pithy pulp. Formerly, many palm stands existed in the land, then desert, up to the midpoint between Santiago and La Paz [or about 100 miles north of San José del Cabo]. Having commenced to work mines, the operators and timber cutters of those establishments started to cut the palms with axes in order to eat the palmito, besides the many that were cut for construction which, so the story goes, were carried to the sea by water from great rains and consequent floods in the arroyos. Certainly palmito is delicious and esteemed for salads, and in places where it exists the Spaniards eat it as a delicacy"

Barco's paragraphs describe uses of Brahea brandegeei which until now have been unrecorded. Of special interest is his description of the use of palmito or palm cabbage. Curiously, this is the earliest reference I know of the use of this delicacy in the New World. Much older references are found for the Old World. Yet one must assume that Amerindians have been eating palm cabbage for many centuries. Strangely, Barco's Baja Californian Cochimi appear to have learned about the edibility of palm cabbage as a result of the spread of Jesuit Missions from mainland Mexico.

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BARCO, MIGUEL DEL. 1973. Historia Natural y Crónica de la Antigua California. Ed. Miguel Leon-Portilla. Universidad Nacional Autónoma de México.

Note: An English translation of the Barco work is to be published by Dawson's Book Shop in Los Angeles, California. There will be some corrections and additions to footnotes relating to plant names in the original publications. These have been made by Dr. Annetta Carter, student of the Baja California flora, who states that the palma colorada "is most abundant in the Cape Region but extends north almost to latitude

26°N. In the vicinity of Loreto, it is called 'palma de taco' or 'palma de tlaco.' The leaves are valued for thatching." Dr. Carter further states that a "palma blanca," incidentally mentioned by Barco in two different places in his chronicle (pages 56 and 62) probably represents Washingtonia robusta, which is "common in the northern part of the Sierra de la Giganta."—W.H.H.

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Palms in Utah

24 April 1979

Residents of St. George, Utah, are calling the windmill palm, *Trachycarpus fortunei*, the "snow palm" after the bitterly cold winter of 1978–1979.

White-dusted windmills were a common sight in the normally sunny desert resort, which received a total of 24.5 inches of snow in January and February.

A late-winter inspection tour showed that a week with low temperatures under 10 degrees Fahrenheit, the lowest being three above zero, did not visibly damage any of the hairy-trunked fellows.

St. George sits at an elevation of 2760 feet 120 miles northeast of Las Vegas, in the U.S. Department of Agriculture's plant hardiness Zone 6, and *Trachycarpus fortunei* usually fruits every year.

This past winter's intense cold may not have tilted any windmills in Utah's "Dixie," as it's called by locals, but it may have claimed the lives of many California fan palms.

Washingtonia filifera was planted in front of numerous motels and residences in St. George, but it seemed obvious from drooping brown fronds that few individuals survived. Many specimens were quite tall.

25 July 1979

I have just returned from a four-day stay in St. George. Frankly, I was

shocked—but delighted—to discover that about 50 percent of the palms I thought were dead or dying in February made it through the winter alive.

I suspected a few would still be around, since the intense cold was of short duration, but the number of *Washingtonia filifera* that recovered was truly amazing.

The tallest and/or oldest individuals in town, as one would expect, appeared to be in the best shape. They range in trunk height from 10 to 30 feet. Most are in sheltered spots, but some are very exposed.

It should be noted that the motels and hotels in St. George, like those in Las Vegas, bring in large specimens to landscape their facilities so size is not always an indicator of local growth.

I noticed a number of California fan palms that were defoliated last winter putting out new fronds, but there are "headless" trees in every neighborhood in town that show no signs of recovering.

Many of the palms that went entirely brown in the winter have been removed by their owners, but other people are waiting patiently for their trees to spring forth in the warm desert sun.

This is not the first time Washing-tonia filifera has taken a beating in St. George. I understand that in 1972, another bad winter, many of them were killed while others came through okay.

The town's leading nurseryman told me in February that he expects most locals who like palms will probably only plant *Trachycarpus fortunei* in the future because of its proven hardiness in the area.

One would think that Chamaerops humilis, the European fan palm, would be a better choice in the St. George area than Washingtonia filif-



1. Trachycarpus fortunei in St. George, Utah.



2. Young Washingtonia filifera after the winter of 1978-1979 in St. George, Utah.

era, but I have been unable to locate a single specimen anywhere.

Incidentally, I am experimenting with both *Trachycarpus fortunei* and *Chamaerops humilis* here in Ogden. I lost two large greenhouse-grown windmills and one small one in an exposed northern location last winter.

This time, I have two windmills and one European fan palm in a more protected location on the east side of my home. Our winter storms usually come in from the west, but we sometimes get east canyon arctic winds.

I wrapped the three windmills with strips of green burlap last winter, which proved inadequate protection, so this year I'm thinking of covering them with plastic bags with a few holes for air circulation.

We seldom get to 0 degrees Fahrenheit in Ogden, since the Great Salt Lake never freezes and moderates winter temperatures, but last winter was our second worst in history and we slid below 0 several times.

I read in PRINCIPES that windmills

have survived -6 in Georgia and -8 in Maryland, so I'm hopeful that they'll make it here if I can give them enough protection while they're young.

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NOTES ON CULTURE

A New Seed Germinating Chamber

Much has been written in the past about methods of germinating seed, and I have tried a number of them. A couple of years ago I got an idea from Jim Benzie of Laguna Beach, California about yet another way. He had been using an old refrigerator with a small light bulb as a source of heat. I couldn't locate a refrigerator, so, instead, I decided to build a box made of rigid insulating foam. As it turned out, I couldn't have been happier. I've tried heating cables, but they were troublesome and burned out. At this