BLOOD - LILY ... a potential nursery crop for South Florida.

Prepared by Joe Garofalo* and Wagner Vendrame*

Blood-lilies, sometimes called torch-lilies, are among the easiest bulbs to force in South Florida, and one of the most spectacular in bloom. The Spring of 2002 is the seventh year they have been forced in the Homestead area with minimum effort and no problems. This Spring a small production trial is being conducted in cooperation with a Homestead nursery.

CLASSIFICATION.
It seems that horticulturists always have known blood-lilies by the Latin name *Haemanthus* (Latinized Greek, meaning "blood-flower"), referring to the typical flower color. The species usually seen for sale was always *H. katherinae.* Well, as they are wont to do, taxonomists just could not leave things alone, and now they say that is all wrong. The plant we have thought for so long was *H. katherinae* is in fact *Scadoxus multiflorus subspecies (ssp) Katherinae*. That name can be translated as "the glorious umbrella of many flowers." It fits–the inflorescence is an umbel (umbrella) of many florets.

There seems to be no argument about the common name – both *Haemanthus* and *Scadoxus* are called blood-lilies. And that, of course, is appropriate, and follows the only rule there is concerning common names: there are no rules. We even call the white ones blood-lilies.

The two genera are in the amaryllis family, Amaryllidaceae, and include about 30 species, 9 in *Scadoxus* and 21 in *Haemanthus*. All blood-lilies are bulbous herbaceous perennials.

DESCRIPTION.
Some species produce red, pink, or white shaving-brush-like flower clusters. The blood-lily discussed here produces magnificent 6-inch globes of tiny red florets during late Spring. These flower clusters are on stout, solid one-foot stalks, often angular above, & are followed by rosettes of dark green, undulate, handsome leaves reminiscent of *Hosta*. Leaf-stalks & flower-stalks are usually spotted dark red. These leaves are distributed spirally at the top of a short false stem formed by the leaf bases. In full shade this foliage remains dark, glossy green all Summer. In Fall some stems bear ½ in. round, bright orange-red fruits, each containing several seeds, which take about 6 months to germinate.

The *Haemanthus* blood-lilies have leaves that always come out of the bulb on the same two sides in the same plane, so are 2-ranked. They also bear petal-like bracts below the true flowers.

The *Scadoxus* blood-lilies have leaves arranged spirally, and the flowers are grouped in large, round clusters without showy bracts at the base. This fact-sheet describes the culture of *Scadoxus multiflorus spp Katherinae*, formerly known as *Haemanthus katherinae,* and still sold under that name.

CLIMATE & GROWTH CYCLE.
These fine bulbous plants are of tropical-subtropical origin, thus have no chilling requirement. They survive at least to climate zone 8b (+15E F), according to prior observations, and probably lower. They can be grown anywhere in Florida as garden perennials, but probably should be given a heavy Winter mulch in the coolest parts of north Florida.

Blood-lilies originate from southern and eastern Africa, ranging from the eastern Cape of Good Hope area in South Africa to Zimbabwe, eastern Transvaal, and Natal. Some of that area has a Mediterranean climate, but there is also a part that receives Summer rains, and that is the home of the blood-lilies. They are, therefore, well adapted to warm temperate areas with cool, dry Winters and hot, wet Summers. They prefer a dry Winter dormant period and a bit of shade to do their best in South Florida.

In the wild, blood-lilies emerge in late Spring, producing their flowers first. The leaves emerge later on a separate shoot, usually before all the flowers in a cluster have finished. These leaves manufacture the food that is stored in the bulb for the next bloom cycle. Blood-lilies in landscape situations are showy first as Spring flowers, then as Summer and Fall foliage. The display of leaves alone would make these plants worth growing, even if the flowers were not so showy.

BULB & FLOWER PRODUCTION.
Blood-lilies are very slow to propagate. For this reason the prices tend to be fairly high. Retail they sell for about the same as mixed (seedling) Amaryllis, $4.00 per bulb. The wholesale price is about $95/100, about $1 per bulb. Since it is just about impossible to force more than one bulb per pot due to the size of the inflorescence, the per-pot cost is less than that for paperwhite narcissus (at $.40 per bulb, $1.60 minimum per pot).

Blood-lilies are reported to bloom best if they are root-bound. One grower in south-central Florida holds onto unsold pots – the second year, he gives them a top-dressing of growing mix. He finds that bulbs that have been dug and replanted produce inferior plants. It is probably best always to use new bulbs for forcing.

The bulbs are offered for sale beginning in late January or February. They do not sprout immediately if you plant them when they come in, apparently requiring a rooting period. They start pushing up bloom stalks during late April. We need some research here, to compare planting dates and bloom dates, and a study is underway which should provide some data.

FORCING.
Experience indicates that blood-lilies cannot be forced into bloom except when their season arrives. Bulbs can be held in dry storage and planted at intervals to extend bloom at the end of the season, but no one can get them to bloom early.

Blood-lilies are well-suited for pot production. They are always forced in soil, never in pebbles and water, as paperwhite Narcissus and Hyacinths often are. Though they bloom when growth begins, meaning that they are ready to flower, growing mix is the commonly used medium for forcing them.

For nursery forcing, deep pots are probably best. One-gallon plastic pots are good, but smaller sizes would probably fall over due to the weight of the inflorescence. Either soil-based or soilless media can be used, but it must be well-drained & free of pathogens. The peat & perlite mixes work well.

Bulbs are usually sold in one size only, called either "top size," or "blooming size." And the latter epithet is dependable–according to personal experience, every bulb bought bloomed.

In Europe blood-lilies are forced under glass as cut-flowers, but in the U.S., there are no reports of such practice. They seem to be unknown in the nursery trade here, though potted plants were at one time sold by local florists. Because of their striking appearance, once they become available again, one can predict that they will not stay unknown for long.

POTTING AND FLOWERING.
Fill the pots nearly to the top and firm the medium – these plants will be top-heavy. Use one bulb per pot, pressing it into the medium firmly, then add medium just covering the bulb, and press this firmly. The growing point at the top of the bulb should be just showing above the medium. Leave about a half-inch

headspace for watering.

Pots should be forced in partial shade. The scapes tend to be shorter in full sun, and the color is often less intense than on shade-grown plants. They come into bloom fairly quickly, within 4-6 weeks of planting.

As the scapes emerge, watch them closely. It may be necessary to turn the pots daily for a week or so before sale to avoid bending of the scape. A blood-lily in full bloom is a striking sight, one best enjoyed if the scape shoots straight up. Bends can also make the pots more subject to falling over. If shade is uniform on all sides, bending should not be a problem.

MARKETING.
Blood-lilies remain attractive for two-three weeks, which compares well with other flowering pot-plants. Care must be taken in packing and transporting blood-lilies not to damage the inflorescence. They must not be crowded together, and must not be allowed to fall over.

It would be best to market your crop when about one-quarter of the florets are open. Bloom can be retarded, but that requires a cooler, which is not practical for most nurserymen. A good strategy would be to sell them before full bloom to a florist, who already has a cooler, and who is experienced at using temperature to advance or retard bloom.

When blood-lilies are taken indoors the low light level causes the scape to stretch. This happens with most plant species, and takes a week or more to become evident. This problem is of much less concern with blood-lilies than with other bulbous crops. (Amaryllis is the big offender here because of its tall, heavy inflorescence.) The retailer should be advised to give them as much light as possible.

After bloom is over, the consumer should plant the bulbs in the landscape in a 50% sun, well-drained site. They should be planted about four inches deep.

DISEASES & PESTS.
Because blood-lilies are usually in and out of the nursery in less than three months, disease and pest problems are rare. When bulbs arrive, inspect them for signs of diseases, insect damage, and physical injury. If damage is found, contact your county extension agent or the Plant Disease Diagnostic Clinic for management recommendations. Most problems can be controlled by roguing—just remove and destroy affected bulbs.

MARKET POTENTIAL.
A potted blood-lily in bloom will sell itself. They are so striking in their shape, size, and color that customers are drawn to them. If the price is reasonable, they will sell. It is that simple.

I flower a few myself for personal use every year, and do not sell any of them, but I am constantly being asked by people who see my plants if I would consider selling some.

Any nurseryman with blood-lilies coming into bloom should be able to sell them by bringing them to retail florists and garden centers. These plants are so spectacular that people instantly want them, even if they have never seen them before and have no idea what they are. The price you ask will determine how many you sell, but you definitely will sell them.

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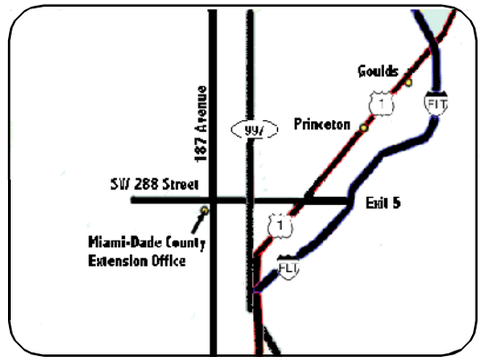

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In Writing
Publications for the horticulture
professionals of Miami-Dade County.
Fact-sheet No. 64.
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Printed 3 2002 jfg BloodLilyProd fs

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Cooperative Extension Service

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