CROCUS GROUP BULLETIN NO. 6

Hon. Secretary's Notes

The Group continues to be adequately financed by its yearly auction and its balance to date is £26.21. This will be considerably reduced when the costs of printing and postage of this current bulletin have been deducted. Please continue to support our auctions!

Primrose Warburg
South Hayes
Yarnells Hill
Oxford.

2nd September, 1979.

PROGRAM 1979/1980

Sunday, 7th October

Meet at the High Street entrance to the Oxford Botanic Garden at 11 a.m. Brian Mathew will be there to name any crocuses which are in flower. At 12 noon the Garden closes and you are invited to come and look at the crocuses in your Hon. Secretary's garden (address above) about 15 mins. drive away. Bring your own packed lunch (hot soup will be provided). Afterwards there will be some crocus corms for sale, collected by Mr. Stevens and Mr. Horton on their recent trip to Turkey.

Mr. and Mrs. J.H. Parker-Jervis, Marten's Hall Farm, Longworth, Abingdon, Oxon would be pleased to show anyone their crocuses and colchicums in the afternoon. They are 15 mins. drive in the Swindon direction.

The Crocus lecture will again be given by Brian Mathew, at the March meeting of the B.I.S. Species Group. A visit to Wisley and to Brian Mathew's own garden will be arranged, probably at the weekend after the lecture. Details later when the R.H.S. show dates are known.

An auction of crocus corms in aid of Crocus Group funds will be held after the lecture. Please set aside any corms you can spare to keep us solvent.

If you have any interesting crocuses in flower and are coming to any of these meetings, please bring them with you so that the rest of us can see what they look like.

Crocus lecture - B. Mathew Spring 1979

The lecture began with some slides to illustrate various useful characters such as corm tunics and branching of the style. There are many different types of tunic, both fibrous and membranous. Fibrous ones can have parallel fibres or netted ones, while in C. fleischeri they are interwoven. The membranous-tunic ones can also split in a parallel manner, and one group has rings at the base of its corm tunics - the annulate group. Within the broad divisions of tunic type, there are various types also - for example Crocus cancellatus and C. sativus are both reticulate-tunic species but the former has very coarsely netted fibres and the latter, very fine.

Style branching varies from being 3-branched, the simplest form, to many-branched. Each species is fairly consistent in the amount of branching.

Various natural groups of Crocus were dealt with:

1) Crocus vallicola and its allies

The species related to this are all autumn-flowering and apart from C. ochroleucus have no leaves at flowering time. They have corms with very thin membranous tunics. The leaves have an almost A-shaped section with the keel almost as wide as the upper surface. The anthers are white, except in C. scharojanii.

The species in this group are:-

A C. vallicola Flowers in late August-October in NE Turkey and Caucasus. It grows in alpine turf, not too wet. Flowers white, often veined with purple; throat marked with a ring of yellow spots. Perianth segments with long wispy points at the apex.

B C. scharojanii Very closely related to C. vallicola, having the same chromosome number and hybridizing with it occasionally. Flowers wholly orange-yellow; the only species in this group to have yellow anthers; sometimes corm stoloniferous but not always. Grows in NE Turkey and Caucasus, flowering in July-August in very wet grass by streams. I can find no difference between it and C. lazicus. The leaves from the previous year are sometimes still present at flowering time.

C C. suwarowianus This has in the past been linked with C. vallicola because they are superficially rather alike. However, it is clear that it is much more closely related to C. kotschyanus and indeed should perhaps be regarded as a subspecies of it. It usually has white flowers with a yellow-blotched throat but in some populations I have seen there are very pale lilac forms. These are difficult to distinguish from a pale C. kotschyanus although there is a slight difference in flower shape between the two. C. suwarowianus grows in much drier habitats than C. vallicola and lacks the curly tips to the segments.

D C. kotschyanus (C. zonatus) The most widespread of this group with a distribution from N Turkey through central Anatolia to the Taurus, then south into the Amanus, E Syria and Lebanon. It is usually pale lilac-blue, veined darker with a ring of yellow blotches in the centre. Very occasionally it lacks the yellow and this has given rise to the vigorous clone 'leucopharynx' in cultivation, which is often erroneously distributed as 'karduchorum'. C. kotschyanus varies a lot from place to place and the plants from Hakkari, N Turkey and the Taurus are all separable from each other. The Lebanon plant is stoloniferous. Various subspecies will be published in the 'Flora of Turkey' account.

E C. karduchorum This has probably arisen as a local variant of C. kotschyanus but is now well established and has a distinct distribution at the south-west corner of Lake Van. It is lilac blue with no yellow blotches in the throat and has a large much-dissected white stigma projecting well above the stamens. It has been recollected several times in recent years but is still rather rare in cultivation.

F C. gilanicus A recently described species from W Iran, in the Talysh-Elburz mountains. It is a dull plant with small white flowers which shade to pale purple at the tips of the segments. It looks very like C. suwarowianus but has a pubescent, plain white unblotched throat. The chromosome number is 24 and the shape of the chromosomes quite different to any other species in this group.

G C. autranii This is known only from one locality in the Chisshir area of Abchasia in the western Caucasus. It is a beautiful plant, rather like a deep blue-violet C. vallicola, with a very well defined white zone in the throat. It does not seem to be too difficult to grow but has not increased at all.

H C. ochroleucus The best known species in the group, occurring much to the south in Lebanon, SW Syria and N Israel. Its flowers are white with a deep yellow throat and the leaves are often showing at flowering time. It increases very rapidly by producing cormlets around the parent corm. I have a form which is completely white with no yellow in the throat - it is the most dead-white Crocus I know, since the anthers and style are white also, leaving no trace of colour in the whole flower.

2) Crocus cancellatus group

This widespread plant, from Yugoslavia and Greece to Iran, is always recognisable by its very coarsely netted fibrous corm tunic. It is autumn-flowering and normally has no leaves at flowering time, although some low altitude forms occasionally have the tips of the leaves just visible. For the Flora of Turkey account it will be divided up into several subspecies - for example the Greece/Yugoslavia/SW Turkey variant is recognisable and will be called mazziaricus, a name used by Herbert. In the drier, almost desert parts of E Turkey and Syria we have damascenus while in the Taurus mountains there are 3 recognisable variations. One of these is very striking, having white stamens and a very much dissected reddish-orange stigma. In my experience C. cancellatus from all other areas has yellow anthers (normally - no doubt odd albinos occur) but a comment was made at the Species Group meeting about white anthers in Greece. I would be grateful for any definite proof of white-anthered collections of C. cancellatus from anywhere other than Antalya province of S Turkey. At present five subspecies are recognisable.

3) Crocus sativus group

A rather complicated group but now reasonably clear except for C. pallasii in Turkey and the Cretan members of the aggregate, which are confusing because of few collections. The group is recognisable by the 3-branched red style (rarely not red!) from which saffron is obtained, and the fine, silky, netted fibres of the tunic. Each corm produces many narrow leaves, in most of the species.

All are autumn-flowering. Briefly they are:-

A C. hadriaticus White (rarely pale lilac) with a yellow throat (except on Mt. Parnassus where it is plain white). Often tinged brownish or purplish on the perianth tube and base of segments. Greece.

B C. thomasii Lilac with yellow throat. Rather short style branches. Italy and Adriatic coast of Yugoslavia.

C C. pallasii Lilac with no yellow in throat. Rather short style branches. Extremely variable and has several synonyms such as C. elwesii and C. olbanus. C. haussknechtii is a subspecies of it. Crimea, Roumania, Bulgaria, S.Yugoslavia, Turkey, Syria, Lebanon, Israel and Iran.

D C. dispathaceus Probably best regarded as a variant of C. pallasii but looks very different in its extreme forms. Most commonly a deep purple colour with very narrow segments and short, yellow style branches. S Turkey and N Syria.

E C. cartwrightianus Probably the wild species from which C. sativus was selected, as a vigorous sterile triploid. It has long red style branches and no yellow in the throat. The flowers are lilac, purple or white with a lot of variants, such as white with a bluish zone in the throat. A plant distributed some years ago as C. cartwrightianus albus was really a form of C. hadriaticus. The true C. cartwrightianus has its style branches more than half as long as the perianth segments. Greece, only in the Athens area, Cyclades and Crete.

C. sativus is still cultivated for Saffron in Turkey and other countries, on a small scale.

F C. oreocreticus The status of this is unclear. A good study of Cretan autumn Crocus is needed. It has lilac flowers with a wash of pale silvery-white or fawn on the outside, and leaves which are glabrous, whereas in C. cartwrightianus and other members of the group they are ciliate on the margins. It occurs at higher altitudes on Crete than C. cartwrightianus.

G C. niveus Although very distinct from all the others in the group it is probably best treated with them. It has a fine fibrous tunic and red style, although this is often branches into more than 3. It is a very robust Crocus and one of the most beautiful of all the autumnal species. It is white or pale lavender with a deep yellow throat and is endemic to the southern Peloponnese.

H C. (new species) This will be described shortly. It occurs in the Taurus mountains of S Turkey and has white flowers with long style branches, the division of the style being quite high up in the flower and the weak branches flop outwards rather than remaining erect. There are several distinguishing features and it appears to be a rather distinct species.

4) Crocus biflorus and its allies

This is the difficult 'Spring Annulate' group. Work is going on on this at present and it is not the best time to make notes - a talk about it might be arranged for this (1979) year.

There are several distinct members of the group - C. pestalozzae, C. weldenii, C. alexandri, "C. crewei" (probably in for a name change!) and at a pinch, C. danfordiae! C. chrysanthus is a hotch-potch of all the yellow-flowered forms and almost certainly should be split up into subspecies, but it is not easy to do.

C. biflorus is the name which covers all the non-yellow spring annulate Crocus other than those distinct ones mentioned above. There are of course a lot of other names in literature which go into "C. biflorus", in the broad sense. The white-flowered striped Italian form is true C. biflorus, and this

also occurs in Turkey and Rhodes. In Turkey there are a host of other forms differing widely in appearance and habitat. Some are plain blue without striping, some strongly striped, some with black anthers, some on limestone, some on granite, some in wet meadows having broad leaves, etc. etc. There are many different chromosome types in this group and it is obvious that there are different taxa involved, whether they are called species, subspecies or whatever.

It is very unfortunate that C. aerius was described by Herbert from material collected on the Zigana Pass in Turkey and it is clear that it is the same plant as Maw later described as C. biliottii, in which case the latter name goes into synonymy under C. aerius. C. aerius is a well-known name but has been misused for other plants in this group - variants of C. biflorus.

Other names involved in this C. biflorus aggregate are C. nubigenus, C. tauri, C. melanthorus, C. tauricus, C. geghartii, C. rcopiae, C. artvinensis, C. adamii and C. pusillus. It is hoped that some sort of logical classification can be worked out, but almost certainly whatever system is adopted it will change because new collections and variants are coming to light on each visit to Turkey!