

CROCUS GROUP BULLETIN NO. 3

Hon. Sec.'s Notes.

The Group now contains 38 members, and its' financial state is good, and no further subscriptions from existing members are necessary.

I much regret that, through a combination of circumstances, I was forced to ask members not to visit my garden last autumn, and very much hope to welcome as many as possible in 1977.

I hope to arrange a number of visits to members' gardens in the Spring of 1978, and I should be very grateful if anyone willing to be visited would get in touch with me, so that we can make it possible for people interested in Crocus to get together in small groups without travelling too far.

Primrose Warburg
South Hayes,
Yarnells Hill,
Oxford.

PROGRAMME 1977 AUTUMN

Saturday 1st October 1977

Come to South Hayes, Yarnells Hill, Oxford - the home of your Hon. Sec. between 11.00-11.30 am, when coffee will be provided. Bring your own packed lunch, and afterwards visit the Alpine Nursery of Mr. & Mrs J.H. Parkes-Jervis at Martens Hall Farm, Longworth, Abingdon, which is 15 minutes drive in the Swindon direction. There should be crocuses and colchicums to see in both gardens.

Saturday 22nd October 1977

Meet at the Information Room, Wisley R.H.S. Gardens, at 11.00am. The director, Mr. C.D. Brickell, has kindly offered to show us the Crocus Collection. Bring your own packed lunch, and somewhere under cover will be provided to eat it in. It may be possible to visit the gardens nearby in the afternoon.

Tuesday 22nd November 1977 at 6.30 pm

The B.I.S. Species Group Crocus lecture will be given by Brian Mathew at 6.30pm followed by an auction of crocuses, which we hope members will kindly provide.

Summary of a Lecture on Spanish Crocus given by Mr. S.V. Horton on
22nd February 1977

Mr. Horton began by saying that he intended only to refer to Crocuses which had their centre of distribution in the Iberian peninsular. Thus, he confined his remarks to the spring C. carpetanus and C. nevadensis, and the autumnal C. nudiflorus, C. salzmannii, C. clusii and C. serotinus.

C. carpetanus and C. nevadensis, though both plants of high mountains, are not found together. If a line is drawn north-south through Madrid, C. carpetanus is found west of the line, and C. nevadensis east of it.

The Portuguese form of C. carpetanus is a weaker grower, and is probably what Bowles had as he complained that it died out with him after two seasons. In many forms, particularly from the Gredos Mountains of Spain, the leaves are almost entirely cream on the upper surface, with a very narrow green border. The leaf construction is unique and is semi-cylindrical with no keel.

C. nevadensis is widely distributed in Spain and is also found in N. Africa. Like C. carpetanus it has a peculiar fringed stigma. It flowers in England in January, and February. C. nudiflorus is the most easily separated of the four autumn flowering species on account of its glabrous throat and stoloniferous habit. It is generally a rich purple, but lighter forms are not uncommon and there is an attractive white form.

The other three autumn-flowering crocuses all have hairy throats. C. salzmannii now includes what used to be separated as C. asturicus and C. granatensis. The darkest forms are found in N. Spain. The time of appearance of the leaves is a variable factor, and no use for identification. The difference between the three species lies in their corm tunics. C. serotinus has a coarsely reticulate tunic; that of C. clusii is of parallel fibres except at the neck where it is finely reticulated; and C. salzmannii has parallel fibres throughout. C. salzmannii is much the most widespread being the most common Crocus in Spain as well as being found in N. Portugal and N. Africa. C. serotinus is the rarest of the three, coming from a very limited area in the extreme S.W. tip of Portugal where it grows on sea cliffs. C. clusii has its centre in central Portugal extending W. and S. reaching to Cadiz in S.W. Spain. All three species may be feathered on the outer segments but they are generally self-coloured. C. salzmannii appears in September, C. clusii in October to November, and C. serotinus in November to December.

Clusius in his Rariorum Plantarum Historia discusses three separate species under the name C. montanus including one from rocky places by the shore of Portugal, but as the drawing of the specimen clearly shows it has a corm with parallel fibres we cannot be certain that Clusius actually found C. clusii, even though it is named after him.

Crocus biflorus and its allies

by Brian Tatters.

Perhaps this group should rather be called 'Annulate Crocus' since it covers most of the species having corm tunics which split off into horizontal rings at the base. However, it is not necessary to group the autumn-flowering C. speciosus and C. pulchellus with C. biflorus since they are probably quite-unrelated to the spring-flowering species, and certainly possess enough features to make it unnecessary to compare them. Since C. biflorus Miller is the oldest name for any species in the group it seems logical to use this as a point of reference. It is also the most widespread species in the group. Other names (not the same 'other species'!) to be considered here are:-

C. chrysanthus, C. crewei, C. weldenii, C. nubigenus, C. melantherus, C. pestalozzae, C. tauri, C. tauricus, C. gaghartii, C. almehensis, C. pallidus, C. danfordiae, C. isauricus, C. x hybridus, and C. cyprius. Marginally linked with these are C. biliottii, C. adanensis, C. hartmannianus, and C. leichtlinii, in which the annulate rings are less distinct and the tunic tends to be split into parallel fibres, especially towards its base.

They can thus be excluded from this discussion although the distinction is a very slight one.

Unfortunately for the taxonomist the points of difference between all the spring annulate Crocus are very obscure, and it is difficult to see any logical method of classification. For example one might say that C. chrysanthus is yellow; C. biflorus striped purplish or brownish on a bluish or white ground, with yellow anthers, and C. crewei similar but with blackish anthers. This is fine on paper, but if it is applied in the field, it works only to a limited degree. In Dalmatia, C. biflorus is white with or without a bluish suffusion on the outside of the segments and not striped like the Italian forms. It has been given the name C. weldenii. It does not have a yellow throat like the majority of those from Italy or Turkey. Farther into Yugoslavia, in S. Serbia and Macedonia, the name C. pallidus has recently been applied to a cream-white annulate Crocus, while in the same area 'typical' C. chrysanthus and C. biflorus occur, the latter with purplish suffusion or stripes on the outside of the segments. In certain populations these hybridize to give yellow-flowered plants with purple stripes looking rather like some Dutch nurseryman's hybrid! This has been formally described as C. x hybridus. In European Turkey, mixed colonies occur which have white, pale creamy-yellow and very pale blue forms. Does one call these C. biflorus (blue), pale C. chrysanthus (pale yellow) or C. pallidus (whitish)? Morphologically there is little to assist one in trying to distinguish them. The 'blackish bars' on the base of the anthers seem to be meaningless, cropping up haphazardly in several species. The 'rings' on the corm tunic may or may not have teeth on them but little sense can be made of this character for it appears not to be linked with any other feature, or with the distribution.

C. crewei with black anthers is not even easy to define. In Greece it is a very common plant in the Peloponnese where it flowers in autumn. A black anthered annulate Crocus extends in Turkey eastwards to Lake Van from S.W. and the Aegean Islands, but it is spring-flowering. In Greece the anthers are not always black, for Chris Brickell and I have collected yellow-anthered variants in populations of otherwise 'normal' C. crewei, flowering in October. These yellow-anthered forms, rather rare it must be admitted, appear to be indistinguishable from spring-flowering C. biflorus. C. melantherus and C. rubigenus both appear to be forms of the black-anthered spring flowering plant.

Taking the striped Italian C. biflorus as being a rather typical form, we find that this is a widespread plant from Italy through Turkey to Iran, varying a little in its ground colour from white to lilac-blue. C. tauri, C. geghartii and C. tauricus are all variants of this, the first from the Taurus mountains of Turkey, the second from Armenia and the last from Crimea. (Some confusion over C. geghartii has taken place since some recent introductions have included corms of C. speciosus mixed in with the spring annulate one. However, there is no doubt that the description refers to the C. biflorus relative). In any population of these striped forms a great variation can be found, sometimes the striping becoming an overall suffusion of bluish-biolet. I have also seen forms with a biscuit external colour in Turkey.

C. cyprius, a Cyprus endemic, usually has this purple staining on the outside of the segments and is perhaps distinct in its flower shape but it can be more or less matched by variants from the Turkish mainland.

C. almezensis is a yellow-flowered species akin to C. chrysanthus but has rather wide, deeply channelled leaves, and a rather large 'frilly' stigma. The perianth segments have the same very glossy appearance as those of C. korolkowii. It occurs farther east than any other annulate Crocus, in eastern Iran, although it has recently been reported to me by an Armenian botanist that C. almezensis has now been found in Armenian Russia.

The Turkish C. danfordiae presents something of a problem in that it appears to be only a diminutive form within the annulate group. It can usually be recognised by its small white, pale blue or pale yellow flowers with greyish stippling on the exterior. There is however, an overlap in size between it and C. chrysanthus and occasionally one finds stippled forms of C. chrysanthus, C. crewei and C. biflorus. The anthers of C. danfordiae sometimes possess small black bars at the base of the anthers.

C. pestalozzae is a rather distinct species and can be recognised quite easily by several characters including the small size of its flowers and the dark spot in the throat of the flower, at the base of each of the stamens. It occurs in both white and blue forms and is very common on the hills in northwestern Asiatic Turkey and in European Turkey. Here it grows intermixed with a typical C. biflorus but I have not observed, or know of the existence of hybrids.

It appears that this whole widespread aggregate of annulate Crocus has certain local forms which can just about be recognised for the practical purposes of having usable names but with the understanding that they have little taxonomic value. The differences between them break down in some areas. For example, I have seen in Turkey populations of yellow C. chrysanthus with black anthers like those of C. crewei, and forms with greyish anthers, such as C. isauricus, have been recognised.

Closely related to the strictly annulate species are a few with parallel-fibred tunics and little or no basal rings. All of these occupy quite small areas within the general distribution of the C. biflorus aggregate. C. leichtlinii from S. Turkey has blue flowers with a yellow throat, and slightly greyish anthers. The corm tunic is quite hard and shell-like, splitting into coarse teeth at the base, not unlike that of C. laevigatus. The Cypriot C. hartmannianus is very similar to C. cyprius except for the corm tunic and the anthers, which, in all the collections I have seen, have been deep purple. C. biliotii is known from the Zigana Pass in Turkey where it grows in wet meadows. It is a colourful species with strongly veined and striped blue flowers. C. adanensis is a fairly recently described species from Adana vilayet in Turkey, having a very thin parallel-fibred tunic and pale lilac-blue flowers with a clearly defined white throat which shows through to the outside of the segments.
