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A Needle Palm in the Northern Landscape

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Even among cold-tolerant palms, *Rhapidophyllum hystrix* is legendary for its hardiness. Like most legends, this one is part fact and part fallacy.

Reports of the needle palm surviving temperatures of -15° F or even -20° F have led some mail order nurseries to rate the plant hardy to USDA zone 6. A South Carolina nursery listed a zone 6 rating for the needle palm as recently as last year, but their latest catalog says the palm is hardy to Washington, D.C., inside zone 7.

Why? For one thing, northerners who bought the plant often lost it during the crucial first winter. I've noticed that marginal trees and shrubs nearly always perform better their second and third winters in our soil, even when those winters are more severe than the initial one. According to what I've read in horticultural books and articles—and later affirmed by experimenting—a plant requires at least a year to acquaint itself with new soil. Until it

becomes acclimated an ornamental is sensitive to winter injury, drought stress, and the limitations of its particular site (incompatible soil types, lack of drainage, etc.). Of course plants grown at the edge of their hardiness limit are especially at risk.

Though it is especially hardy, the needle palm is a southern, heat-loving plant. Scattered populations may endure a night or two of abnormal cold in their native situation, but that cold spell is usually short lived. In the North, cold lingers, sometimes until April.

I first tried needle palms at a northern exposure because I'd had some success there with broadleaved evergreens. Since the northern side of the house is always shady, problems with winter sunscald are eliminated. My first needle palm, planted ten feet from the house, showed only a little green by spring. It was alive when I dug it up, but died soon afterward. The second needle palm I tried, this one planted

close to the northern foundation, fared better. About half its foliage remained green through winter, and stayed that way through spring. But the spot was so cool and shady that the palm never commenced growing.

Watching those needle palms battle the New England winter showed how repeated bombardments of frigid weather weaken a plant, each cold spell sapping a little more of its vigor. Cactophiles are familiar with this problem. They try plants from cold desert areas where below zero temperatures occur, and are disappointed when the cactus doesn't stand up to the same temperatures in the East. Sometimes the problem is the soil type they've used, but often it's because their site is just too cold. Daytime temperatures in the East and Midwest don't climb as high as they do in the cold deserts—even where nighttime temperatures are similar. In the deserts, afternoon warming gives plants a break from having to fight off the cold. Similar conditions prevail in the southeastern United States, though daytime fluctuations there are not as pronounced as they are in the Southwest.

Working on the theory that the needle palm might benefit from warm daytime temperatures, I offered a new plant (about one foot tall) a spot along the southern side of my house, on ground that slopes to the southeast. I planted this palm just a foot or so from the foundation. The soil here doesn't freeze more than a few inches, and with a generous mulch it doesn't freeze at all. The sloping ground, which catches more sunlight, enhances the warm microclimate. I mulched the plant up to its two inch trunk and applied Wilt-Pruf, an anti-desiccant spray, three times during the winter.

In late November of 1989 the earliest zero degree reading ever recorded here ushered in a six week spell of frigid weather, damaging ornamental plants throughout the region. By early December, morning temperatures started falling below zero. Each afternoon wind devils frolicked in our

back yard, churning up dry leaves and robbing plants of moisture. I watched this scene from a kitchen window, reflecting on the vagaries of a New England winter, and thinking that perhaps this wasn't the best year to plant a palm in Massachusetts.

Shortly after that zero degree reading, one of the fronds on the needle palm showed about 50 percent frost burn. But the damage—a reddish color rather than the usual dark brown—looked unusual. I noticed that the frond had been crushed, and that the damage was limited to the area of this bruise.

Three weeks later, we were still in the midst of the cold spell (with a 19° daily average over a six week period), when a new front arrived, bringing temperatures of -10° F. The following morning it was -10° F again.

The edges on all of the fronds showed slight damage a few days after these coldest days of winter. In late February, we had another -10° F night. Except for the minor damage at the fronds' edges (which is no longer noticeable), and the damage to the bruised area, the needle palm came through our abnormally cold zone 6 winter looking much like it did when I planted it. In May, after daytime temperatures warmed to the seventies and eighties, the small palm began growing again, with two and a half new fronds by summer's end.

Having one palm survive for one winter does not warrant its hardiness, but this plant was purchased from the same source (Woodlanders Nursery) as the others, and I have no reason to believe it is any hardier than they were. Based on its performance last year, I expect the needle palm will sail through this winter unaffected by the New England cold. Two factors now enter into its favor for continued survival. First, last winter was about the worst we've had here in ten years; chances are the next few will be milder. Second, the needle palm is now established—and so somewhat hardier—established in our soil, and becomes more each year.

A needle palm might survive out in the open yard here at a southern exposure, but considering the palm's performance on the north side of our house, I doubt it would fare well without the added warmth coming from the foundation. In climates a bit warmer than mine—zone 6b, for example—the needle palm may survive in several types of planting situations, but that would probably depend on winter conditions during the plant's first year.

With a little luck, and good strategy by the planter, the needle palm, *Rhapidophyllum hystrix*, can make a strong showing in zone 6 (and no doubt in parts of zone 5). Gardeners who try the plant once and discard it as unsuitable for their climate do *Rhapidophyllum* a disservice by not taking advantage of its incredible hardiness—not to mention its beauty and worth

in the landscape. Large boulders, outbuildings, and conifer screens may work in place of foundation planting in some sites, giving the palmophile more landscaping options and strategies. You can always place a polyethylene or burlap cover on the needle palm in its first year, or mulch it over with fallen leaves, straw, or even shredded newspaper. In the second, hardier year, the palm may surprise you by living up to its best reputation for cold-tolerance.

When I told a friend that I'd planted a palm in my yard, he looked at me incredulously. "You planted a palm tree?" he asked. "Not a palm tree," I told him. "Just a palm. A shrubby palm native to the South." "Yeah, but a palm," he said. "How hardy can a palm be?" I looked at him blankly, and thought a moment. "Hardy enough," I said.

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CHAPTER NEWS AND EVENTS

Alain Moinié of France

The IPS joins our French Chapter, Fous de Palmiers, in mourning the loss of Alain Moinié, member of their Administration Council and Founding Member. Alain Moinié, author of *Palmiers pour les climats tempérés*, died on October 10, 1992. (*Palms for Temperate Climates*, an excellent book for on Palms for French-speaking people, is available through Fous de Palmiers.) The presence of Alain Moinié will be much missed. Those who knew and appreciated him plan to plant a palm to his memory in July 1993 and Fous de Palmiers president Alain Hervé solicits contributions to that end. All interested in participating, please send donations to the Fous de Palmier Secretary, Violette Decugis.

Thanks for the 1992 Biennial to the South Florida Chapter Hosts

Those of you who did not attend the IPS Biennial in Miami in early November missed a fine meeting. Yes, Miami and south Florida had significant damage from Hurricane Andrew which was sometimes staggering. But areas adjacent to Miami to the north seemed untouched by the storm and the gardens there had many beautiful palms to enjoy. Overall the meeting was exciting and educational. There were many well-known speakers who gave informative and entertaining talks. The Wednesday meeting and lunch hosted by Fairchild Tropical Gardens revealed a garden under recovery from Andrew's forces but also committed to using this "opportunity" to refocus the garden on its proper course for the future. This positive attitude permeated from director Bill Klein on down throughout the staff. Also revealed was a