PLANT PORTRAITS

ITEMS FROM THE LACEBARK TREE [*LAGETTA LAGETTO* (W. WRIGHT) NASH; THYMELAEACEAE] FROM THE CARIBBEAN

Like every other subject, economic botany has a dark corner. Although herbarium specimens continue to accrue in many institutions, there are still few scientifically named collections that represent the interdependence of plants and people. Such collections can communicate the importance of conservation and sustainable use to a wide audience: to decision makers, to the ignorant or unconvinced, but most of all to those who follow us and may otherwise wonder why we do not collect and document the ever changing interface between cultural and biological diversity. There is also the question of threat. For example, as traditionally crafted baskets of grass, palm and sedge yield to the ubiquitous plastic bag, both the economic status of the natural sources and the continuation of local skills can come to an end. Perhaps we would do well to collect such disappearing items now.

But how does a curator on the inevitably low budget, and with a finite amount of space, decide what should be incorporated into an economic botany collection? Whatever the policy may actually be—saving what is disappearing, using objects and products as educational tools, or having some geographical, cultural or utilitarian focus—serendipity, undoubtedly the stronger force in the past, may be more persuasive. If there are enough collections, representing a long held willingness to receive them, we can build up a picture of how a plant was used, of its importance, its qualities, and, perhaps, of a potential that can once again be tapped. For the lacebark tree, the picture we gain is of a species once plentiful and well documented for its uses but now of unknown status, unused, and apparently forgotten.

Of the four species of the genus *Lagetta* (Thymelaeaceae) the lacebark tree *L. lagetto* (W. Wright) Nash is the most widespread. It occurs in Cuba (Leon and Alain 1953) although is not mentioned by either Bisse (1988) or Borhidi (1991) and has not been collected in recent years (Antonio Lopez Almirall pers. comm.); in Hispaniola (both the Dominican Republic (Logier 1982) and Haïti (Barker and Dardeau 1930)); and in Jamaica (Adams 1972). In Jamaica (its best documented locality) it grows to 12 m high and is (or was by 1972) "Occasional, mostly in the central parishes, in woodlands on limestone hills; 1500–2600 feet [460–800 m]." However, in 17 years, the author collected just one specimen (Dennis Adams pers. comm.) and the only assessment one can make of its current status is that it is absent both from any Caribbean Center of Plant Diversity (Davis et al. 1997) and from the IUCN Red List (Walter and Gillett 1998). As a non endemic in Jamaica, the lacebark was not considered by Kelly (1988) in a detailed assessment of the state of the island's flora. An early record from Guadeloupe is doubtful (Howard 1989).

The characteristics and utility of the lacebark are better documented. "What is most strange in this Tree," wrote Sir Hans Sloane in 1725, "is, that the inward Bark is made up of about twelve Coats, Layers, or Tunicles, appearing white and solid, which if cut off for some Length, clear'd of its outward Cuticula, or Bark, and extended by the Fingers, the Filaments or Threads thereof leaving some rhomboidal Interstices, greater or smaller according to the Dimensions you extend it to, form a Web not unlike Gause, Lace, or thin Muslin" (Sloane 1725). Some of the barks found in the Kew collections, such as that shown in Fig. 1, are similar to that described by Sloane.

Many authors, including Sloane, recorded the presentation of a lacebark cravat by the Governor of Jamaica to the English king, Charles the Second (who reigned from 1660–1685). Wright (1787) briefly listed the lacebark's medicinal uses and Lunan (1814), at a time when the lacebark was 'common' in central southern areas of Jamaica (and much used for making ropes, caps and suits), described how the bark was bleached by stretching it out in the sun and "acquires a degree of whiteness equal to the best artificial lace." No one ever seems to have recorded how the bark was harvested but possibly the tree (or its stripped branches) died.

Collections at Kew, some undated but all almost certainly from the nineteenth century (and

Economic Botany 54(1) pp. 4–6. 2000

Fig. 1. A whip (left) and a stem (center) of a lacebark tree bought as part of a larger collection at an auction in London in about 1975 by Mrs Elvira Strong, showing how the inner bark has been teased out into a mesh; a portion of bark (right). (Kew EBC 75996, 75995 and 4494).

all bar one from Jamaica), include samples of bark and fruits, paper, a bonnet, fans (Fig. 2), table mats, slippers from c. 1827, and a cap ornamented with seeds of *Leucaena glauca* from 1861. An article by Nash (1908) is perhaps the last dedicated to the lacebark before this one. He wrote that the bark was then still being used in Jamaica for items to wear. The Bark of Trees (Sale Prevention) Act of 1929 offered no protection to the lacebark, surely indicating a scarcity of use or lack of concern. Walter (1938), however, recorded the continued production of

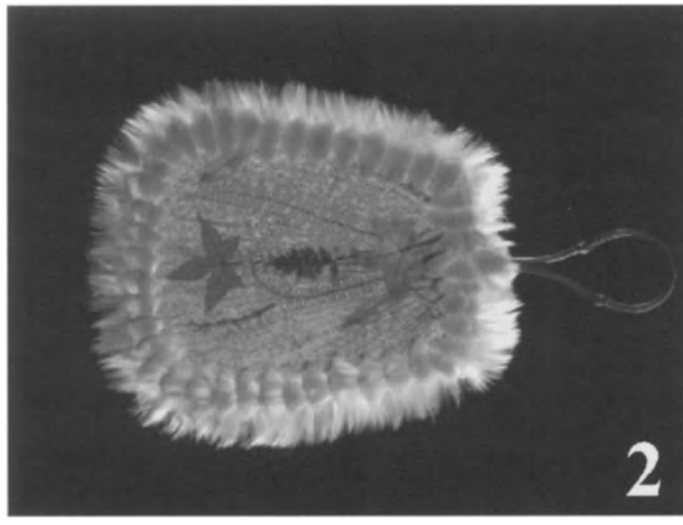

Fig. 2. A fan ('made in the West Indies') donated by Mrs Galley Blackley, 1927; cleaned and repackaged by the Textile Conservation Centre, Hampton Court, 1996. Lacebark provides a single layered mesh onto which a bryophyte and a number of pteridophytes have been attached, including *Hemionitis palmata,* at least two species of *Cheilanthes, Elaphoglossum* sp., and a filmy fern *Hymenophyllum.* The rim is composed of what appear to be the seed plumes of an asclepiad, and the handle is probably a *Smilax* stem. The other side of the fan has further samples. (Kew EBC 30892. A. McRobb, RBG, Kew.)

'fancy-work' and whips (from the smaller branches), while Swabey (1941) reported cordage as the chief use. Thereafter there is silence from Jamaica, although Kew has a whip donated from there in 1948.

The qualities of the bark have also been appreciated in Cuba (where it used to be known as *daguilla* or *guanilla*; Roig 1988) and in Haïti where the French vernacular name of *bois dentelle* translates exactly as lacebark.

Overall we have here a tree with a certain wealth of historical use and data but which has gradually declined into such obscurity that we do not even know if it is under threat. Will it ever return? Who can tell, but these collections at least draw our attention to a possible conservation issue and provide a legacy of how human ingenuity can apply itself to a peculiarity of wood anatomy.

Literature Cited

Adams, C. D. 1972. Flowering Plants of Jamaica. University of the West Indies, Mona, Jamaica.

Barker, H. D., and W. S. Dardeau. 1930. Flore d'Haïti. Service Technique de Departement de l'Agriculture et de l'Enseignement Professionel, Port-au-Prince, Haïti.

Bisse, J. 1988. Arboles de Cuba. Editorial Científico-Técnica, La Habana.

Borhidi, A. 1991. Phytogeography and Vegetation Ecology of Cuba. Akadēmiai Kindó, Budapest.

Davis, S. D., V. H. Heywood, O. Herrera-MacBryde, J. Villa-Lobos, and A. C. Hamilton, eds. 1977. Centres of Plant Diversity: a Guide and Strategy for their Conservation. Vol. 3. The Americas. WWF and IUCN, Cambridge.

Howard, R. A. 1989. Flora of the Lesser Antilles. Leeward and Windward Islands. Volume 5. Arnold Arboretum, Harvard University, Massachusetts.

Kelly, D. L. 1988. The threatened flowering plants of Jamaica. Biological Conservation 46:201–216.

Leon (J. S. Sauget), and Alain (E. E. Liogier). 1953. Flora de Cuba. Vol. 3. Imp. P. Fernandez y Cía, La Habana.

Liogier, H. A. 1982. La Flora de la Española. Vol. I. San Pedro de Macorís, Universidad Central del Este.

Lunan, J. 1814. Hortus Jamaicensis. Printed at the St Jago de la Vega Gazette, Jamaica.

Nash, G. V. 1908. The lace-bark tree. Journal of the New York Botanic Gardens IX:116–119.

Roig, J. T. 1988. Diccionario Botanico de Nombres Vulgares Cubanos. Editorial Científico-Técnica, La Habana.

Sloane, H. 1725. A Voyage to the Islands Madera, Barbados, Nieves, S. Christophers and Jamaica. Vol. II. Printed for the Author.

Swabey, C. 1941. The Principal Timbers of Jamaica. Department of Science and Agriculture, Jamaica Bulletin No. 29. Government Printer, Kingston.

Walter, M. 1938. Some Jamaican Wild Plants Described and Pictured. No publisher given.

Walter, K. S., and H. J. Gillett, eds. 1998. 1997 IUCN Red List of Threatened Plants. IUCN, Switzerland and Cambridge.

Wright, W. 1787. An account of the medicinal plants growing in Jamaica. London Medical Journal 8: 217–295.

—Georgina Pearman, Department of Anthropology, University of Kent at Canterbury, Canterbury, Kent CT2 7NS, UK; Hew D.V. Prendergast, Centre for Economic Botany, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, UK.