

Martagon Lilies

by Frans Officer

This is a short, practical guide for growing martagon lilies. It's not intended to be your sole source for martagon information. On the contrary. Because this reflects the experiences of only one grower, you're encouraged to seek out other sources of information. There are some wonderful books that belong in every gardener's library, whether you're an absolute novice* or an experienced lily grower**.

When possible, the information below is presented in outline form. This eliminates redundant text and aids in using this CD as a quick reference tool. Full text has been used only when it seemed logical to do so.

L. martagon and *L. martagon* var. *album*



A. Martagon species

Martagons are “true” lilies, botanically placed in Division II of the genus ‘Lilium’. Five different species make up the Martagon Group of lilies. Similarities include: whorled leaves, small down-facing flowers and smooth re-curved petals (except *L. tsingtauense*), good-sized seedpods and delayed hypogeal*** seed germination.

1) *Lilium distichum*

- a) 30-90 cm (1-3 feet) tall with 3 to 8 orange-red flowers with dark spots;
- b) found in the Amur and Vladivostok areas of Siberia, as well as in Manchuria and Korea;
- c) occurs in moist, shady woodland habit.

2) *Lilium hansonii*

- a) 60-150 cm (2-5 feet) tall with a cluster of up to 12 yellow flowers;
- b) found in Korea, Eastern Siberia and Japan;
- c) occurs in humus deposits on rocky cliffs and in scrub.

3) *Lilium martagon*

- a) from 60-180 cm (2-6 feet) tall; normally from 3-14 flowers, but can carry as many as 50; color mostly from light pink to dark pink; there is a white form (*L. martagon* var. *album*); there's a very dark-red variety (*L. martagon* var. *cattaniae*, sometimes called *L. martagon* var. *dalmaticum*);
- b) found in Eurasia, from Portugal eastwards throughout southern Europe all the way into Siberia;
- c) occurs in limestone hills up to 2300 meters (7500 feet), in Beech woods on lime substrates, at the margins of woods and shrub thickets in well-drained but well-watered soils.

4) *Lilium medeoloides*

- a) small, from 25-70 cm (10-28 inches); flowers orange to apricot in color;
- b) found in Japan, China and Korea;
- c) occurs in volcanic soils from 200-2500 meters (650-8200 feet), in half-shade at lower elevations and in the open at higher elevations.

5) *Lilium tsingtauense*

- a) from 40- 90 cm (15"-3 ft); leaves often appear marbled; flowers mostly orange in color; yellow and red varieties do exist;
- b) found in China and Korea;
- c) occurs mostly in limestone hills, in moist places among open woods or herbs.

Note: *Lilium hansonii*, *Lilium martagon* and *Lilium tsingtauense* are readily available in the retail trade. *Lilium distichum* and *Lilium medeoloides* are harder to find.

B. Martagon hybrids

Martagon hybrids are the result of pollinating a martagon flower with pollen from a non-identical lily. At the start, martagon hybridizers could only use lily species to create hybrids. The first martagon hybrid ever was *L. x dalhansonii*, the result of a dab of *L. hansonii* pollen onto a *L. martagon* var. *dalmaticum* flower around 1890. Since then, uncountable numbers of hybrid seedlings have been raised. Maybe 500 or so have been given a name by their hybridizers or growers, but far fewer have been officially registered with the Royal Horticultural Society in England.

As more and more hybrids are created, the choices of which two plants to use in creating yet more martagon hybrids increase as well. Looking at the photos on this CD will give you a good idea about the variety available today. But it is equally important that hybridizers choose the best possible garden-performers for the two parents of new hybrids. It makes no sense to use a weak-stemmed under-performer's pollen and take a chance of passing those traits on. Selection is everything!

Our increasing scientific knowledge has come to the lily world as well. Mother Nature previously made some crosses impossible by rejecting the embryo before a seed could be fully formed. Today, the embryo can be "rescued" and grown in a test tube to become a small bulb. A good example of this is David Sims' cross of *Lilium martagon album* with non-martagon *Lilium pumilum* from Asiatic lily Division I. David has now succeeded in making many other martagon/asiatic crosses (see the "Martasians" article, as well as several more images in the photo section of this CD). Other hybridizers in Canada and Germany have succeeded in crossing martagons with non-martagon lilies from Division IV, the American lilies (see the article by Norgart Martschinke under "Hybridizing"). Will these Martagon-American lily hybrids be grouped under headings 'MartAms'? Only time will tell!



C. Garden culture

Martagon lilies are fairly resistant to viruses and hardy enough to withstand winters in North American climate zones 4, 3, and even 2. Late frosts after the plants come out of the ground usually do not interfere with the plant's ability to produce flowers, unless the temperature drops to near 20 F or lower. But even if it does, the bulb is not affected and will produce next year. *L. distichum* and *L. medeoloides* and their hybrids are reputedly less hardy and should be mulched for winter.

Martagons occasionally display one "quirky" habit: sometimes they sulk underground for the first growing season after planting. They may show only a few inches of green above ground before disappearing for the year. It's as if the plant had programmed itself the previous year to grow to a certain size this year. When the bulb was dug up last fall, it probably lost most of its roots. It starts growing in its new location according to what was programmed the year before, only to suddenly realize it doesn't have the roots (and thus its nutrient support system) to grow to its intended size. It immediately stops its growth, rebuilding its support system for next year. So when planting a martagon lily, pick a spot where the plant can stay for an extended period of time, plant the bulb(s), and be patient. You will be rewarded!

1) Soil

- a) well drained;
- b) humus very beneficial;
- c) slightly alkaline (slightly acidic for '*L. distichum*' and its hybrids).

2) Light

- a) full sun OK;
- b) day-long dappled shade (= open shade = light shade) seemingly better;
- c) all-morning sun with afternoon full shade OK;
- d) not OK: heavy shade all day long.

Note: Space your plants farther apart as the amount of shade increases. This allows increased circulation and faster drying of wet plants, thus preventing Botrytis (a fungal disease spread by spores that thrives in wet condition; Edward McRae's book "Lilies"* contains an excellent explanation of this disease). Hosta planted between martagons make nice "spacers" and provide a pleasing high-low structural contrast in the shade garden.

3) Feeding and watering

- a) feed a granular fertilizer twice a year (a generic 10-10-10 is fine):
 - i) when plants first start coming out of the ground (April)
 - ii) when plants are just done blooming (early July)
- b) in between the above granular feedings, supplement with an occasional spraying of water-soluble fertilizer such as "Miracle Gro"; spray in mornings rather than later in the day so plants can dry before nightfall;
- c) an organic mulch in mid-July would provide additional slow-release nutrients;
- d) water deeply occasionally, rather than shallow and often;
- e) water early rather than late in the day (again, to avoid Botrytis)

4) Grooming

Lily plants produce a certain amount of energy to fuel seed production. If there are no seedpods,

this energy will go to the bulb. There it will be used to grow the bulb larger so it can produce additional stems next year, or to produce additional, smaller bulbs underground.

- a) If you do not intend to harvest seed:
 - i) after blooming, remove the entire inflorescence (that part of the stem that carried the flowers).
- b) If you do intend to collect seeds:
 - i) leave only 2 or 3 seedpods to ripen on each stem;
 - ii) collect the pods when they begin to show signs of bursting open (usually after August);
 - iii) open the pods and dry the seeds inside the house;
 - iv) store the dry seeds in paper (not plastic) envelopes in the freezer (not the refrigerator) until you intend to use them.****

When leaves turn yellow and or wither in autumn, cut the stem off at ground level and remove any and all plant parts.



As with other lilies, most gardeners dig and split their martagon bulbs in fall. Some gardeners dig their bulbs 45 days or so earlier. The theory here is that the bulbs will be able to grow more of a root-structure in their new location, thus carrying them through the winter better with less “sulking” the next year. Which system is better? I’m not sure, but I am experimenting. So far, it appears that there may be some merit to digging the bulbs earlier. Some bulbs I received in August of last year were breaking ground this spring as if they’d been there forever! Whenever you decide to dig bulbs for transplant, don’t split your bulbs until there are at least 5 or more stems. A generous stand of Martagons will catch the eye, stimulate the senses and sooth the soul!

Notes

* As a basic guide, “Let’s Grow Lilies” is hard to beat. It’s an accurate, delightfully light and yet no-nonsense approach to lily culture. It’s available from the North American Lily Society (www.lilies.org) or your local lily society.

** “Lilies” by Edward Austin McRae is excellent. It provides wonderful information on any lily culture subject you can think of. We believe this book belongs in every gardener’s personal library! Some of the above text, especially in the “Martagon species” section, comes directly from that book. Many thanks to friend Eddie for allowing us to quote from his wonderful book.

** “Martagon Lilies” by Dr. E. Eugene Fox was scheduled to be released in early June of 2006. This 6x9 inch hard-cover is 182 pages in length with 16 pages of color. Although we have not had a chance to review it, we’re betting this book will be a “must” for martagon lovers everywhere. Dr Fox’s work with martagons is second to none and having his insights in print will prove to be very valuable to all of us.

*** “Hypogeal” means “underground”. The term “delayed” refers to the emergence of the first leaf above the soil surface. In nature, here’s what happens: (a) the ripened seeds scatter in late summer or early autumn; (b) the covered seed then forms a tiny bulb underground next to the seed-jacket itself, still feeding off the embryo in the seed; (c) it rests during the winter season, (d) sending up its first true leaf in spring.

**** Even if you do not want to propagate the seeds yourself, donating them is a great idea. Martagon seeds are very much in demand. Your local lily society, the NALS Seed Exchange (www.lilies.org), the RHS Seed Pool (www.rhslilygroup.org), the European Lily Group (www.liliengesellschaft.org) or the New Zealand Lily Society’s Seed Pool (www.nzlilies.org.nz) will gladly accept your seed donations. The seeds you donate have an excellent chance of being distributed all over the world. Now that is a big garden!