For the want of rhub

Gareth Evans looks at a familiar dessert ingredient and puts it into historicial perspective.

Think of the colour of rhubarb. Most probably the pink of forced spring rhubarb stems comes to mind. However 150 years ago 'rhubarby' was a mustard-like yellow, the colour of the root of medicinal rhubarb (*Rheum palmatum, R. offinicale et al*).

Its long-established reputation as an unsurpassed laxative – both purging and astringent – had helped create a sort of mania in the West. The dried rhubarb root first appeared in the medieval period at the Levantine end of the long trade routes from the East. A species of rhubarb native to the Black Sea area (*R. rhaponticum*) was known to the Ancient Greeks. Confusingly the new medicinal root was introduced to Europe as Turkey rhubarb, an epithet that stuck for centuries.

The renowned French botanist Joseph Pitton de Tournefort gave a snapshot of this ancient spice route, which remained commercially significant to the West as late as the 1720s. While botanising in the Levant (1700-1702) he described the superiority of the drug-trading families who would not degrade their ancestors' honour by carrying other goods. They knew the best money for rhubarb lay in the West. Unsurprisingly the bales of rhubarb root from the East remained intact in transit. "They would let a sick man die for the want of rhubarb", Tournefort remarked ruefully in Armenia.

Rhubarb in Britain

The major 18th-century marketplace for rhubarb was London where exotic 'Turkish' street sellers were a sideshow of this immense trade. Turbaned and moustached, in pantaloons and slippers, by 1804 their presence was sufficiently established to be included in many early 19th-century illustrated collections of London Cries, along with the familiar London gingerbread men, lavender sellers and chair menders. All carried their shoulder-hung tray in front of them to hold hand scales and lumps of prepared root.

Not much is known of these colourful characters. However journalist Henry Mayhew (see *Herbs*, 40.2) interviewed a veteran 71-year-old 'Turk' in the mid-19th century. More than 40 years previously the seller had left the Moroccan Jewish community in Magadore (present-day Essaouira) to ultimately become a 'Turk' in Britain, as had many of his elders before him.

Like others variously identified as Irish and even Armenian, they sold both rhubarb and spices at assorted London stands, travelling occasionally around the whole country. "I think people like to buy Turkey rhubarb of de men in de turbans", was Mayhew's representation of the seller's wry observation. 'Turks' kept company with the Royal Pavilion at Brighton, the Pagoda at Kew and, just as loosely Oriental and à la mode, the first Aladdin pantomime to be performed in London in 1788.

The Turkey moniker remained in common usage well beyond the 18th century discovery that the true medicinal rhubarb was native to the inaccessible Asian plateau from Tibet to south-east China. By now the best quality Turkey rhubarb root came to Europe via the tightly controlled Russian caravan trade that had largely superseded the ancient overland spice roads. From 1689 to 1755 (and afterward under licence) the Imperial caravans from Central Asia had operated under the Russian government's monopoly on rhubarb. The prepared root did not store too well and could be of variable quality even before it left China but stringent sorting at the border maintained the high quality, and price, of Russian rhubarb.

Maintaining the custom of naming the drug after its commercial origins, the street seller also offered 'East Indy'; a cheaper, unsorted version of the root shipped here with crates of tea from China. In the last decades of the 18th century a peak of

Foliage of *Rheum palmatum*.

70,000 pounds (31,000 kg) were sold annually in London by the British East India Company. British pressure to import a truly addictive substance into China, in the attempt to balance this trade, was to conflagrate into the bloody Opium Wars.

In different ways both the Russian and East Indian systems manipulated the market to create a constant 'want' for Chinese rhubarb. As late as 1839 the Chinese Emperor's officials envisaged a biting retaliation on Britain over the Opium Wars by withholding supplies of tea and rhubarb, without which they believed the English would expire. Tea with bread was, in fact, the staple diet of many London poor.

Mayhew's seller's supplementary trade was in spices: nutmeg, cinnamon and ginger. The common offence of adulteration was clearly anathema to him; as he simply stated "we all of us know the good spice from the bad". Mayhew points out that the seller bought his Turkey rhubarb from the London warehouses, while it was known that some less scrupulous 'Turks' were happy to pass off root from a more recent source, home-grown rhubarb.

British rhubarb

There can have been few drugs so widely popular whose exact identity and origins were pursued for so long a period. The trade routes ended in ambiguity and obfuscation: the Bukharans, with whom the Russians traded, were middlemen themselves and protected their sources; the East Indiaman ships could only access China at the trade ports of Canton (later Shanghai), or off-mainland East India Company ports. Unknown at the time, the regions from the Black Sea eastwards

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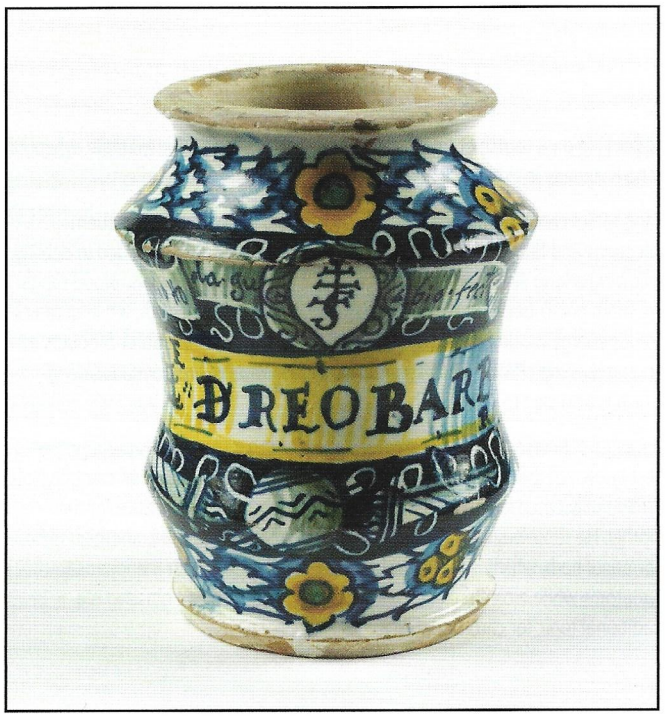

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An *albarello* (drug jar) made by the workshop of Mariotto di Gubbio (1584) labelled *PILLE D'REOBARDO* or 'rhubarb pills'.

held approximately 50 species of *Rheum* to trip up the medicinal plant-hunter. The highest expectations were given to the collected seeds (*R. rhaponticum, R. compactum, R. undulatum, R. emodi* etc) but the roots produced were eventually judged sub-standard.

When in the course of time the true rhubarb was introduced into the country, the disappointments of the previous false introductions were equalled by concerted attempts to cultivate British-grown medicinal rhubarb. Although some good results were reported, the complex history can perhaps be summarised as an exquisitely slow failure as fields of rhubarb gradually degraded, readily forming hybrids of unreliable medicinal value. With hindsight, vegetative propagation would have kept the precious species true.

Despairing of the usual preparation of pills, tinctures and syrups, the London Hospital had to make an unprecedented medicinal pudding out of one batch of English-grown rhubarb root before it would act, in what must have been a bitter and nauseous experience for the patients. With many British fields cultivated speculatively with this unpredictable crop it was not surprising that other commercial opportunities were sought. Making a simple pie from the chopped-up leaf stalks (after discarding the toxic leaves) had been recorded for some time.

However it took the persistence of growers at markets combined with cheap sugar from West Indian plantations to firmly establish the popularity of rhubarb pie. Dubbed by some 'physic pie', it and its many other confections, are still our everyday legacy of the medicinal rhubarb mania. Heavily crossed, the culinary cultivars are now covered by the catch-all species identifier *Rheum* x *hybridum*, the root of which is not used for medicinal purposes.

Da Huang

The difficult geography of medicinal rhubarb's native habitat gave, and still gives, problems in definitively identifying species and hybrids. The high-flying plant-hunter E H 'Chinese' Wilson published an article in 1906 on the Chinese rhubarb which he had found at its most abundant in a very specific habitat, at around 12,000 feet (3700 km).

"The highest altitude of any tall-growing herb in these regions, it is a striking plant, with its large handsome dark-green leaves and tall loose inflorescence of white flowers, 7- 8ft (2.1 – 2.4m) high. The fruits are salmon-red, and even more conspicuous than the flowers. The medicine-gatherers of these regions root up only the oldest specimens, which from experience they readily recognise." Known for his introduction to the West of more than 5,000 ornamental species, Wilson would not have been surprised by the use of *R. palmatum* (its cousins and garden cultivars) as a present-day architectural garden perennial.

If not for the upheavals of 20th-century China, medicinal rhubarb might have been as familiar to us as is senna. We may still meet medicinal rhubarb root in the West in the formulations of long-standing tonics.

As da huang it is part of the repertoire of traditional Chinese medicine that is now accessible to us. The limited historical Western application of what is a biochemically complex medicinal plant is in contrast to da huang's long utilisation in China. The first written record, part of the ancient Chinese classic text *Materia Medica*, 2,000 years later the 20th century *Barefoot Doctor's Manual*, lists its varied use for boils and in certain forms of dysentery, reflecting the antibacterial constituents of the drug.

Listed in numerous modern national pharmacopoeias, several species are included, reflecting taxonomic doubt, national use and those in present-day cultivation; pragmatically allowing for its nature 'interspecific hybrids' are included.

Medicinal rhubarb maintains its potent but enigmatic character, the latter partly explained by the great variation in levels of active constituent during growth, by season and during processing. Recent investigators have suggested an alternative to the previous widely accepted mechanism of its basic action. Trials have also been undertaken of its use in diabetes, stomach ulcers and renal failure; suggesting that rhubarb's tortuous story may not be over yet.

Selected References

Clifford M Froust, *Rhubarb, The Wondrous Drug*, Princeton 1992

Ernest H Wilson, Chinese Rhubarb, *Chemist and Druggist*, 1 September 1906, p371

Joseph Pitton de Tournefort, *Relation d'un voyage du Levant*, 1717

Report from the Select Committee on Adulteration of Food etc, House of Commons Papers, Volume 8, HMSO, 1856, p58

William Marshall Craig, *The Itinerant Traders of London in their Ordinary Costume*, London 1804

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