Letter From The Editor: Election News

Barry Meyers-Rice

The 1998 elections have concluded and the six successful candidates were (in alphabetical order) Madeleine Groves, Jay Lechtman, Joe Mazrimas, Carl Mazur, Barry Meyers-Rice, and Jan Schlauer. This sextet will be joined by the 1998 ICPS president Rick Walker to form the new Board of Governors. As I write this, the Board has just begun its business and in the coming weeks will develop plans for the ICPS's future.

One of the important tasks the ICPS must address is how the Society relates to its many Chapters. At present there are no official benefits or guidelines for its Chapters. To help us change this, we would like to hear from every ICPS chapter. Please send a letter to us, describing who you are, how many people are in your Chapter, and what geographic range you span.

A Carnivorous Plant on an Irish Postage Stamp: David Moore and *Sarracenia* Hybrids at Glasnevin Botanic Gardens

E. Charles Nelson
Tippitiwitchet Cottage, Hall Road
Outwell PE14 8PE
Wisbech, Cambridgeshire
United Kingdom
(formerly at National Botanic Gardens, Glasnevin, Dublin.)

Keywords: history: David Moore, Ireland, *Sarracenia*.

In September 1995, to commemorate the bicentenary of the foundation of the National Botanic Gardens, Glasnevin, Dublin, the Irish Post office issued a set of stamps including one depicting a carnivorous plant. The set comprises *Crinum moorei* (32p), a lily from Natal named after Dr. David Moore, *Solanum crispum* 'Glasnevin' (44p), a cultivar of the potato vine, and *Sarracenia* × *moorei* (38p, see Figure 1). The issue included a souvenir booklet with the stamps set in a strip and as a block of four (two 32p, and one each 38p and 44p). The stamps were designed by Frances Poskitt and were released on 9 October.

Why was *Sarracenia* × *moorei* chosen for this issue? It was the first artificial hybrid pitcher plant and was raised in the early 1870s at Glasnevin, then known as the Royal Dublin Society's Botanic Gardens, Glasnevin. Situated a few kilometres north of the centre of Dublin, the Gardens still flourish and today are known as the National Botanic Gardens, Glasnevin; for many years—from about 1870 until 1922 when the Irish Free State was established—they bore the name Royal Botanic Gardens, Glasnevin (see note 1).

Almost as multifarious as the names for the gardens in Glasnevin are the names applied to the hybrid resulting from the deliberate cross-pollination of *Sarracenia flava* and *S. leucophylla*. All plants arising from that cross, whether naturally occurring or artificially created, have only one correct name: *Sarracenia* × *moorei* [Anonymous ex] Masters. *S.* × *mooreana* Veitch is a superfluous synonym which should be abandoned as I have pointed out elsewhere (see note 2); its continued use is contrary to the International Code of Botanical Nomenclature.



Figure 1: The *Sarracenia* × *moorei* stamp.

The hybrid was named after Dr. David Moore (see note 3), Director of Glasnevin Botanic Gardens from 1838 to 1879. David was a Scot, a native of Dundee. His father and grandfather were gardeners, and David (and his younger brother Charles) evidently absorbed their love of plants. It must also be said that Scotland's unique system of education in the eighteenth and nineteenth centuries was conducive to the production of gardener-botanists of outstanding calibre with a depth of knowledge equalled by few modern horticulturists or botanists (see note 4). While still in his teens, David moved from Scotland to Dublin as an assistant gardener in the city's other botanic garden, that attached to the University of Dublin (Trinity College). At the College Botanic Garden situated in Ballsbridge, one of Dublin's southern suburbs, David's botanical education and horticultural training continued under the guidance of James Townsend Mackay—he was also Scottish and imbued with that distinctive Scottish passion for both wild and cultivated plants.

After four years in the College Botanic Gardens growing orchids and Cape heaths among many other things, David Moore became a field botanist working for the Ordnance Survey, collecting indigenous species in the north of Ireland. His contribution to Irish botany was to continue for many years. But in 1838 he returned to gardening as curator of the Royal Dublin Society's Botanic Gardens at Glasnevin.

David Moore took over a garden of about 30 acres which was in its fifth decade. It had been formed as a patriotic gesture in March 1795, had risen to be a fine garden and then declined into the doldrums. Ninian Niven—yet another Scot—was appointed to resuscitate it in 1834. He succeeded wonderfully and was able to bequeath to David Moore a vigorous and expanding collection. By the late 1830s plants were flooding in from collectors in the Himalaya and the Pampas of the Argentine, from Australia and the Cape of Good Hope. Glasnevin was already leading many of its sister gardens in the challenging work of plant introduction.

David Moore built on Niven's programme of replanting and acquisition. He began to form the orchid collection that was to sparkle brilliantly by the end of the century, and it was at Glasnevin, under David Moore's direction, that for the first time an orchid was raised from seed and brought into flower. He had an equal interest in trees and shrubs, raising and flowering such wonders as *Cardiocrinum giganteum*—a sumptuous lily from the Himalaya with a flower spike that can rise four metres in height.

Insectivorous plants were among David Moore's favourites and he evidently assembled a good collection of species. *Sarracenia* seeds were successfully germinated at Glasnevin, although from an exchange of letters printed in *The Gardeners' Chronicle* late in 1866, this evidently was not a general occurrence even in botanic gardens. Responding to a comment that seedlings 'do not appear to be common,'

Moore retorted:

> On two occasions seedlings of Sarracenias [*S. variolaris* = *S. minor*] have been raised at Glasnevin, first in the autumn of 1850 and again in the spring of 1851. I have however freely to confess, that I was not then aware of any particular interest being attached to the matter, thinking the same thing had been frequently done at other plant establishments, and consequently no further notice was taken of it, than that appertaining to the mere botanical question of the plants being exogenous or endogenous. Mr. D. Orr who sowed the seed and managed the young plants until they were distributed pretty freely in exchange for other plants, states that he sowed the seeds on the surface of rotted Sphagnum, which was placed in a common flat or pan for pots to stand in, and slightly covered them with a very thin dusting of propagating sand, covering all with an ordinary bell glass, at the outer edge of which he occasionally poured water, so as to keep the Sphagnum, within the glass constantly saturated.

But he was not content just to grow species: Moore and his gardeners, especially the young German-born propagator William Keit (see note 5), realised that by artificially cross-pollinating *Sarracenia* species, hybrids might be produced. This they did, raising a batch of seedlings from *S. drummondii* (correctly *S. leucophylla*), and from *S. rubra*, both of which had been pollinated with *S. flava*. The exact date of this work is not known but one document suggests the *S. leucophylla* × *flava* hybrid was created in 1870 and the other in 1872. The first hybrid acquired the name *Sarracenia* × *moorei* as a compliment to Dr Moore, and the second was named *S.* × *popei* after William Pope, a foreman in the Glasnevin Botanic Gardens.

Dr. David Moore brought the Glasnevin hybrids, and foliage of that wonderful aquatic lace-leaf, *Aponogeton madagascariensis* (formerly *Ouvirandra fenestralis*), to the International Botanical and Horticultural Congress, Firenze (Italy), in June 1874. For his achievements in raising the hybrids and growing the lace-leaf Moore was awarded two gold medals, both of which survive; one is in the National Museum of Ireland, Dublin (see note 1). Which medal was for which achievement is not known—they are identical.

By the late 1870s Glasnevin was a thriving garden, a veritable Mecca for plant enthusiasts—many Irish gardens benefited from the largesse of Glasnevin in distributing new and rare plants, and gardens, both public and private, in other countries were not omitted when new glories could be spared.

David Moore married three times. His first wife died of typhoid in 1836 leaving two young children who, it seems, went to foster-parents. David's second wife died in 1847, again leaving two children who were cared for by others. Margaret, his third wife survived him, and they had five children, the eldest boy being Frederick who also became a brilliant horticulturist. When David Moore died in June 1879, Frederick was quickly appointed to succeed him as curator in Glasnevin. Following his father's successful crosses, Frederick Moore continued to raise *Sarracenia* hybrids, including back-crosses (see Table 1) during the 1880s and 1890s.

David Moore—born on 23 April 1808 at Dundee, Scotland (see note 6), died on 9 June 1879 in Dublin—is commemorated in the names of several other plants, for example, *Equisetum* × *moorei*, *Salix* × *moorei*, *Apium* × *moorei* (three natural hybrids found in Ireland), *Crinum moorei* (the lily from Natal, depicted in the stamp series) and *Passiflora mooreana* (a passion flower from Argentina). *Moorea* was proposed as the generic name for the Argentinian pampas grass but was never taken up and *Cortaderia* is now conserved against it.

Table 1: Hybrids created in Glasnevin 1870-1885: this is an exact transcription of a list made c. 1900 by Frederick Moore (nomenclature has not been updated, nor has the orthography of the names been altered, although neither accords with present-day rules of nomenclature).

1870 *S. Moorei* = (*S. Drummondi* × *S. flava* ♀)
1872 *S. Popei* = (*S. rubra* × *S. flava* ♀)
1878 *S. Drummondi* × *S. flava* ♀ 3 pots
1879 *S. flava* × *S. purpurea* ♀
1880 *S. Popei* with sps ? [i.e. sp. ined]
S. Popei × *S. purpurea* ♀
S. Moorei × *S. purpurea* ♀
S. Drummondi alba × *S. Moorei*
S. flava × *S. Drummondi* ♀
S. flava × *S. purpurea* ♀
S. Drummondi × *S. purpurea*

1881 *S. Drummondi* × *S. Chelsoni* [second parent is male]
S. Drummondi alba × *S. Chelsoni*
S. flava × *S. Drummondi*
S. rubra × *S. Chelsoni*
S. Chelsoni × *S. Drummondi*
S. Moorei × *S. purpurea*
S. flava × *S. purpurea*
S. popei × *S. Chelsoni*
S. Drummondi × *S. Chelsoni*
S. flava × male parent uncertain (self ?)
S. purpurea × *S. Chelsoni*
S. rubra × *S. purpurea*
S. flava × *S. Chelsoni*

1882 *S. Popei* × *S. purpurea* [ditto]
S. flava × *S. purpurea*
S. Moorei × *S. purpurea*

1883 *S. flava* × *S. Stevensii* [ditto]
S. Popei with flowers and pitchers closely approaching *S. flava* × *S. Stevensii*
S. Stevensii × *S. flava*
S. Moorei × *S. Stevensii*
S. Moorei × *S. purpurea* [ditto]
S. Drummondi × *S. Chelsoni*
S. Popei × *S. Chelsoni*
S. Popei × *S. Chelsoni*
S. Popei × *S. purpurea*
S. rubra × *S. purpurea*
S. flava × *S. purpurea*
S. purpurea × *S. flava*
S. purpurea × *S. Moorei*
S. Chelsoni × *S. Popei*

1884 *S. Chelsoni* × *S. Patersoni*
S. Williamsii × *S. Moorei*
S. Stevensii × *S. Moorei*
S. flava maxima × *S. Moorei*
S. purpurea × *S. flava maxima*
S. Chelsoni × *S. flava maxima*
S. Moorei × *S. Chelsoni*
S. Popei × *S. Williamsii*
S. flava maxima × *S. purpurea*
S. Stevensii × *S. purpurea*
S. rubra acuminata × *S. purpurea*

1885 *S. Chelsoni* × *S. rubra acuminata*
S. purpurea × [*S. rubra acuminata*]
S. Moorei × *S. Patersoni*
S. rubra acuminata × *S. Patersoni*
S. Patersoni × *S. Chelsoni*
S. rubra acuminata × *S. Madissoniana*
S. Drummondi × [*S. Madissoniana*]

Notes

1. For a comprehensive history, see Nelson, E.C. and McCracken, E.M. 1987, The Brightest Jewel: a History of the National Botanic Gardens, Glasnevin, Dublin, Boethius Press, Kilkenny.
2. This nomenclatural quagmire is discussed fully in Nelson, E.C. 1986, *Sarracenia* Hybrids Raised at Glasnevin Botanic Gardens, Ireland: Nomenclature and Typification, Taxon 35: 574-578.
3. Not after Thomas Moore of Chelsea Physic Garden, as was stated by Mazrimas, J.A. and Song Jr., L.C. 1984, *Sarracenia* Hybrids—The F-1 Generation. Part I. *S. flava* Hybrids, Carniv. Pl. Newslett., 13, 41-44.
4. Nelson, E.C. 1987, The Scottish Connexion in Irish Botany and Horticulture, Scottish Naturalist, 1987: 3-31.
5. McCracken, E.M. and Nelson, E.C. 1989, Julius Wilhelm Keit, A German Horticulturist At the Botanic Gardens, Glasnevin, Moorea, 8, 34-40.
6. Various sources state that his surname was originally Muir: his baptismal gives it as Moir which is another variant of Moore. For date of birth see Nelson, E.C. 1983, David Moore's Date of Birth—A Correction, Glasra, 7, 24.
7. The modern names for the species and hybrids mentioned in this article and

accompanying table are as follows: *S. Chelsoni* = *S.* × *chelsonii* (i.e. *S. rubra* × *purpurea*), *S. Drummondii* = *S. leucophylla*, *S. Maddisoniana* = *S.* × *formosa* (i.e. *S. psittacina* × *minor*), *S. Moorei* = *S.* × *moorei* (i.e. *S. leucophylla* × *flava*), *S. Popei* = *S.* × *popei* (i.e. *S. rubra* × *flava*), *S. rubra acuminata* = *S. rubra* subsp. *rubra*, *S. Stevensii* = *S.* × *catesbaei* (i.e. *S. flava* × *purpurea*), *S. Williamsii* = *S.* × *catesbaei* (i.e. *S. flava* × *purpurea*). The references to "*S. patersoni*" in the list written *ca.* 1900 present interesting problems since apparently such crosses did not exist in or before 1884. (Note #7 supplied by the editors.)

Cultivation of *Triphyophyllum peltatum* (Dioncophyllaceae), the Part-Time Carnivorous Plant

Gerhard Bringmann,
Jan Schlauer,
Kristina Wolf,
Heiko Rischer,
Institut für Organische
Chemie der Universität
Am Hubland
97074 Würzburg
Germany

Uwe Buschbom,
Andreas Kreiner,
Friedrich Thiele,
Martin Duschek,
Botanischer Garten
der Universität
Julius-von-Sachs-Platz 2
97082 Würzburg
Germany

Laurent Aké Assi
Centre National de
Floristique
B. P. 172
Abidjan 08
Ivory Coast

Received: 5 August, 1998

Keywords: cultivation: tissue culture, *Triphyophyllum peltatum* — observations: *Triphyophyllum peltatum.*

Summary

Cultivation of *Triphyophyllum peltatum*, a rarely grown part-time carnivorous plant, is presented.

Introduction

Comparatively little is published on *Triphyophyllum peltatum* (Hutch. & Dalz.) Airy Shaw, a liana widely neglected among carnivorous plant students and growers. Almost nothing has been published on the cultivation of this plant. In the course of our investigations of the secondary metabolites of the plant order Nepenthales, especially of the naphthylisoquinoline alkaloids (Bringmann & Pokorny 1995[1]) that are so far known only from two small palaeotropical families, *viz.* Ancistrocladaceae and Dioncophyllaceae, we became interested in the physiology and biochemistry of these plants. Live material is indispensable for the study of the biosynthesis of the plant natural products. Therefore, efforts were made to obtain living specimens of several species of *Ancistrocladus* (the only genus of Ancistrocladaceae) and of *Triphyophyllum peltatum* (one of three monotypic genera of Dioncophyllaceae, and the only carnivorous plant to contain naphthylisoquinolines, Bringmann *et al.* 1998a). We succeeded in finding seeds and small plants of a number of these species, including *T. peltatum*. Our experience with germination and cultivation, including *in vitro* methods, are communicated in this paper.

[1]Part 124 in the series "Acetogenic Isoquinoline Alkaloids". For part 123, see Bringmann *et al.* 1998c.