DROSERA ARCTURI by Peter Muller

CPN

In the spring, the plants begin to come out of their long rest period that has taken them through winter. The first thing that they must do is to put out new leaves to replenish their depleted supplies of nutrition. The first leaves are rather poor and comparatively small, but soon the plants manage to put up some long healthy and deadly leaves. Then, about halfway through spring, small flower buds begin to appear. After a period of about 2-3 weeks, the plant has caught sufficient food to carry on pushing the newly formed flower buds on up to the light. When the flower stalk has stretched to a length of about 2-4 inches, small buds appear to elongate and within a short time they open. Usually, depending on the soil and light, the flowers are white in strong light and in partial shade appear to be violet or purple and white.

In summer, depending on whether the flowers have been visited by pollinating insects, the seed pod will begin to swell. If not pollinated, the flower turns brown and wilts. After three weeks, the seeds are mature and ready to be distributed among the surrounding bush and begin a life of their own.

In autumn, the plant needs to store up as much food as the plant can for the long winter. Many insects meet their end on the deadly leaves of this species. The small basal area where the feeble root system leads out into the soil becomes rather fat and round. In some cases, the plant cannot get enough food and the plant does not emerge during the following spring. But this happens very seldomly and only under very extreme conditions.

In winter, the quiet period just before deep winter sets in, a few leaves come out. They begin to yellow and lose interest in catching insects. Soon there is nothing to be seen but a few twisted, brown leftovers from the prosperous summer. The plant is now entirely below ground and frequently covered with snow and no one knows where they are hidden until the following spring when they show their intriguing leaves again.

ON NAMING THE CYTOTYPES OF THE DROSERA SPATHULATA COMPLEX by Katsuhiko Kondo

The Drosera spathulata complex consists of five cytotypes reported: 2n=20, 40, 50, 60, 80. Each of them is isolated geographically. A cytotype of the diploid form grows in New Zealand. The tetraploid form grows in eastern Australia, up to Yakushima Is., and in the Kanto District in Japan. The latter (tetraploid; Kondo, in press) is called the Kanto type. Around Kansai District and southwestern Chubu District there is another cytotype, the hexaploid Drosera spathulata, which is called the Kansai type. The pentaploid Drosera spathulata Kobayashi seems to be of hybrid origin and is not common to nature. The octoploid Drosera spathulata is called Drosera aliciae at the present time. These cytotypes show differences in quantitative characters but not much difference in morphological characters. Petal color differences (e.g., white or pink) do not mean anything. Thus, subspecies, varieties, or form designations would not be necessary to taxonomically rank each cytotype.

The problem is there are five cytotypes of the <u>Drosera spathulata</u> complex; perhaps additional cytotypes will be found. If these cytotypes are ranked taxonomically and are named now, they would be confused by different people in the future: a different cytotype does not mean "different subspecies", "different variety" or "different form" taxonomically.

For growers, the following names are recommended at present:

- (1) \underline{D} . spathulata from New Zealand (diploid) $\underline{New Zealand type}$ $\partial \mathcal{N} = \partial \mathcal{O}$
- (2) D. spathulata from Australia, Yakushima Is. (Japan), Kanto District (Japan) (autotetraploid) Kanto type N=40
- (3) D. spathulata from Japan (allopentaploid) Kobayashi type 2N250
- (4) \underline{D} . spathulata from Kansai District and southwestern Chubu District (allohexaploid) $\underline{Kansai\ type}$
- (5) D. spathulata from unknown locality (octoploid) D. aliciae W=80

There is a hybrid of <u>Drosera spathulata</u>, horticulturally named <u>D.x 'Nagamoto'</u>, which was made by Mr. Jiro Nagamoto. The parents of the hybrid were <u>Drosera longifolia (anglica)</u> as the maternal parent from Hokkaido and <u>D. spathulata</u> as the paternal parent from Mt. Shinoda, Osaka (the Kansai type). This hybrid might join with the <u>Drosera spathulata</u> complex.