That Confounded Winter's Bark

Gareth Evans takes to the high seas with Sir Francis Drake to discover the history behind Winter's bark, a useful tree whose bark provided Vitamin C to sea-farers before it became a tree of garden interest.

"When the privateer Sir Francis Drake attacked Riohacha in the sixteenth century, Úrsula Iguarán's great-great grandmother became so frightened... that she lost control of her nerves and sat down on a lighted stove."

This image from Márquez's novel *100 Years of Solitude* reminds us there is more to the popular image of Sir Francis Drake than the familiar seafarer hero. After plundering ships and sacking ports around South America, Drake's 1577-1580 circumnavigation of the world has been described by some as a pragmatic way to return his booty-laden ship home while avoiding the vengeful Spanish. Diplomatically sensitive as Drake's activities were, the silence imposed on him and his crew by the Crown on their return was strict.

The first account to appear in print was purely botanical: *Aliquot notae* (1582) by Carolus Clusius was a description of new specimens brought back from Drake's voyage. The renowned Clusius (otherwise Charles de l'Ecluse) was a Flemish botanist, translator and editor, whose wide network of contacts had often helped him to be the first to publish descriptions of the new plants that appeared in the ports of Europe, including London. It may be unfair on the buccaneering Drake to express surprise that he had an interest in natural history. However it is true that he, and his companions, knew that there was a market in exotic natural history specimens when they returned to London.

As for any other sought-after commodities there were middle men that sold them on to the curious apothecaries, physicians etc. However, when possible, the buyers preferred to interrogate the person who actually obtained the specimens themselves in order to extract as much first-hand information as possible. One can imagine within some cold chamber in a northern port the spicy aromas lifting from these dried leaves and barks as they were scratched, smelt, tasted – weighing up what this strange stuff might be used for.

No doubt if Drake had not had so much success as a licensed pirate he would have collected what local information he could, including natural products. This is in fact what happened to his second-in-command John Winter, captain of the Elizabeth. With Drake's Golden Hind he steered his ship though the treacherous Straits of Magellan but lost Drake in a storm on the far side. He decided to return to England, and, in doing so becoming the first European to sail the Straits in an easterly direction. He then took the opportunity to scrutinise the east coast of South America. Where necessary he gave the impression to suspicious Portuguese colonists that he was an English merchant, but otherwise traded with 'naked men of the countrey'.

Photo: Gareth Evans

Winter's bark, in April, at the Botanical Gardens, Singelton Park, Swansea.

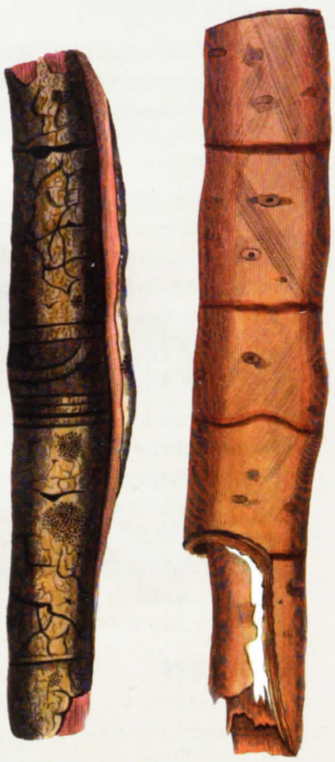
Treatment for scurvy

If Clusius met Winter on his return to London then it is surprising that such a punctilious author should get his name wrong. Referring to him as William Winter, Clusius described an aromatic bark that John Winter returned with. There are many elaborations of this much-repeated story in the horticultural literature. However it is clear that Winter had already proved that it was an effective treatment against scurvy. Some stories have it that he was led to this by natives, but, as was the usual practice, he may have experimented on sufferers among his crew. "Boiling in honey", he said, was a useful corrective to the acrid edge of the otherwise spicy aroma; in fact it is popularly known as *canelo* (cinnamon) in South American Spanish.

Clusius had named one exotic specimen after Drake (*Radix Drakena*, Drake's root), but christened the useful bark, Cortex Winteranus, Winter's bark. It took 20 years for the first Dutch circumnavigation voyage to discover the tree, now known as *Drimys winteri*, that was the source of the bark. Today a prized ornamental in milder UK gardens, Winter's bark is one of a small group of garden plants that we still know by their original drug names.

Some 200 years after Winter's voyage, gentleman botanist Joseph Banks arrived at the Straits of Magellan on Captain Cook's first circumnavigation (1768–71). In a neat full circle Banks noted in the margins of his on-board copy of Clusius' *Aliquot Notae* that he had collected a stock of Winter's bark with his assistant Daniel Solander, so aiding Cook in his campaign against scurvy.

Since the identification of the tree, Banks asserted that all the navigators that passed the Straits of Magellan had sought out the plentiful trees that could



The bark was sold in two grades, from Graves' *Hortus Medicus*, 1834.

Drimys winteri has jasmine-scented blooms that appear in early summer.

reach 15m in height. The leaves and powdered bark were used as spices on 'meat and muskles', and reserved as a medicine. The availability of this bark and edible herbs in itself made the Straits the preferred route to rounding Cape Horn. The bark's concentration of the then-unknown vitamin C was of course invaluable against scurvy, but its aromatic and astringent properties made it a useful general tonic, especially for the stomach.

By this time Winter's bark was so familiar in Britain that Banks did not feel the need to describe it, other than as the 'excellent aromatick bark so much valued by Physicians'. Hans Sloane (leading patron of such enduring institutions as the Chelsea Physic Garden) had obtained an authenticated sample from a 'curious and understanding' sea captain. In 1683, Sloane presented a paper to the Royal Society indicating that it was being 'confounded', or confused, by apothecaries with the Caribbean Canella alba; a situation that reflects the original's popularity, comparative rarity or even the cachet of its name.

In 1776 the eminent Quaker physician John Fothergill obtained genuine bark and published a detailed monograph, engaging the help of Daniel Solander to give the first full botanical description. Appropriately it is featured today at the Royal College of Physicians' well-stocked physic garden at their headquarters near Regent's Park, London.

Garden tree

In the first half of the 19th century Winter's bark gradually went out of fashion as a drug, but it is at this time that the tree first appeared in UK gardens. They were already present in some UK gardens when, in 1843, Lord Derby received specimens from Kew Gardens collected from the wild: "They will prove highly ornamental" wrote the director, W J Hooker. By the first half of the 20th century Maud Grieve (*A Modern Herbal*, 1931) wrote that the drug was then seldom imported into Britain. At the same time the garden designer William Robinson promoted the tree's use in his 'naturalistic' style. Gardens, mostly in the mild damp south-west of the UK and in Ireland, that contain mature specimens highlight their attractive and aromatic leaves, red-tinted stems and jasmine-scented blooms that appear in early summer. Recognising its qualities, the species gained the RHS's Award of Garden Merit in 2002.

Unfortunately in recent times, after the identification of new strains of that other resident of the mild south-west, Phytophthora, the tree has been recognised as a host leading to well-known specimen trees being removed at Trengwainton Garden, Cornwall.

Uses in South America

In its native South America Winter's bark has other associations. Within a strict definition of the species *Drimys winteri* varies from a stately tree in the cold south to, in the northerly temperate latitudes, the shrubby multi-stemmed habit that we are more familiar with in UK gardens. Growing plentifully, it overlaps the lands of the native Mapuche that extend from Chile into Argentina. Many indigenous peoples have the misfortune to be social and cultural outsiders in their own land; but many too remain holders of persistent and dynamic traditions. This is certainly true of the Mapuche and their shaman class known as machi, who also provide a popular alternative medicine to Chile's wider population.

There is an intriguing photograph of a formal meeting of Chilean government members with Mapuche representatives that took place in 1999. The ministers are holding branches of Winter's bark (foye). In doing so they are adopting a Mapuche symbolic gesture of peace that was developed in colonial times. This only hints at the pervasiveness of Winter's bark in Mapuche culture. It is an emblem of their traditional medicine; the aromatic leaves and bark have use in treating wounds, colds, rheumatism, stomach infections and ringworm. (Modern investigators maintain that the bark's extracts have greater antiseptic and antibacterial properties than tea tree oil.) Spiritually it is a sacred tree of life with many ritualistic uses, some of which distinguish between the various native varieties. The distinctive Mapuche stepped altars, *rewe*, are traditionally carved from its wood; in ritual a machi climbs it as a means of transportation towards the heavenly cosmos.

But what of our eponymous captain? He has disappeared from our story as he has from the historical record. Not helped by Clusius' initial error, it is unfortunate that the more personal information you read in books the more likely it is incorrect. Like his bark, his identity has been 'confounded' with that of others, in this case better known contemporaries of the same, or similar, names. As with many non-Navy seamen of his times there are no or few existing records. Nevertheless, as a contemporary of Fothergill quipped, having a plant named after you is a 'species of immortality'.

References

Carolus Clusius, *Aliquot notae in Garciae Aromatum Historiam...*, Plantin, Antwerp, 1582.

Edward Cliffe, *Mariner, The voyage of M. John Winter into the South Sea.* Hakluyt III.

Ana Mariella Bacigalupo, *Shamans of the Foye Tree.* University of Texas Press, 2007.

Some gardens with featured specimens of *Drimys winteri*

Trebah Garden, Falmouth, Cornwall
Wakehurst Place, Haywards Heath, Sussex.
Picton Castle and Gardens, Haverfordwest, Pembrokeshire.
Mount Usher Gardens, Wicklow (a Robinson-inspired garden).
Fota Arboretum, Fota House, Cork.

Gareth Evans would like to thank the staff of the Library of the National Maritime Museum, Greenwich.

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