**Summary** The early history in Victoria of eight plants, milk thistle (*Silybum marianum* (L.) J.Gaertn.), sorrel (*Rumex acetosella* L.), horehound (*Marrubium vulgare* L.), jalap (*Ipomoea* spp.), white clover (*Trifolium repens* L.), mallow (*Malva sylvestris* L.), shepherd’s purse (*Capsella bursa-pastoris* Moench.) and saffron (*Carthamus* spp.) is considered. The extent to which medicinal use may have been involved in their introduction to Victoria, and thus in their becoming weeds as garden escapes is investigated.

**Keywords** Early weed introductions, medicinal use.

**INTRODUCTION**

It is generally accepted that plants introduced and cultivated by the early European settlers of Victoria included plants used for herbal remedies. Some of these medicinal plants became weeds. This paper attempts to substantiate whether the historical use of weeds for herbal remedies provides a partial explanation for their presence in Victoria.

Within 20 years of the establishment of settlements at Portland and Port Phillip, many exotic plants had become established. They included plants that were well-known weeds in Britain, and had become weeds in Victoria. Although some introductions seem to have been accidental, others were deliberate. Weeds named in reports from 1850–60 include plants that are known to have been in medicinal use at the time. This paper attempts to substantiate whether the historical use of weeds for herbal remedies provides a partial explanation for their presence in Victoria.

**RESULTS AND DISCUSSION**

**Milk thistle** The first weed to arouse serious public concern in Victoria was the milk thistle. Superintendant La Trobe published a Notice in the ‘Port Phillip Government Gazette’ of November 6, 1850, drawing attention to ‘the urgent necessity of timely measures being taken to check the growth and spread of the large milk thistle’ (Parsons and Cuthbertson 2001).

Despite this and other activity, the milk thistle was still widespread in 1860, and was to remain a serious weed for many years. Hooker (1860) listed it, under the name *Carduus marianus* L. among the 139 naturalised plants of the Australian Colonies ‘chiefly compiled from the Melbourne collections and notes of F. Adamson, Esq’ in the introductory essay to ‘Flora Tasmaniae’, noting that it had ‘spread amazingly along the great road up-country, and at Melbourne, preferring the richest soils’. The plant remains a major weed (Parsons and Cuthbertson 2001).
Silybum marianum has a long history of medicinal use. Culpeper (1850) considered it a good remedy against jaundice; and it is still in use today as a liver tonic (Leyel 1998). The plant was cultivated in England and had escaped to hedgebanks and waste ground (Bentham and Hooker 1904, Leyel 1998). It seems likely to have been introduced to Victoria for medicinal use.

Sorrel By 1853, sorrel was a ‘most troublesome weed’ in Victoria (Kelly 1977). It is still a significant agricultural weed (Auld and Medd 1992). Sorrel, which was offered for sale in Hobart in 1836 (Bunce 1994), had been an early introduction. According to ‘The British flora medica’ its main use was as an anti-scorbutic in the cure of scurvy (Barton and Castle 1877).

Horehound A similar account may be given of horehound, which was also for sale in Hobart in 1836 (Bunce 1994).

Mueller’s ‘First General Report’ as Government Botanist in 1853 had annexed to it an ‘Index to the plants of Victoria’ which included 52 starred items which were, he explained, ‘not only naturalised beyond the possibility of extirpation, but may yet overpower the more tender indigenous plants’ (Mueller 1853). The list included horehound, as *M. vulgare*. By 1856, Hannaford (1856) noted that it was common on the banks of the Yarra River and at Port Fairy in Victoria. Although Mueller (1885) later wrote that ‘Its naturalisation can nowhere be unwelcome, as it does not unduly spread, as it has important medicinal properties…’, by 1909 it had been proclaimed for the municipalities of Maldon and Warrnambool (Ewart and Tovey 1909) and for the whole state in 1932 (Parsons 1981). It is still a serious weed (Parsons and Cuthbertson 2001).

Horehound has long been used medicinally. Culpeper (1850) wrote of many medicinal uses, including as an expectorant and this usage has continued to the present day (Leyel 1998).

Summary There is a reasonably strong case to be made for the proposition that these three plants, milk thistle, sorrel and horehound, became naturalised in Victoria because, having been cultivated for medicinal purposes, they escaped and established widely. However, records of actual use as medicine by colonists have not been located.

Medicinal herbs used by colonists References to medicinal herbs in colonists’ journals are few. ‘The Henty Journals’, for example, contain many references to members of the tiny settlement at Portland being ill, but only two, for 29 January and 9 September 1836 refer to the medicines used to treat illness, calomel and jallup (Peel 1996). As the Hentys had come to Portland from Van Diemen’s Land, their ‘jallup’ may well have been an *Ipomoea* plant from the *Convolvulaceae* family. ‘Ipomea’ (sic) was offered for sale in Hobart in 1836 (Bunce 1994).

Jalap was one of the plants taken on by the First Fleet at Rio de Janeiro in August 1787 (Collins 1971). It is not certain, however, what plant was referred to by the name ‘jallup’ or ‘jalap’. Most authorities today indicate *Ipomoea purga* Wend. as jalap. *Ipomoea jalapa* and *Convolvulus jalapa* are synonyms for *I. purga* and all with the common name of jalap (Page and Olds 1997). The purgative properties of *Ipomoea purga* are also attributed to other species of *Convolvulaceae* (Whittet 1962).

Although jalap was not listed by name by Governor King in his 1803 ‘List of plants in the Colony of New South Wales that are not indigenous’ (HRA Series 1 Vol. 4), three varieties of *Convolvulus* (sic), ‘Major’, ‘Minor’ and ‘Scarlet’ were listed, among the flowers. The family *Convolvulaceae* includes a number of garden species of *Convolvulus*, as well as field bindweed (*C. arvensis* L.), and the *Ipomoea* species. Bentham and Hooker (1904), having referred to the common blue *Convolvulus minor* of our gardens’, said that ‘the so-called *Convolvulus major* is the *Ipomoea* or *Pharbitis purpurea*, a widely spread species over the hotter parts of the world, probably of American origin’. King described the ‘Scarlet’ *Convolvulus* as ‘Scarce’. The plant referred to could well have been red morning glory (*I. coccinea* L.).

The plant listed in Bunce (1836) catalogue as ‘Ipomea’ could be jalap. It could also be; however, the closely related common or blue morning glory (*Ipomoea indica* Burm. syn *I. congesta* R.Br.), which has been widely grown in gardens for its attractive flowers and is now often listed as an environmental weed because of its smothering habit. *I. indica* is also said to be used for medicinal purposes (Blood 2001).

Colonial use of *Ipomoea* species as a purgative may have contributed to their widespread cultivation and distribution in Australia.

Trefoil, mallow and shepherd’s purse William Howitt (1972) noted on his journey to Yackandanda in 1853, via the Goulburn and Broken rivers, ‘extensive patches of trefoil, mallow, and shepherds’ purse’ amid the rank vegetation ‘near any station or shepherd’s hut’, ‘from the nightly camping of the sheep’; and referred to the story that Lady Franklin on her journey across the colony had ‘sown trefoil at every station where they stopped’, and ‘it now appeared universal across this plain’.
Lady Franklin, the wife of then Governor of Van Diemens Land, travelled overland from the new settlement at Port Phillip to Sydney in 1839 (Rawnsley 1923). In her letter to Sir John Franklin dated 20th April 1839, written from an encampment on the Murray (near what is now Albury), Lady Franklin said that she had brought a packet of Clover seed on her journey ‘for the express purpose of … disseminating pasture along the travellers track.’ She sowed some seed in the trench dug round their tent to carry off the rain, expecting that it would ‘in all probability spread itself from this point all along the banks of the Murray.’ She had forgotten to use the packet before then, but gave some of the seed to a mounted police corporal, who was returning to the Broken River; no doubt it was for him to help fulfil her purpose (Havard 1943).

Why did Lady Franklin plant and intend to spread trefoil in North-East Victoria? Although her letter refers to ‘disseminating pasture’ and not to medical use, *Trifolium* species, *T. repens* L., *T. dubium* Sibth. and *T. pratense* L. have all been used medicinally in British folk tradition (Allen and Hatfield 2004).

Mueller (1853) list included *T. repens* among three *Trifolium* species. Hannaford (1856) recorded all three as occurring ‘occasionally in pastures’. By 1860, Hooker (1860) noted that *Trifolium repens* had ‘spread most luxuriantly wherever there is moisture, often destroying all other vegetation’.

White clover is today ‘the most common pasture weed to be found in the high rainfall areas of south-eastern Australia’ (Stern 1986). It is regarded as an environmental weed (Blood 2001).

The other plants noted by Howitt (1972) were also used medicinally. Mallow species, (*Malva sylvestris* L., *M. parviflora* L. and *M. vulgaris* L.) have been used medicinally since ancient times (Culpeper 1850). It may be inferred from Howitt’s (1972) account that mallow was cultivated and deliberately spread in colonial Victoria. The motive could have been this medicinal use. Hannaford (1856), in recording the presence in 1856 of *M. vulgaris* in waste places at Melbourne and Warrnambool, also confirmed its medicinal use. Mallow was established in Victoria by 1853 (Mueller 1853). Mallow is today ‘a common and prolific cosmopolitan weed’ which continues to be used as a medicinal herb (Stern 1986).

Shepherd’s purse, the third plant mentioned in the passage from Howitt (1972), has long been in association with man. It has a long history of medicinal use, in particular to arrest bleeding (Culpeper 1850). The effectiveness of shepherd’s purse to stop bleeding is well attested. Grieve said that during the First World War an extract of the plant was used to arrest bleeding (Leyel 1998). Such medicinal use seems a possible explanation for the plant being found by Howitt (1972) to be so widespread. Today this cosmopolitan weed is ‘widespread throughout temperate Australia and occurs in all States’ (Auld and Medd 1992).

While dispersal by sheep is indicated, this evidence supports that another reason why trefoil, mallow and shepherds purse were found growing on these runs was their medicinal use.

**Saffron** Georgiana McCrae provides another example of the use of medicinal plants by colonists. In a letter dated July 19, 1846 describing the cottage on Arthur’s Seat and her life there, Georgiana wrote ‘Seldom ill ourselves; the worst sickness, scarletina, yielded to simples, and dishes of saffron tea’ (McCrae 1978).

‘Scarletina’ is now more commonly called scarlet fever. ‘Simples’ were ‘herbs used medicinally’, but it is not clear what herbs were used. The reference could be to saffron (*Crocus sativus* L.), but is more likely to have been to safflower or bastard saffron (*Carthamus tinctorius* L.). *Crocus sativus* was cultivated since biblical times, but as Grieve noted was expensive, and had largely been replaced with safflower (*Carthamus tinctorius* L.). ‘In domestic practice these flowers are used in children’s and infants’ complaints – measles, fevers … an infusion is made of ½ oz. of the flowers to a pint of boiling water taken warm to produce diaphoresis (i.e. sweating)’ (Leyel 1998). This seems to be what Georgiana McCrae was doing, and suggests that her ‘saffron tea’ may have been derived from *Carthamus tinctorius*, which was listed as growing in New South Wales in 1803 (HRA Series 1 Vol. 4), and was included by Hooker (1860) as one of the naturalised plants found in the vicinity of Melbourne. Ewart (1930) described *C. tinctorius* as ‘A garden escape, native to Europe, Asia, and Africa, widely spread in Victoria… Long cultivated’.

It is possible, however, that Georgiana’s ‘saffron tea’ was made not with *Carthamus tinctorius* (Safflower) but with the closely related *C. lanatus* L. (saffron thistle). Both thistles have yellow flowers, and have been confused one with the other (Parsons and Cuthbertson 2001). The similarity of the species, and confusion between them open up the possibility that the ‘saffron tea’ was made with an infusion of *C. lanatus*. It suggests also that gardeners may have cultivated *C. lanatus* when intending to grow *C. tinctorius* and thus assisted its spread through colonial Victoria.

*Carthamus lanatus* has been a serious weed in Victoria and other Australian states for many years (Whittet 1962, Parsons and Cuthbertson 2001). In 1909, Ewart and Tovey wrote that ‘The saffron thistle is widely spread over the whole State, and in many
districts is reported to be the worst of all the thistles’. In comparison, *C. tinctorius* (safflower), they wrote, ‘...is occasionally sent in as a weed evidently having escaped from gardens, but appears to be of trivial importance as a weed’ (Ewart and Tovey 1909). Today, *C. tinctorius* is regarded as being of minor importance, whereas *C. lanatus* is a major problem (Parsons and Cuthbertson 2001).

**CONCLUSIONS**

The evidence from settlers’ accounts and other contemporaneous sources as to the use of herbal remedies is, when fully considered, equivocal. Although there is evidence of plants being introduced to Australia for medicinal use, direct evidence of use is surprisingly hard to find. There remains, however, circumstantial evidence to support the view that many plants introduced and dispersed for medicinal use, escaped gardens and became weeds.

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