IRIS

IRIS: SECTION IRIS

The bearded irises

A few of these species are the wild ancestors of the widely grown hybrid bearded irises. They comprise Subgenus Iris along with the arillate sections Oncocyclus, Regelia, Psammiris, Hexapogon and Pseudoregelia. They are unlike all these other sections in lacking the fleshy, white aril on their seeds but they are also in general easier to cultivate than these other groups. The section is distributed in the wild from Portugal and Spain through the Mediterranean area and Southwest Asia to the Tien Shan. They are all more or less summer-dormant plants, which in cultivation need a well-drained soil, usually alkaline rather than acid, and a site in full sun. We maintain our parent stocks of the larger species planted out in our netting-sided polythene tunnel, where they give us little trouble, though a few are by no means easy to flower well. We grow the dwarfer species in pots for practical reasons but they would probably grow just as well, or better, in a raised bed. Their rhizomes must be planted with their upper surface exposed. They all exhaust nutrients in the soil quickly and if clumps need division and replanting, this should be done in late summer. This is also a good time to sow seeds, though we have had perfectly good results with later sowings throughout the winter.

Seeds are not set on our parent plants without hand-pollination so we can give a reasonable assurance that the resulting seedlings will be the genuine species. Authentic material of the original wild species, such as we offer, is rare in cultivation and we echo Brian Mathew's sentiments that it is his hope "that there will always be enough 'species enthusiasts' to maintain the true plants so that their identity is not lost."

Nomenclature: While we more or less follow the names used in the standard floras for each area involved, 'Flora Europaea', 'Flora of Turkey', 'Flora Iranica' and 'Flora of the USSR', we do use the W.R. Dykes 1913 account, 'The Genus Iris', for the the diverse wild taxa currently 'lumped' under Iris germanica. The best concise reference for all the species is still 'The Iris' by Brian Mathew (1981).

IRIS: SECTION ONCOCYCLUS

IRIS: SECTION REGELIA

The Arils

We specialize in seeds from several sections of the genus Iris, the large type-genus of the Iridaceae with about 250 species spread around the northern hemisphere. One group for which we have a long-standing affection and an association extending over almost 40 years are the rhizomatous irises of Sections Oncocyclus and Regelia, known to enthusiasts as **'the arils'** because of the large white aril on their seeds. These irises belong to Subgenus Iris, the bearded irises, but their cultivation is very much more of a challenge than it is with their close allies in Section Iris. They are the

most spectacularly beautiful of all irises, indeed of all plants, and one of the most difficult groups to grow well, especially in the wet climate of Western Europe. We grow a wide range of species belonging to these sections under glass to make available hand-pollinated seed from correctly named plants of known wild origin and we collaborate with other European growers such as Michael Kammerlander, Chris Lovell, Ed Picken, Norman Stevens and Bob and Rannveig Wallis to conserve these difficult species in cultivation.

The Mediterranean oncocyclus irises are mostly larger growing, robust plants, distributed from northern Syria, through the Lebanon to Israel and Palestine. They start to grow in autumn with the first moisture and their foliage may not tolerate very low temperatures in winter. Some are quite vigorous plants and include some of the easier species to grow.

The desert oncocyclus irises extend from the Syrian Desert southward through Syria and Jordan to Gaza in Egypt. They include several attractive dwarf species but they are used to a dry atmosphere throughout the year and have their main growing period in winter. They are the most difficult to cultivate in wetter and colder northern climates, where light intensity and temperatures in winter are likely to be too low and atmospheric humidity too high

The steppe oncocyclus irises are distributed through the steppes of Central Anatolia, Transcaucasia and northern Iran, from near Aksaray in western central Turkey to the Kopet Dag range on the border between Iran and Turkmenistan. They are used to severe continental climates, where they are covered with snow for several months and the summers are dry, though not always extremely hot. Their main growing period is in spring, when the ground is moist from snow-melt, but root activity underground starts with the first moisture in autumn and proceeds slowly at the low winter temperatures. These are almost all dwarf plants with narrow foliage and are perhaps the easiest to grow under glass in Britain. They are temperature-hardy plants which could be attempted in a well-drained, gravelly bed in the open garden in the higher, drier, colder parts of North America, such as northern Arizona and New Mexico, Colorado and the Great Basin area.

IRIS: SECTION REGELIA

The **regelia** irises extend the distribution of the arils eastwards into Central Asia. This is a small section of the genus comprising about 5 or so species. Most are more easily cultivated than those in the Section Oncocyclus and are good plants to start with if you are interested in growing the arils. We grow several planted out along with Eremurus and other Central Asian genera in our netting-sided polytunnel. In such a situation they are very trouble-free. They can even succeed in a raised bed in the open-garden in the drier parts of Britain and will offer no problems outside in colder drier areas elsewhere in Europe and North America.

Propagation from seed is the best method of maintaining all these irises in cultivation. Seedlings will be free from virus and more vigorous than divided rhizomes. Once you are producing seeds yourself, you can sow green seeds extracted from the pods

before they split but we cannot arrange to send this out. Even fresh, dried seed can take a long time to germinate. Ken Bastow, an expert cultivator of these irises claimed that 5-6 year old seed gave the best percentage of seedlings most promptly but we have been told that most growers have had some germination from the current year's seed, which we send out, the first season. Never discard ungerminated seed. It is large enough to check if it is still sound. If so, it will come up in time. Most breeders of hybrids use the complicated process of embryo-culture as a short-cut but this can be risky and it requires some experience and skill. We prefer conventional methods and patience. As with other summer-dormant steppe-species, sow from summer to early winter, place the container outside and remove them to a more protected environment when the first sign of germination occurs in spring. If sown early enough or in a previous year, seed may germinate in autumn with the drop in temperature then so do not ignore seed-containers until spring.

Nomenclature: The Turkish and Iranian species are covered by 'Flora of Turkey' and 'Flora Iranica'. The treatment by Per Wendelbo and Brian Mathew in these floras tends towards 'lumping' several taxa into one broad species. In contrast to this approach, the attitude to the species outside these areas has been one of extreme 'splitting' where every minor variant has been given specific status. This is the reason we have not indicated the number of species in this section. It is a very debatable matter. 'Splitting' makes more fun for the gardener who wishes to acquire representatives from every colony. We try to even out the nomenclature by not following the Wendelbo and Mathew nomenclature too slavishly.

Further information: 'The Iris' by Brian Mathew (1981) is the best, easily accessible source of information. There are plenty other books of varying quality on irises but the information on the arils in these is not always reliable. There is an award-winning overview of Section Oncocyclus written by Jim Archibald and published in The Quarterly Bulletin of the Alpine Garden Society, Vol.67, No.3 (September, 1999). This was reprinted in a subsequent Year Book of the Aril Society International.

IRIS: SUBGENUS SCORPIRIS

Invariably referred to by their devotees as **'the junos'**, this diverse, exciting and very beautiful group of over 50 species includes some of the most difficult of summer-dormant species to challenge & frustrate the specialist. There are a few comparatively easily grown ones which will be no trouble in a bulb-frame or in pots in the alpine-house or even, in a very few cases, ones which can be grown in the open garden in most temperate areas. In most cases though these are very difficult plants to grow so do not waste your money and also the efforts we and others have made to produce this seed by trying to grow the difficult ones before you have grown the easier species. We have an extensive knowledge of these irises in the wild throughout Turkey, Iran and the Central Asian republics. Many members of Subgenus Scorpiris are almost impossible to maintain in the moist atmosphere of W Wales, where we garden. Correctly named cultivated seed from some of these junos is usually supplied to us by specialist growers in the colder, drier, more continental climates of Europe. Wild-collected seeds are periodically available, depending where current field work is taking place.

Seed is best sown between summer and early winter. Germination is extremely erratic and unpredictable but usually occurs in early spring. A long cold period with repeated freezing helps to break seed-dormancy. Like most dry-climate plants, seeds retain viability over many years, so never discard ungerminated seed.

Nomenclature: For the present, we follow the names used in the standard floras for each area involved, ‘Flora of Turkey’, ‘Flora Iranica’, ‘Flora of the USSR’, etc. Some of the current nomenclature is unlikely to stand when current taxonomic work is completed. The misapplication of names such as *I. orchioides, I. willmottiana* and *I. albo-marginata* to garden-plants has led to great confusion. We do not trust the naming of any junos in gardens with the exceptions of the collection cultivated by Tony Hall at Kew, those grown by Janis Ruksans in Latvia and by Norman Stevens in the UK. All these collections have been put together in collaboration with Arnis Seisums, the world authority on these irises. His work is ongoing. We hope to see a monograph on the juno irises from Tony & Arnis, based on a revised nomenclature. We shall put names in line with this in due course but publication is not likely for some years to come. In the meantime, we collaborate closely with Arnis Seisums, to ensure the material we distribute is as accurately named as possible, using the current nomenclature.

Further information: 'The Iris' by Brian Mathew (1981) is the best source of information. There are plenty other books of varying quality on irises but the information on the junos in these tends to be derivative and to perpetuate inaccuracies.

IRIS: SERIES CALIFORNICAE

The Pacific Coast Irises

There are only about a dozen species in this group, distributed from California northwards into Washington. In gardens, much material is of hybrid origin, mainly derived from *Iris innominata* and *I. douglasiana*, and the pure species are seldom available. If you are familiar with these hybrids, remember that many wild plants are likely to be both less showy and less easy to grow than garden hybrids. We sometimes have wild-collected seeds available but we now have parent-stocks of almost all species and subspecies, raised from correctly named wild seeds, growing under protection as a source of hand-pollinated seed. The possibility of hybridization with our cultivated stocks is unlikely but not impossible. Most grow wild in light woodland or among sparse scrub, usually on steep slopes. In cultivation they need excellent drainage and a neutral to acid soil. The most lime-tolerant and also the most vigorous garden-plant in the UK is I. douglasiana. In northern Europe, a site in full sun might be preferable to half-shade for most species. Although their foliage is more or less evergreen and their rhizomes are quite thin, all are tolerant of dry conditions in summer. *I. innominata* and *I. thompsonii* are excellent rock-garden plants. A few, such *as I. hartwegii columbiana, I. fernaldii* and *I. munzii,* might be best grown in a bulb-frame or perhaps a bed along a South-facing wall in the UK.

Seed sown at any time between late summer and midwinter will usually germinate quite well in spring. Some can be a little irregular in appearing. Seedlings can be sensitive to an excess of moisture during hot summer weather and are best handled in spring or early autumn when roots are active.

Nomenclature: These irises exemplify better than any other genus how much speciation is proceeding actively in California. The variation, intergradation and hybridization of the recognized taxa are considerable. Dr. Lee Lenz's 1958 classification published in Aliso 4, No.1 is the basis for all subsequent nomenclature. It was adopted by Munz in ‘A California Flora’, by Brian Mathew in 'The Iris' and more or less by the Jepson manual. This classification is a brilliant and acceptable compromise but do not imagine the species are always clearly defined units in the wild. Forest clearance and road-building have opened new channels for the migration of many taxa, so that the situation regarding the delineation of some is possibly more confused now than it was almost half a century ago.

Further information: 'The Iris' by Brian Mathew (1981) is still the best source of information on all the species of Iris. There is a pleasant little booklet published by the British Iris Society in 1967: ‘A Guide to the Pacific Coast Irises’ by Victor A. Cohen. There are plenty other books of varying quality on irises and, though the information might often tend to be derivative, the names of and cultural advice on the Pacific Coast species are usually fairly reliable.