

NARCISSUS FOR THE SUBTROPICS

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One of the neglected fields in the creation of new *Narcissus* varieties is the development of new varieties for the subtropics, the lower limits of the temperate zone, and the beginnings of warm climate latitudes.

This is to be noticed particularly in Florida, where the large-flowered daffodil types are not suitable except in the upmost tier of counties along the Georgia and Alabama lines. Over peninsular Florida, a winter resort section which would welcome a generous variety of *Narcissus* types for winter and spring gardens—there are only a few, mostly the *Narcissus tazetta* or Polyanthus varieties.

These Polyanthus *Narcissus* are grown commercially all along the coast from North Carolina around to Texas and in Southern California. They are found in home gardens, where with good culture and care they survive year after year as a splendid bedding and cut flower contribution to the subtropical winter scene.

A few of the Poetaz types of *Narcissus*, which are listed as hybrids between the Polyanthus and Poeticus *Narcissus*, are reasonably well at home in Peninsular Florida. Certain of the jonquils and jonquil hybrids are likewise suited, especially *N. odoratus*, the Campernelle jonquil. Just why these jonquils are at home to an extraordinary degree in the sub-tropics is uncertain, as they are reputed hardy and also well adapted to gardens in the Northern states where severe freezing is experienced.

Several types of jonquils and jonquil hybrids are found in old gardens in the lower South, including delicious little Campernelle single types, more delicate and charming than the common Campernelle jonquils offered by bulb dealers in the North. These have been growing for decades in these old gardens, and have greatly multiplied. They survive year after year without being dug, requiring only to be weeded and fertilized sparingly every year, and divided when too crowded. There are Jonquil hybrids, apparently with Poetaz or Polyanthus *Narcissus*, which also have survived from year to year in the sub-tropical gardens from old time. The Campernelle blossoms are all the same pleasing gold color, and the shape of the miniature daffodil-like flower with its corona, are characteristics. The jonquil-polyanthus hybrids, have the jonquil foliage, mostly, and flowers more like the Polyanthus types.

Names of these old varieties have long been lost. They are variously called, Princess Ann's daffodils, Queen Anne's Jonquils, etc. Anne seems to be a popular name in flower memory.

Of the Polyanthus *Narcissus*, only a few varieties are grown commercially in the United States, mainly *Paper White*, and a few so-called varieties of same, as *Paper White Grandiflora*, *Paper White Supreme*, etc., *Chinese Sacred Lily*, white with an orange cup, and the familiar *Grand Soleil d'Or*, (great sun of gold) perhaps the most attractive of the varieties commonly grown, and highest priced. The bulbs of *Grand Soleil d'Or* are slower growing and more delicately constituted.

Another interesting Polyanthus *Narcissus* is *Grand Monarque*, a fine, vigorous and free-flowering type, which many fanciers prefer to all the rest. However, it is later in blooming period than the other three, although reasonably easy to grow and produces large bulbs (up to 22 cm.).

Polyanthus *Narcissus* apparently are not too particular about their soil requirements. They do well in fairly acid (5 pH) to above-neutral soils, possibly liking circum-neutral soils best, although the writer has grown handsome bulbs of *Grand Monarque* in acid soils suitable for Irish potato crops, (pH of 4.5 to 5.5) year after year with good results. The recommended range of pH reading for optimum growth of good bulbs and cut flowers is still to be determined, as far as this writer is aware.

The *Paper White* bloom is pure or ivory white, that of the *Grand Soleil d'Or* is a lovely gold, with slightly deeper orange cup, and *Grand Monarque* has a large lemon cup with creamy white perianth. There are two other varieties sometimes found in America, *The Pearl*, with small, pale lemon cup and creamy perianth, blooming early. It is a vigorous type, usually found as a rogue in *Paper White* plantings, and is thrown out by the hundreds by growers, who claim that its flowers do not hold up as well as the *Paper White* in the cut flower trade. It is slightly more vigorous than the *Paper White*.

During the 20's and early 30's, *Paper White Narcissus* were grown by the hundreds of acres in Florida, Mississippi, Texas and other states of the lower South and along the lower Atlantic coast. The price of *Paper White* bulbs sometimes went as low as \$8.00 or \$10.00 per 1000 for the small sizes (10 cm. up). The large sizes, as 16cm. up, sold as cheaply as \$25 per 1,000. *Grand Soleil d'Or* bulbs were never cheap, bringing \$40.00 to \$60.00 and more in blooming sizes, 12 cm. up to 17 cm.

Since World War II increased the costs of production, and labor difficulties and other conditions curtailed the plantings of Polyanthus *Narcissus*, especially *Paper White* bulbs, these have risen in price tremendously in recent years, bringing as much in past seasons as the *Grand Soleil d'Or* before the war, or nearly so.

There are no large commercial plantings of the jonquil types in the South, so far as known. They are grown for garden ornament, and cut flowers.

The Polyanthus *Narcissus* are grown for garden display also, but mostly for cut flowers. The flowers are shipped by the ton to Northern markets in season, which is midwinter. *Paper White* is in flower in the field at Christmas time, the *Chinese Sacred Lily* follows shortly after and the *Grand Soleil d'Or* comes into its full glory in January and early February. *Grand Monarque* is at its best in February. These dates are approximate in middle Florida, for bulbs planted early in the fall, at least by the end of September.

What Sub-tropical gardens need is the attention of breeders of *Narcissus* to produce more kinds of *N. tazetta* hybrids, the introduction of more types of the *N. tazetta* from warm climates where it is native,

and more attention to jonquil-polyanthus hybrids. The introduction of new types of *N. tazetta* appears to be a most promising field for plant investigation. The species is a varied one, found native widely from the Pillars of Hercules to China and Japan. In all this range there must be hundreds of variations and strains of *Narcissus tazetta* which would bear study in the gardens of the Lower South, either for use in hybridizing or as garden material unchanged.

Paper White is an old variety, the *Grand Soleil d'Or* goes back to the late 18th century, and the *Chinese Sacred Lily* may not be a hybrid at all. *Paper White* seeds rarely in Florida, but *The Pearl* seeds occasionally. *Paper White* under special culture has been known to seed, so hybrids should be possible. Hybridization is a delicate operation, requiring a skilled plantsman for success. The seeds are little black shot-like things, the size of radish seeds or slightly larger, and are slow in germination and growing. Several years would be required to make a blooming size bulb.

The best Polyanthus blooms as observed by the writer in Florida, were grown on bulbs lifted in summer, stored in a warm dry place in the shade until late September, and then planted back in well manured, fertile, moist soil, where the drainage is at least good to fair. Commercial bulbs are "round" bulbs, a condition which lasts only one season. A round bulb planted back in the soil splits and makes a mother bulb the next season, with one or more offsets or "slabs". These offsets are separated from the mother bulb and grown on two or three years to produce blooming size bulbs for commerce. The best blooming size bulbs are 12 cm. size and up, 14 to 16 cm. being optimum for ordinary garden and forcing purposes. Millions of *Paper White* and thousands of the *Grand Soleil d'Or* bulbs are sold annually in late summer and fall by seedsmen, department stores, florists, etc., in the North and South for forcing in the home in pebbles and water, to which this type of *Narcissus* is better adapted than others. Northern florists and wholesale growers force thousands of these bulbs for midwinter cut flowers, as they can be brought into bloom in a cool greenhouse with little heat or trouble, and provide a sweet-smelling, bright cut flower with good stems and excellent lasting qualities in the midwinter season of December and January. By successive plantings, they may be had in bloom later. The greenhouse grown flowers are usually far superior to the field run stock shipped north from the Southern outdoor plantings, but have to bring a high price to meet costs, as the Northern grower has to discard his bulbs after forcing.

Growing the bulbs on an acreage scale in the lower South is not something to undertake on overnight impulse. It is a slow, tedious, painstaking process, involving a large investment of time, labor and money, besides the difficulty of developing markets for the finished product. The bulb production must be efficient and economical to pay production costs and a profit.

It is possible that in the Riviera section of France, and the gardens of Southern Spain, or even in the Scilly Isles southeast of England, there are varieties of Polyanthus *Narcissus* which should be introduced to the United States promptly for trial. John Weathers lists the following varieties of Polyanthus *Narcissus* in his "The Bulb Book", (1911):

"Flowers white, with a yellow or orange corona—*Bazelman Major*, *Couronne Blanche*, *Gloriosa*, *Grand Monarque*, *Grand Primo*, *Her Majesty*, *Laura*, *Maestro*, *Mont Cenis*, *Queen of the Netherlands*, *Scilly White*, *Staaten General*, and *White Perfection*.

"Flowers all white,—*Early Snowflake*, *Paper White*, *White Pearl*.

"Flowers all yellow—*Apollo*, *Aureus*, *Bertolini*, *Bathurst*, *Charles Dickens*, *Cupularis*, *Jaune Supreme*, *Lord Canning*, *Soleil d'Or*, etc."

To American *Narcissus* enthusiasts, who have only *Grand Soleil d'Or* in their gardens of all the above listed "all yellow" Polyanthus varieties, Weathers' roster of names leaves a strong impression that some plant introduction is very much in order from the *Narcissus* gardens of Southern Europe. The writer makes a sincere appeal to all *Narcissus* lovers knowing of the existence of other varieties of Polyanthus *Narcissus* than are commonly grown in the United States to communicate the news to him at Winter Park, Florida, whether in American gardens or anywhere else in all the broad range of this interesting species.