

Three Pine Rock Land Shrubs

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Pine rock land is a distinctive habitat found only in the Bahamas, southern Florida, and Cuba. It is characterized by a rich and diverse flora, much of which has been overlooked by native gardeners. Three shrubs that frequently occur in pine rock lands are described with information regarding their ornamental qualities, cultivation, and propagation.

KEYWORDS: *Callicarpa*, *Crossopetalum*, *Tetrazygia*, Lamiaceae, Celastraceae, Melastomataceae, Florida, native plant, pine rock land, shrub.

In southeastern Florida there is found a special type of pine forest consisting of Southern Slash Pine (*Pinus elliottii* var. *densa*) that has developed on porous limestone. This habitat is famous for the large number of tropical plants that, although widespread in the Caribbean and Latin America, are limited only to this habitat in the United States. In addition, there are several species of plants that are found nowhere else. These forests are globally endangered and for the most part now consist only of "island" remnants. With few exceptions, even these remnants are under intense development pressure.

On superficial examination, this habitat appears monotonously uniform; however, this is misleading. In many ways, it is as biologically diverse as mesic forests developed on rich soils. Contributing to this diversity, are a wide array of shrubby plants, many of them highly ornamental, and all of them with some point of interest. This article will introduce you to three noteworthy shrubs found in these unique pinelands.

BEAUTYBERRY

This plant is one of the most common understory shrubs in all of Florida and is not restricted to pine rock lands. Its presence in a variety of habitats throughout the state attests to its adaptability to a broad variety of conditions. The common name is essentially a translation of the genus name (literally, *beautiful fruit*).

Plants form multiple-stemmed shrubs with very little branching above the base and they have a peculiar scurfy appearance due to a covering of stellate hairs over all parts. Crowded masses of dainty pink flowers are borne in the axils of the opposite leaves. While the flowers are pretty enough, it is the fruit that is this plant's most exciting feature. When fruiting, nearly every leaf node bears large, conspicuous, rounded masses of berries. These berries are an electric purple-amethyst color for which the appellation *beautyberry* is scarcely adequate.

Easily grown under garden conditions, plants begin to flower and bear fruit when only about one foot tall and only one or two years old. When selecting plants at a nursery for the home landscape, try to observe them in fruit so as to select a heavy fruiting clone with a color tone that pleases you. And be sure to stand several yards from the plant. Some forms have fruit that, although exquisitely colored at close range, appear dull and dark purple from a distance.

The plant's form is awkward and not particularly interesting. Therefore, do not let it grow into a large treelike shrub, which is what it will do in cultivation. In order to obtain the most attractive plants, occasionally prune them back severely to keep them at three to six feet in height. Such pruning also appears advantageous in that it produces vigorous young growths that flower and fruit heavily.

QUAIL BERRY

This plant belongs to the same family as *Euonymus*, a genus frequently used in garden landscapes further north and world famous for its brilliant autumnal display. Quail berry (*Crossopetalum ilicifolium*) is a diminutive shrub only a few inches high with spreading branches about two feet long. It is not a shrub in the traditional sense of the word; rather, it is a subwoody groundcover.

Quail berry's leaves are borne in pairs, average three-fourths of an inch long and have three or four spiny teeth on each side. Their resemblance to holly is quite marked and this explains the species epithet, *ilicifolium*, which means *holly-leaved*. Flowers are tiny, greenish and inconspicuous, but they are followed by showy, bright red berries in the autumn and into early spring. I do not know if these are a favorite of quails. Nor do I know, incidentally, why *beautyberry* is spelled as one word and *quail berry* as two words, but that is what my references indicate.

Quail berry can be grown from seed, the main requirement being patience. Seeds sown in late December of 1989 did not germinate until August of 1990. Indeed, they took so long to germinate, I had forgotten that I had ever planted

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them! They had been sown in a large tub with a morning glory vine growing in it and were subjected to the watering, fertilizer and sunlight exposure of the morning glory.

Two seedlings were selected for growing on. They are presently in a six inch pot of regular houseplant soil in an outdoor spot facing east. Except for periodic light doses of fertilizer, they do not receive any special attention.

The most unusual quail berries I have ever seen were growing among limestone rocks at Parrot Jungle, a tourist attraction in Miami. It appears that the rocks were gathered locally and several native plants were inadvertently brought along. Due to regular irrigation, and perhaps fertilizer, the quail berry had dangling stems over six feet long, resembled vines, and had a bumper crop of berries.

I have read that, because of its superficial resemblance to holly, early Floridians used quail berry as a Christmas decoration; however, this plant is endangered due to habitat destruction and such use can no longer be condoned.

FLORIDA TETRAZYGIA

Tetrazygia bicolor, which I will refer to simply as *tetrazygia*, is a member of the Melastome family, the same family to which the genus *Rhexia* (meadow beauty) belongs. It is a common member of the flora of pine rock lands and is an indicator species for this community type, although it may also be found in rocky hammocks. Healthy, robust, well-grown plants are one of the most horticulturally desirable and beautiful shrubs in the United States. Many qualities combine to make this plant so beautiful: the leaves and their vein pattern, an abundance of white flowers of exotic appearance, conspicuous fruits, and a rounded, self-branching, symmetrical form.

The leaves are an attractive, glossy, dark green color. They have several parallel veins extending from the base

of the leaf to its apex. These principal veins are connected by cross veins, the whole forming a kind of checkerboard pattern. This type of vein pattern is so characteristic of the melastomes that botanists refer to it as *melastome venation*. The veins are clearly marked on the leaf's surface and their intriguing pattern adds beauty and interest. New growths are densely covered with minute white hairs that are gradually shed as the leaves mature. Thus, each branch tip contrasts with the rest of the plant in a subtle but attractive and novel manner.

In late spring or early summer, *tetrazygia* bears branched clusters of white flowers accented by long yellow anthers. In cultivation, it can bear flowers from early spring to late fall. The flowers are followed by conspicuous purple-black berries.

Fresh seed germinates readily without special attention; however, the seedlings are tiny, sensitive and slow-growing during their first six months or so. In order to grow them to maturity, they must be provided with perfect conditions for the first six months of their lives: (1) a moisture retentive but well-drained soil mix; (2) even watering, never allowing them to remain sopping wet but never allowing them to get too dry either; (3) periodic light doses of fertilizer; and (4) bright light without direct sun. After six months or so, the seedlings begin to grow much faster and can be gradually acclimated to full sun and fresh air, which they require for their best development.

When selecting a site for *tetrazygia* in the home garden, choose it carefully and ensure that it is well-drained. The best site is one where the plants will receive bright even light from all sides. Remember, these plants are self-branching and, if they receive equal light on all sides, they will naturally form even, rounded, many-branched shrubs that look as if they had been pruned into perfect symmetry. The next time you are seeking a specimen plant that grows about six feet high and wide, why not try *tetrazygia*?

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