portugal. The provisional map in JALAS & SUOMINEN (1986) suggests that this taxon mainly grows in the western part of the Mediterranean area (mainly in Italy, Sardinia, Corse, and on the Iberian Peninsula). This is supported by GREUTER (1997) who does not indicate subsp. *angustifolia* for Greece. Nevertheless subsp. *angustifolia* seems to occur more eastwards but probably only occasionally or at least rarely, BALTISBERGER & al. (1993) indicate subsp. *angustifolia* from the coastal region in South Albania. The chromosome number  $n = 12$  found by Bocquet confirms earlier indications in literature, and as the plants originate from Italy this corresponds with the known geographical area of subsp. *angustifolia*.

***Silene vulgaris* subsp. *commutata* (Guss.) Hayek**

**ITALY:** Rocca Busambra, Sicilia, 19.V.1970, *G. Bocquet* 8572;  $n = 12$ .

Rocca Busambra, the locality where the plants investigated by Bocquet come from, is the locus classicus of *Silene vulgaris* subsp. *commutata*. Diploid and tetraploid plants are indicated (compilations see MELZHEIMER & DAMBOLDT, 1973; BALTISBERGER & AESCHIMANN, 1988; BALTISBERGER & WIDMER, 2004) but as *S. vulgaris* subsp. *commutata* is an unclear taxon concerning morphological and ecological characters as well as geographical distribution it is not shure that really both ploidy levels exist. The chromosome number  $n = 12$  counted by Bocquet indicates that the plants from the locus classicus were diploid.

***Silene vulgaris* subsp. *glareosa* (Jord.) Marsden-Jones & Turrill**

**FRANCE:** Roadside between Port-Vendres and Banyuls, 40 m, 14.V.1971, *G. Bocquet*, *R. Borel* & *A. Reist* 9910;  $2n = 24$ .

**SPAIN:** Scree in the gorge of Aliva, Picos de Europa, 1500 m, 9.VIII.1971, *G. Bocquet*, *R. Borel* & *A. Reist* 11429;  $2n = 24$ . – Ascent to refuge Veronica, Picos de Europa, 1950 m, 18.VIII.1971, *G. Bocquet*, *R. Borel* & *A. Reist* 11561;  $n = 12$ .

*Silene vulgaris* subsp. *glareosa* usually grows in calcareous screes in the mountains from North Spain to the Carpathians (JALAS & SUOMINEN, 1986). In literature there is no indication of the chromosome number of *S. vulgaris* subsp. *glareosa* but GRIESINGER (1937; as *S. vulgaris* subsp. *alpina*) and Vachova (in MAJOVSKY & al., 1974; as *S. cucubalus* subsp. *alpina*) probably investigated this taxon indicating the diploid number  $2n = 24$  which is confirmed by Bocquet.

***Silene vulgaris* subsp. *macrocarpa* Turill**

**FRANCE:** Peninsula near Sidrière de Fitou, 14.V.1971, G. Bocquet, R. Borel & A. Reist 9897;  $2n = 48$ . – Roadside on the road from Perpignan to Elne, 20 m, 14.V.1971, G. Bocquet 9909;  $2n = 48$ .

**ITALY:** Calcareous rocks near Cap Calava, Sicilia, 11.V.1970, G. Bocquet 8469;  $n = 24$ ,  $2n = 48$ . – Ascent from Randazzo to Cesaro, 3km S of Cesaro, Sicilia, 800 m, 13.V.1970, G. Bocquet 8516;  $2n = 48$ . – Rocks between the sea and Mount Pellegrino, N of Palermo, Sicilia, 19.V.1970, G. Bocquet 8621;  $2n = 48$ .

**MOROCCO:** Stony ground between Chechaouen and Tetouen, 340 m, 22.V.1971, G. Bocquet, R. Borel & A. Reist 9991;  $2n = 48$ . – Field on the road from Chechaouen to Cherifat, 850 m, 24.V.1971, G. Bocquet, R. Borel & A. Reist 9999;  $2n = 48$ . – Abandoned field near the bridge over Oued Zloul, region of Ahermoumou, 900 m, 28.V.1971, G. Bocquet, R. Borel & A. Reist 10177;  $2n = 48$ . – Fields near Timahdite, Meknes, 1850 m, 7.VI.1971, G. Bocquet, R. Borel & A. Reist 10438;  $2n = 48$ . – In a garden in Msemrir, 1850 m, 21.VI.1971, G. Bocquet, R. Borel & A. Reist 10799;  $2n = 48$ .

**SPAIN:** Roadside on the road to Sorvilan, above Albulol, Granada, 380 m, 18.V.1971, G. Bocquet, R. Borel & A. Reist 9970;  $2n = 48$ . – Roadside near the Camping Las Palmeras de Castell de Ferro, Granada, 0 m, 19.V.1971, G. Bocquet, R. Borel & A. Reist 9990;  $2n = 48$ .

*Silene vulgaris* subsp. *macrocarpa* is probably distributed throughout all Mediterranean countries (GREUTER & al., 1984b) as well as on the Canary Islands (BALTSBERGER & WIDMER, 2006). It is characterized by stolons, rather large leaves, mostly a more or less green calyx with obscure veins (or even nearly veinless), sometimes pinkish petals, and size and shape of the capsules. The plants of the specimens from Bocquet cited here show these characters and therefore represent *S. vulgaris* subsp. *macrocarpa*. They all are tetraploid with  $n = 24$  resp.  $2n = 48$  as most of the indications in literature (compilations see MELZHEIMER & DAMBOLDT, 1973; BALTSBERGER & AESCHIMANN, 1988). GALLAND (1988) indicates both diploid and tetraploid *S. vulgaris* subsp. *macrocarpa* from Morocco, plants from 5 sites being tetraploid and from 2 sites diploid.

***Silene vulgaris* (Moench) Garcke, subsp. *vulgaris***

**AUSTRIA:** Ferlach, Carinthia, 19.VI.1971, J. C. Krug 1178;  $2n = 24$ .

**FRANCE:** Above Vouvray, in the direction to Col de Retord, Ain, 24.VI.1969, G. Bocquet 6330;  $2n = 24$ . – Montagnac near Riez Basses Alpes, Alpes de Provence, 600 m, 12.VII.1969, R. Arnaud 8322;  $2n = 24$ . – Island near Sidrière de Fitou, 14.V.1971, G. Bocquet, R. Borel & A. Reist 9872;  $2n = 24$ .

**GREECE:** Near Aetorrachi, S of Kallianiou, on the road from Pirgos to Tripolis, Arkadias, 22.V.1971, K.-J. Zerbst 00050;  $n = 12$ ,  $2n = 24$ . – Between Theben and Chalkis, 200 m, 29.V.1971, K.-J. Zerbst 00075;  $n = 12$ . – Between the river Voidomatis and Kalivia, Joanninon, 500 m, 14.VI.1972, K.-J. Zerbst 30068;  $2n = 24$ . – Near the Korkyrian grotto, Parnass, Boiotias, 1350 m, 18.VII.1972, K.-J. Zerbst 30257;  $2n = 24$ . – 500 m E of the Korkyrian grotto, Parnass, Boiotias, 1350 m, 18.VII.1972, K.-J. Zerbst 30260;  $2n = 24$ .

**ITALIEN:** Near La Thuile, Valle d'Aosta, 1630 m, 31.VIII.1969, G. Bocquet 8037;  $2n = 24$ .

**SPAIN:** Slope above Albulol, Granada, 600 m, 18.V.1971, G. Bocquet, R. Borel & A. Reist 9985;  $2n = 24$ . – W of Fortanete, 1400 m, 20.VII.1971, G. Bocquet, R. Borel & A. Reist 11200;

$n = 12$ . – Roadside on the road from Villarroya to Fortanete de los Pinares, 1700 m, 21.VII.1971, G. Bocquet, R. Borel & A. Reist 11204;  $n = 12$ . – Scree, E-side of San Gloria, Picos de Europa, 1580 m, 7.VIII.1971, G. Bocquet, R. Borel & A. Reist 11580;  $n = 12$ .

*Silene vulgaris* subsp. *vulgaris* is distributed all over the area of *S. vulgaris* s.l. and grows in a variety of vegetations except the extreme ones concerning high altitudes and drought. All counts by Bocquet have been performed on diploid plants ( $n = 12$ ,  $2n = 24$ ). This matches with most indications in literature. The tetraploid indications probably should be transferred to *S. vulgaris* subsp. *macrocarpa* (or *S. vulgaris* subsp. *commutata*; comments see above).

***Silene vulgaris* (Moench) Garcke, subsp. *indet.***

**FRANCE:** E of Casta, Corse, 15.V.1971, J. C. Krug 1111;  $n = 24$ .

**ITALY:** Surroundings of Favazzina, Calabria, 50 m, 10.V.1970, G. Bocquet 8446;  $2n = 48$ .

**MOROCCO:** Stony ground, Jebel Bou Iblane, 1730 m, 31.V.1971, G. Bocquet, R. Borel & A. Reist 10257;  $2n = 48$ .

The specimens of these three sites consist of tetraploid plants ( $n = 24$ ,  $2n = 48$ ) but the plants are not in good conditions and so do not allow a clear determination. They probably all belong to *S. vulgaris* subsp. *macrocarpa*.

**“*Silene reiseri* K. Maly”**

**CROATIA:** Peninsula Lapad, 4km NW of Dubrovnik, 5-15 m, 12.IX.1970, V. Sulger Büel.;  $n = 12$ ,  $2n = 24$ .

“*Silene reiseri*” is a taxon which was not adopted in literature except by HAYEK (1927), and it is even not mentioned in *Med-Checklist* (GREUTER & al., 1984a). HAYEK (1927) lists it as “B. Reiseri K. Maly” under “*S. vulgaris* I. *angustifolia*”. It grows in rocks of the Dalmatian coast (“Da. BH.”) and is characterized by its suffrutescens base and very thick succulent leaves. Based on these characters and the ecology it is probably thought to be only a variant of *S. vulgaris* subsp. *angustifolia*. The plants investigated by Bocquet have been sampled by Vali Sulger Büel, a technician of the herbarium at ETH, writing with her own hand: “Die Blätter waren sehr succulent und glauk”. The specimen is annotated by Bocquet: “Original récolté dans le locus classicus (presqu’île de Lapad, en face de Dubrovnik). J’ai revisité Lapad en 1970, sans trouver de race aussi extrême que celle-ci. Elle a été récoltée par Madame Vali Sulger Büel sur l’îlot calcaire de Grebeny, en face de l’hôtel Neptune. Toute la presqu’île a été envahi par le tourisme.” The chromosome number of “*S. reiseri*” was not known up till now, with  $n = 12$  resp.  $2n = 24$  it corresponds with counts in *S. vulgaris* s.l.

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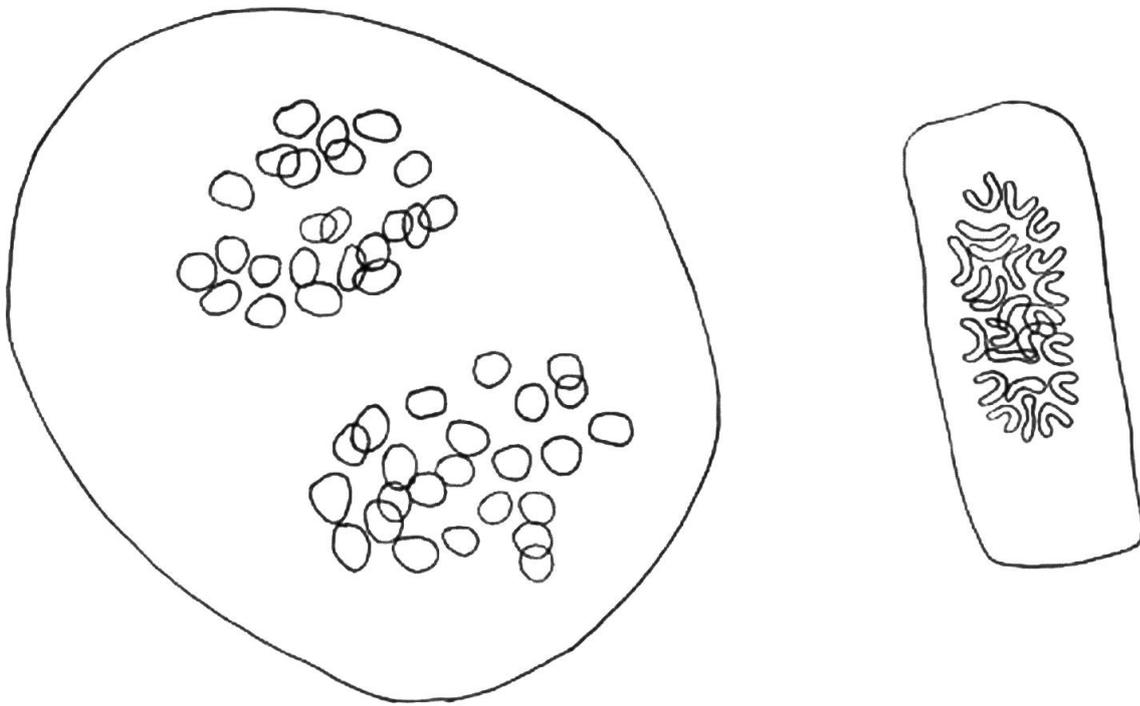


Fig. 1. – **A.** *Silene vulgaris* (Moench) Garcke s.l. [*J. C. Krug 1111*, telophase I with  $n = 24$ ]; **B.** *Silene uniflora* Roth subsp. *uniflora* [*Blaser 1003B*, somatic metaphase with  $2n = 24$ ].