



# Plant Varieties Journal

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## **CONTENTS**

### Registrar's Remarks

### Part 1 — Items of General Interest

PVR in other countries
Cooperative testing arrangements with Netherlands
International Exhibition of Plant Biotechnology — EXPOFLORE
Workshops for qualified persons
Cumulative Index to Plant Varieties Journals
Visit to PVR Office by consultant from Japan
Fees — where the money goes
UPOV — proposed revisions to Convention

#### Part 2 — Matters for Public Notice

PVR Granted PVR Refused

Applications Accepted

a) descriptions finalised

b) descriptions to be finalised

Applications Withdrawn Provisional Protection

Variations To Applications

Corrigenda

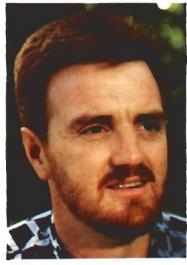
Appendix 1 — Section 14 of the PVR Act Appendix 2 — Section 23 of the PVR Act

Appendix 3 — Fees

Appendix 4 — Extract from the draft revised UPOV Convention Appendix 5 — Organisations offering to undertake PVR trials

Appendix 6 — Summary of PVR applications received to 9 November 1990

## **REGISTRAR'S REMARKS**



Ben Loudon Acting Registrar of Plant Variety Rights PLANT VARIETY RIGHTS OFFICE GPO BOX 858 CANBERRA ACT 2601

This year has been a long and eventful one for PVR office, with new staff members, new premises and, of course, many new plant varieties. At the time of writing, there have now been 286 applications lodged and nearly 30% of these are for varieties bred in Australia.

As the Australian public is becoming acquainted with and adapting to the concept of PVR, the PVR Office must also keep pace with the various changes and new concepts it encounters. These are undoubtedly interesting times for all Australian plant industries and there seems little room for complacency in any sector.

The PVR scheme is becoming firmly established in its role, providing a catalyst for plant breeding and introduction, a minor but vital function. The Office, with the help of PVR applicants, is striving to make PVR registration the simplest aspect of breeding and commercialising new plant varieties. The next few years will be a time for consolidation but there is a continual need for review and exploration of new and better ways of doing things as biotechnology and intellectual property develop.

From all of us at PVR Office, a MERRY CHRISTMAS AND HAPPY NEW YEAR.

### **CLOSING DATE FOR MARCH ISSUE: 24 JANUARY 1991**

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## PART 1 — ITEMS OF GENERAL INTEREST

#### PVR in other countries

Many other countries protect the rights of plant breeders by providing PVR on new plant varieties. Some, like Netherlands and Germany, have had PVR schemes for over 30 years. Most are members of the International Union for the Protection of New Varieties of Plants (UPOV). The 19 current member states are:

Australia, Belgium, Denmark, France, Germany, Hungary, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Poland, South Africa, Spain, Sweden, Switzerland, United Kingdom and United States of America.

Argentina, Czechoslovakia and now Canada also have PVR legislation in force and are interested in becoming UPOV members in the near future. Preliminary discussions with Argentine officials indicate that Australia and Argentina may offer plant breeders reciprocity prior to Argentina's UPOV membership.

As a UPOV obligation, there is a reciprocity in member states allowing nationals of other member states to hold rights in them. This means that Australian plant breeders are now entitled, as Australian nationals, to hold PVR rights to their varieties in the other UPOV states. UPOV members must also respect priority in the dates of filing of applications in other member states.

PVR in each country must be applied for separately. There is not yet any means to file in several countries from the one application. UPOV countries often exchange the technical data of applications, simplifying the examination process and avoiding unnecessary repetition of tests. Australia is beginning to make these exchanges of test reports.

Making an application in another country depends on that country listing the genera and species as eligible for PVR. This presents no difficulty in Australia, New Zealand, Hungary and the Netherlands which cover all genera and species or in USA and Germany which cover nearly all species. It is however, sometimes difficult for breeders of varieties in Australian native genera because some other member countries may not yet list them.

Applicants intending to apply in other countries are advised, in their best interest, to notify the Registrar of details of the plant species and number of varieties. The Office is then forewarned in case the overseas country PVR Office makes enquiries of a technical nature.

# Cooperative testing arrangements with Netherlands

Netherlands authorities have now made arrangements for new varieties of *Anigozanthos* applied for in their country to be tested in Australia.

Detailed arrangements for importation of reference varieties are being finalised for comparative trials to commence early next year at the Australian National Botanic Gardens in Canberra. PVR Office will make test reports to Netherlands based on our supervision and examination of the trials. This is the first, but by no means the last, request from a European UPOV member.

For a sign of progress in cooperation the other way, you may notice that the trial data published for the *Alstroemeria* varieties in this Journal is actually from the official testing conducted by CRZ in Netherlands. The trials with these varieties which are also underway in Victoria, Australia, should provide further confirmation that Netherlands *Alstroemeria* data satisfies our PVR Act section 23 requirements (see appendix 1 and also PVJ Vol 2 No.3).

# International Exhibition of Plant Biotechnology — EXPOFLORE

An International Exhibition of Plant Biotechnology & New Varieties of Plants — titled EXPOFLORE — will be held on 18-21 April at Palexpo, Geneva in Switzerland. This exhibition is for all those who are involved in plant biotechnology; including research, breeding, and multiplication. This is held in parallel with an International Symposium "Plant Biotechnology & its Contribution to Plant Development, Multiplication & Improvement" on 19/20 April at the same venue. Registration details can be obtained from:

#### **EXPOFLORE**

8, rue du 31-Decembre Tel: 22/736 5949 CH-1207 Geneve, Suisse Fax: 22/786 0096

## Workshops for qualified persons

These workshops were announced in Plant Varieties Journal Vol 3. No 1. in March. Since then, eight workshops have been conducted in different parts of Australia and more are planned shortly.

# Cumulative Index to Plant Varieties Journals

In response to suggestions, this has now been done. So this December issue (Vol. 3. No 4.) can be included to complete two volumes in the index, it will be published with the March 1991 Plant Varieties Journal.

# Visit to PVR Office by consultant from Japan

PVR Office was visited recently by Mr Takuo Konno, a Senior Technical Counsellor from the Japan Seed Trade Association. The purpose of his visit was to investigate the Australian PVR Scheme, particularly in its breeder testing and examination processes.

While in Australia, Mr Konno also met in Sydney with officials from the Australian Seed Industry Association and also from a plant breeding institute in Canberra. Mr Konno's trip included a visit to New Zealand for the same purpose.

#### Fees — where the money goes

PVR Office is working towards becoming fully cost recoverable after a particular period of operation. The objective is that the running costs of the office should eventually be fully covered by the income from fees charged. To keep fees low, operating costs have to be carefully restricted to the minimum. The total costs are difficult to extricate and measure precisely within the complexities of Government budgeting and support. Based on known costs, however, PVR Office has attained over 50% cost recovery from fees last financial year. With the current fees and expenses, cost recovery is projected to attain a higher level in 1990/91.

The PVR Office is accountable within the Department of Primary Industries & Energy and is audited by the normal processes in the Commonwealth Government. The following is an approximate breakdown of the PVR Office costs as they are budgeted by the Office for 1990/91. These costs do not include the corporate support in accommodation, office equipment and peripheral administration and also assume (incorrectly) that PVR Office only processes applications.

Salaries and related costs	50 — 55%
Journal printing and publication	12 — 16%
Travel in Australia	7 — 10%
UPOV Membership, servicing and fees including travel overseas	15 — 18%
PVR Advisory Committee expenses	2 5%
General Administration	2 — 5%

As comments on that year, the salaries proportion is higher and the general administration lower than in previous and probably future years. The journal and travel do not include the PVR Office salaries component. It is estimated that about 70% of total PVR Office costs are fixed, irrespective of the number of applications the office receives and processes.

The time and effort in examination is highly variable, depending on the type of plant. Also, for the same plant species, well prepared and complete applications take only a fraction of the time that piecemeal applications take to examine. In these early days, PVR Office staff invest considerable resources in explaining the concepts and functioning of PVR. Such efforts are required less as the industries become more familiar with it. Examination expenses have only been analysed in detail for 1989/90 and the first half of 1990/91. When the PVR Office's resources allocated to examination of

applications are compared with the examination fees charged, the following proportions are found:

Field examination	20%
Publication in PV Journal	52%
Paper examination and administration	28%

The above also takes into account the staff time, telephone calls, correspondence and research pertaining directly to applications. A substantial cost of examination at present is in publication of the Plant Varieties Journal. This is diminishing as less time is spent by PVR Office staff in preparing the Journal because applicant's qualified persons are becoming more adept in preparing descriptions. PVR Office is also exploring ways of streamlining the printing and publishing processes.

Put simply, fees are currently based on what the PVR Office does and what that costs, divided by the number of applications. In principle, the less that PVR Office does, the better. There are still considerable savings to be made, particularly so in publication costs and administration. These savings, of course, are as much in the hands of the applicants as the Office. As efficiency increases, the throughput of applications will rise more than the office expenses.

# UPOV — proposed revisions to Convention

Following several preparatory meetings this year, a draft new Act of the Convention is to be submitted to the Diplomatic Conference in March 1991. Comments on these revisions have been invited in previous issues and some have already been received. Further comment is welcome but no later than mid February 1991.

The revised Convention would oblige its member states to offer a PV Right somewhat stronger in scope than currently exists in Australia under the Plant Variety Rights Act 1987. Countries could remain members of the current Convention but Australia will probably in future years have a need to amend its Act and align with the new Convention — especially if the other UPOV countries do so.

As mentioned in previous PV Journals, the most significant changes for Australia would be in extending the right to cover import and export of propagative material of a protected variety and the right also potentially covering harvested plant material (see appendix 4 for relevant extract).

The extension of the right beyond plant material for propagation is only in particular circumstances where the breeders rights are not respected. For example, if a competitor exports a breeder's new variety overseas to a country without PVR, then grows it in that country, the competitor may import and sell the produce such as fruit or cut flowers without technically infringing rights covering propagating material.

## PART 2 — MATTERS FOR PUBLIC NOTICE

#### **PVR** Granted

Plant Variety Rights have been granted under Section 26 of the *Plant Variety Rights Act 1987*, and entry has been made in the Plant Varieties Register, for the following varieties:

1. 'Vulcain' (Application No. 89/047) Impatiens hawkeri hybrid

Grantee: Kientzler KG of Gensingen, West

Germany

Certificate No 68

Expiry Date: 17 July, 2009

This grant was omitted from Vol 3 No 3 of September 1990.

2. 'Amarillo' (Application No. 89/086)

Arachis sp.

Grantee: The Minister for Primary Industries for and on behalf of the crown in right of the state of Queensland, CSIRO Division of Tropical Crops and Pastures and the Minister for Agriculture and Rural Affairs in right of the state of New South Wales.

Certificate No. 73

Expiry Date: 6 October, 2009

3. 'Gold Rider' (Application No. 90/012)

XCupressocyparis leylandii

Grantee: Leo Koelewyn of Coolwyn Conifers Pty

Ltd of Monbulk Victoria Certificate No. 74

Expiry Date: 6 February, 2010

4. 'Meibarke' (Application No. 90/013)

Rosa hybrida

Grantee: SNC Meilland et Cie of Antibes, France

Certificate No. 75

Expiry Date: 7 February, 2010

5. 'Meigovin' (Application No. 90/014)

Rosa hybrida

Grantee: SNC Meilland et Cie of Antibes, France

Certificate No. 76

Expiry Date: 7 February, 2010

6. 'Schobitet' (Application No. 90/015)

Rosa hybrida

Grantee: Universal Plants S A of Le-Cannet-des-

Maures, France Certificate No. 77

Expiry Date: 8 February, 2010

7. 'Meiponal' (Application No. 90/016)

Rosa hybrida

Grantee: SNC Meilland et Cie of Antibes, France

Certificate No. 78

Expiry Date: 7 February, 2010

8. 'Meirutral' (Application No. 90/017)

Rosa hybrida

Grantee: SNC Meilland et Cie of Antibes, France

Certificate No. 79

Expiry Date: 7 February, 2010

9. 'Meitifran' (Application No. 90/018)

Rosa hybrida

Grantee: SNC Meilland et Cie of Antibes, France

Certificate No. 80

Expiry Date: 7 February, 2010

10. 'Meixerul' (Application No. 90/019)

Rosa hybrida

Grantee: SNC Meilland et Cie of Antibes,

France

Certificate No. 81

Expiry Date: 7 February, 2010

11. 'Holdfast' (Application No. 90/005)

Phalaris aquatica

Grantee: CSIRO Division of Plant Industry, of

Canberra, A.C.T. Certificate No. 82

Expiry Date: 24 January, 2010

12. 'Waradgery' (Application No. 90/006)

Simmondsia chinensis

**Grantee:** RL Dunstone of Curtin, A.C.T., and the Minister for Agriculture and Rural Affairs in

right of the state of New South Wales Certificate No. 83

Expiry Date: 30 January, 2010

13. 'Barindji' (Application No. 90/007)

Simmondsia chinensis

**Grantee:** RL Dunstone of Curtin, A.C.T., and the Minister for Agriculture and Rural Affairs in

right of the state of New South Wales

Certificate No. 84

Expiry Date: 30 January, 2010

14. 'Greenway' (Application No. 90/002)

Lactuca sativa

Grantee: Arthur Yates and Co. Pty Ltd., of

Revesby, New South Wales

Certificate No. 85

Expiry Date: 24 January, 2010

15. 'Summer Gold' (Application No. 90/020)

Coreopsis grandiflora

Grantee: Alana Nominees trading as Little Acre

Nursery of Langwarrin, Victoria

Certificate No. 86

Expiry Date: 6 February, 2010

16. 'Birthday Candles' (Application No. 89/128)

Banksia spinulosa spp spinulosa

Grantee: W M Molyneux, Austraflora Nursery,

of Monbulk, Victoria

Certificate No. 87 Expiry Date: 7 December, 2009

### **Applications**

Applications for PVR on the varieties described and listed below have been accepted under S18 of the Plant Variety Rights Act 1987

### a) Descriptions Finalised

GRAPE (Vitis vinifera)

Variety: 'Moss Sultana' Application No.

88/027

Accepted: 7 September 1988

Applicant: Daratech Pty Ltd, of Melbourne,

Victoria

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a mid season maturing grape with rudimentary seeds; short, elliptic green yellow fruit with large berry size and weight.

Varieties used for comparison

'H5 Sultana' being the closest known variety, and a commonly known variety.

Comparative Growing Trials

All characteristics described below are from comparative growing trials conducted at Mildura, Victoria, from 1979 to 1988. The plant material consisted of third generation material propagated from cuttings. The field trial consisted of 4 vines per plot planted in a complete randomised block design with 5 replications.

Origin

This variety arose as a mutation of 'H5 Sultana' and was originally identified by Mr J Moss. Mr H Hawson established a second generation at the Sunraysia Horticultural Centre near Mildura where it was included in value testing trials. 'Moss Sultana' was finally selected for its superior table grape qualities.

Morphology — see comparison tables.

'Moss Sultana' differs from the standard commercial variety 'H5 Sultana' by having larger berries. Berries of 'Moss Sultana' are both longer and wider, and of greater weight, particularly when cultured for table grape production, than 'H5 Sultana'. 'Moss Sultana' generally has fewer bunches per vine, fewer berries per bunch but greater pruning weights than 'H5 Sultana'.

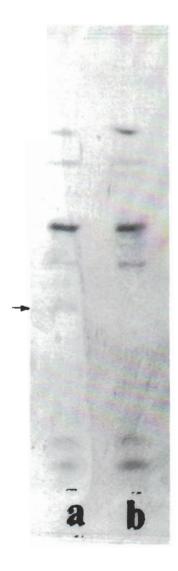
'Moss Sultana' has yellow-brown stems with no pubescence, and green ovoid medium sized buds. Leaves are circular, serrated and medium green. Flowers are small (1.5mm) and contain 5 stamens and 1 pistil. Time to flowering is intermediate. Fruit are short elliptic, mature in approximately 170 days

and have colourless firm flesh with only rudimentary seeds.

In addition to the morphological data from growing trials the applicant has submitted, as a distinguishing characteristic, prints of gel electrophoresis of enzymes extracted from young fully expanded leaves. The enzymes were extracted according to the modified method of S Arulsekar and D E Parfitt in *Hort. Sc.* 21:928-933, 1989. The banding was obtained using agarose iso-electric focusing as described in P E Burdett, *Forens Sc.* 26:405-409, 1981, and developed using the staining procedures of B J Richardson et al in *Allozyme Electrophoresis* p162, 1986.

The photograph shows that the same bands are present for 'Moss Sultana' as 'H5 Sultana' except for one indicated by the arrow.

Reference: Deer, T W W and J R Whiting (1989) 'Evaluation of sultana grapevine selections for table grape production'. *Aust.J.Exp.Agric.* 29:901-4



Peroxidase banding pattern of 'Moss Sultana' (left) and 'H5 Sultana'.

(Photograph supplied by Victorian State Chemistry Laboratory)

# **Table of Comparison of Sultana Grape** Varieties

(\* = variety used for comparison)

	'Moss Sultana'	*'H5 Sultana'
BERRY WEIGHT		
mean	6.1g	4.8g
range	5.4 - 7.2	4.0 — 5.9
standard deviation	0.5	0.3
significance		P<0.01
BERRY LENGTH		
mean	2B.4mm	25.4mm
range	26.7 - 30.5	23.4 - 27.3
standard deviation	1.0	0.8
significance		P<0.01
BERRY DIAMETER		
mean	18.9mm	17.5mm
range	18.0 - 20.4	16.6 — 19.0
standard deviation	0.6	0.4
significance		P<0.01
SUGAR CONTENT		
mean	19.1°Brix	21.3°Brix
range	18.4 — 19.7	19.9 — 22.3
standard deviation	0.7	0.7
significance		P<0.01
PRUNING WEIGHT		
mean	3.0kg/vine	2.2kg/vine
range	2.8 — 3.2	1.9 — 2.5
standard deviation	0.4	0.4
significance		P<0.01
BERRIES PER BUNCH		
mean	107	155
range	83 — 132	109 — 202
standard deviation	13	32
BUNCH WEIGHT		
mean	594g	652g
range	4B1 — 707	503 — 802
standard deviation	6B	153
BUNCHES PER VINE		
mean	25	25
range	16 - 34	17 - 32
standard deviation	4	3
FRESH YIELD (kg/vine)		
mean	15.4 kg	15.3 kg
range	11.6-18.5	14.1-16.2
	3.5	1.1

# ALSTROEMERIA (Alstroemeria hybrid)

**Comparative Growing Trials** 

All characteristics described for each variety below are from central growing tests conducted at Wageningen, Holland, over various years. These trials are the official testing for Plant Breeders Rights in Holland. They are conducted in accordance with UPOV guidelines TG/29/6. The states of expression of characteristics are recorded relative to the example varieties grown in the same trial. They are normally ranked 1-9, but for clarity they have been expressed in this journal as words, for example, very small, small, small to medium, etc. A minimum of 4 plants of each variety were planted in glasshouses in October. They were grown in spaced rows, 40 - 50 cm apart, in a peat compost substrate with added calcium carbonate to maintain a pH of 5.5-6.0. Plants were liquid fertilized according to soil analysis and kept well watered. The temperature was 16°C during the first 3 weeks of culture, 8-12°C thereafter, and from the middle of January rising to 15-18°C depending on light intensity. The light was natural. All observations were made on 10 different flower stems.

Australian growing trials are in progress.

Varieties used for comparison

Over 200 varieties are grown each year and include all previous and current applications for PVR in Holland, as well as the example varieties.

Variety: 'Stalan' Application No. 89/104 Accepted: 25 May 1990 Applicant: Van Staaveren BV, of Aalsmeer, Holland.

Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Stalan' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. 'Stalan' has been protected by Plant Variety Rights in Holland, Germany, France, England, Denmark, and New Zealand, and by Patent in the USA. Plant Variety Rights have been applied for in Italy and Israel. 'Stalan' was first sold overseas in Holland in September 1986.

Morphology — see comparison tables.

'Stalan' is a medium height plant with a medium to thick stem showing medium to strong anthocyanin coloration. 'Stalan' leaves are long and verγ broad, dark green, with weak glossiness on the upper side. 'Stalan' inflorescences have a medium number of medium length umbel branches, and medium length pedicels. The main flower colour of 'Stalan' is redpurple. 'Stalan' flowers are medium sized, with a medium spread of tepals. The outer lateral tepals of 'Stalan' are obovate in shape and bear no stripes.

'Stalan' inner lateral tepals are narrowly obovate, predominantly red-purple with a yellow zone, and bear a medium number of medium sized, dark brown stripes. The stamens of 'Stalan' have purple-pink filaments and grey anthers. The pistil of 'Stalan' has a light to mid green ovary with a medium intensity of anthocyanin coloration, a purple-red style, and a pink stigma bearing no spots.



Flowers of 'Stalan' (Photograph supplied by applicant)

Variety: 'Stalvir' Application No. 89/111

Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer,

Holland.

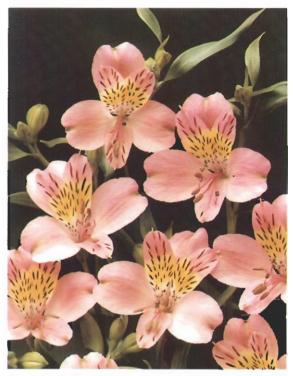
#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Stalvir' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. 'Stalvir' has been protected by Plant Variety Rights in Holland, Germany, France, England, Denmark, and New Zealand, and by Patent in the USA. Plant Variety Rights have been applied for in Italy. 'Stalvir' was first sold overseas in Holland in September 1987.

Morphology — see comparison tables.

'Stalvir' is a medium height plant with a thin stem. 'Stalvir' leaves are long, medium in width, dark green, with medium glossiness on the upper side. 'Stalvir' inflorescences have a medium number of medium length umbel branches, and medium length pedicels. The main flower colour of 'Stalvir' is pink. 'Stalvir' flowers are mid sized, with a medium spread of tepals. The outer lateral tepals of 'Stalvir' are obovate in shape and bear stripes. 'Stalvir' inner lateral tepals are elliptic, predominantly pink with a

yellow zone, and bear a medium number of small, purple-brown stripes. The stamens of 'Stalvir' have light purple filaments and purple anthers. The pistil of 'Stalvir' has a mid green ovary with a weak to medium intensity of anthocyanin coloration, a light purple style, and a light purple-pink stigma with spots.



Flowers of 'Stalvir' (Photograph supplied by applicant)

Variety: 'Staronic' Application No. 89/113

Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer,

Holland.

#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Staronic' was selected from seedlings of the cross on the basis of flower characteristics, and subsequently propagated vegetatively. 'Staronic' has been protected by Plant Variety Rights in Holland, Germany, France, England, and New Zealand, and by Patent in the USA. Plant Variety Rights have been applied for in Denmark, Italy, and Israel. 'Staronic' was first sold overseas in Holland in September 1987.

Morphology — see comparison tables. 'Staronic' is a tall plant with a stem of medium thickness. 'Staronic' leaves are of medium length and width, mid green, with weak glossiness on the upper side. 'Staronic' inflorescences have many short umbel branches, and medium length pedicels. The main flower colour of 'Staronic' is pink. 'Staronic' flowers are large, with a large spread of tepals. The outer lateral tepals of 'Staronic' are broadly obovate in shape and bear stripes. 'Staronic' inner lateral tepals are narrowly obovate,

predominantly yellow, and bear many medium sized, purple-brown stripes. The stamens of 'Staronic' have pink filaments and green-yellow anthers. The pistil of 'Staronic' has a light green ovary with no anthocyanin coloration, a white style with a purple tip, and a light purple stigma bearing spots.



Flowers of 'Staronic' (Photograph supplied by applicant)

Variety: 'Starover' Application No. 89/115

Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose as a mutation of 'Staronic'. Rhizomes of 'Staronic' were irradiated to induce mutations, and 'Starover' was selected on the basis of flower colour, and subsequently propagated vegetatively. The work was done by the applicant in cooperation with Dr C Broertjes, Ital-Institute in Wageningen, Holland. 'Starover' has been protected by Plant Variety Rights in Holland and Germany, and by Patent in the USA. Plant Variety Rights have been applied for in France, England, Denmark, New Zealand and Italy. 'Starover' was first sold overseas in Holland in September 1987.

Morphology — see comparison tables. 'Starover' is a tall plant with a stem of medium thickness. 'Starover' leaves are medium length and width, mid green, with weak glossiness on the upper side. 'Starover' inflorescences have many medium length umbel branches, and medium to long pedicels. The main flower colour of 'Starover' is redpurple. 'Starover' flowers are large, with a large spread of tepals. The outer lateral tepals of 'Starover' are broadly obovate in shape and bear stripes. 'Starover' inner lateral tepals are narrowly obovate,

predominantly yellow, and bear many medium sized,

purple-brown stripes. The stamens of 'Starover' have pink filaments and grey anthers. The pistil of 'Starover' has a light green overy with no anthocyanin coloration, a light pink style, and a light pink stigma, with a brown tip, bearing spots.



Flowers of 'Starover' (Photograph supplied by applicant)

Variety: 'Staverpi' Application No. 89/117

Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Staverpi' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. Plant Variety Rights have been applied for in Germany, Holland, and France. 'Staverpi' has not been sold overseas.

Morphology — see comparison tables. 'Staverpi' is a medium height plant with a stem of medium thickness. 'Staverpi' leaves are medium length and width, mid green, with medium glossiness on the upper side. 'Staverpi' inflorescences have a medium number of medium length umbel branches, and medium length pedicels. The main flower colour of 'Staverpi' is pink. 'Staverpi' flowers are large in size, with a large spread of tepals. The outer lateral tepals of 'Staverpi' are broadly obovate in shape and bear stripes. 'Staverpi' inner lateral tepals are elliptic, predominantly yellow with a pink tip, and bear many medium sized, red brown stripes. The stamens of

'Staverpi' have salmon pink filaments and yellowgreen anthers. The pistil of 'Staverpi' has a light green ovary with weak anthocyanin coloration, a salmon pink style, and a salmon pink stigma bearing no spots.



Flowers of 'Staverpi' (Photograph supplied by applicant)

Variety: 'Stadutia' Application No. 89/103

Accepted; 25 May 1990

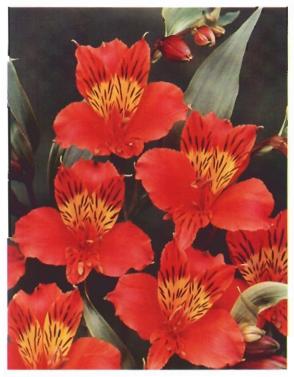
Applicant; Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Stadutia' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. 'Stadutia' has been protected by Plant Variety Rights in Holland, Germany, France, England, Denmark, and New Zealand, and by Patent in the USA. Plant Variety Rights have been applied for in Italy and Israel. 'Stadutia' was first sold overseas in Holland in September 1987.

Morphology — see comparison tables. 'Stadutia' is a tall plant with a stem of medium thickness showing medium anthocyanin coloration. 'Stadutia' leaves are long and broad, dark green, with weak glossiness on the upper side. 'Stadutia' inflorescences have a medium to high number of long umbel branches, and medium length pedicels. The main flower colour of 'Stadutia' is orange-red. 'Stadutia' flowers are medium to large in size, with a medium spread of tepals. The outer lateral tepals of

'Stadutia' are obovate in shape and bear no stripes. 'Stadutia' inner lateral tepals are narrowly obovate, predominantly orange-red with a yellow zone, and bear a medium number of medium to large sized, dark brown stripes. The stamens of 'Stadutia' have orange-red filaments and dark red-brown anthers. The pistil of 'Stadutia' has a medium green ovary with a weak intensity of anthocyanin coloration, a dark orange-red style, and an orange-red stigma bearing spots.



Flowers of 'Stadutia' (Photograph supplied by applicant)

Variety: 'Stalibron' Application No. 89/107 Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose as a mutation of 'Stalbel' in Aalsmeer Holland. Rhizomes of 'Stalbel' were irradiated to induce mutations, and 'Stalibron' was selected on the basis of flower colour, and subsequently propagated vegetatively. The work was done by the applicant in cooperation with Dr C Broertjes, Ital-Institute in Wageningen, Holland. 'Stalibron' has been protected by Plant Variety Rights in Holland, Germany, France, England, Denmark, and New Zealand, and by Patent in the USA. Plant Variety Rights have been applied for in Italy and Israel. 'Stalibron' was first sold overseas in Holland in September 1987.

Morphology - see comparison tables.

'Stalibron' is a medium height plant with a stem of medium thickness. 'Stalibron' leaves are long and broad, dark green, with medium to strong glossiness on the upper side. 'Stalibron' inflorescences have a medium number of medium length umbel branches, and medium length pedicels. The main flower colour of 'Stalibron' is yellow. 'Stalibron' flowers are medium sized, with a medium spread of tepals. The outer lateral tepals of 'Stalibron' are broadly obovate in shape and bear stripes. 'Stalibron' inner lateral tepals are narrowly obovate, predominantly yellow, and bear a medium number of small to medium sized, dark brown stripes. The stamens of 'Stalibron' have red filaments and yellow-green anthers. The pistil of 'Stalibron' has a medium green ovary with a weak intensity of anthocyanin coloration, a pink style, and a pink stigma bearing spots.



Flowers of 'Stalibron' (Photograph supplied by applicant)

Variety: 'Stalsam' Application No. 89/110

Accepted: 25 May 1990

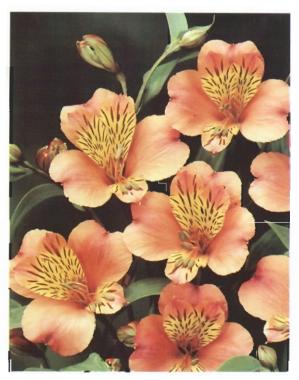
Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Stalsam' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. 'Stalsam' has been protected by Plant Variety Rights in Holland, Germany, France, England, Denmark, and New Zealand, and by Patent in the USA. Plant Variety Rights have been applied for in Italy and Israel. 'Stalsam' was first sold overseas in Holland in September 1986.

Morphology - see comparison tables.

'Stalsam' is a medium height plant with a stem of medium thickness showing weak anthocyanin coloration. 'Stalsam' leaves are long and broad, dark green, with medium glossiness on the upper side. 'Stalsam' inflorescences have a medium number of long umbel branches, and long pedicels. The main flower colour of 'Stalsam' is pink. 'Stalsam' flowers are medium sized, with a medium spread of tepals. The outer lateral tepals of 'Stalsam' are obovate in shape and bear no stripes. 'Stalsam' inner lateral tepals are narrowly obovate, predominantly yellow, and bear a medium number of medium sized, dark brown stripes. The stamens of 'Stalsam' have salmon pink filaments and green-grey anthers. The pistil of 'Stalsam' has a medium to dark green ovary with a strong intensity of anthocyanin coloration, a purple-pink style, and an orange stigma bearing spots.



Flowers of 'Stalsam' (Photograph supplied by applicant)

Variety: 'Stayeli' Application No. 89/118

Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose as a mutation of 'Stalbel'. Rhizomes of 'Stalbel' were irradiated to induce mutations, and 'Stayeli' was selected on the basis of flower colour, and subsequently propagated vegetatively. The work was done by the applicant in cooperation with Dr C Broertjes, Ital-Institute in Wageningen, Holland. Plant Variety Rights have been applied for in Germany, Holland, and France. 'Stayeli' has not been sold overseas.

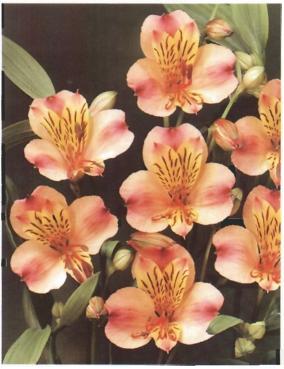
Morphology - see comparison tables.

'Stayeli' is a medium height plant with a stem of medium thickness, 'Staveli' leaves are long and broad, mid green, with medium glossiness on the upper side. 'Stayeli' inflorescences have a medium number of medium length umbel branches, and medium length pedicels. The main flower colour of 'Stayeli' is yellow. 'Stayeli' flowers are medium sized, with a medium spread of tepals. The outer lateral tepals of 'Stayeli' are elliptic in shape and bear no stripes. 'Stayeli' inner lateral tepals are broadly obovate, predominantly yellow, and bear a medium number of medium sized, dark brown stripes. The stamens of 'Stayeli' have salmon pink filaments and green-yellow anthers. The pistil of 'Stayeli' has a dark green ovary with a strong intensity of anthocyanin coloration, a salmon pink style, and a salmon pink stigma bearing no spots.



Flowers of 'Stayeli' (Photograph supplied by applicant)

Morphology — see comparison tables. 'Stayelor' is a tall plant with a stem of medium thickness. 'Stayelor' leaves are long and medium in width, dark green, with medium glossiness on the upper side. 'Stayelor' inflorescences have a small number of short umbel branches, and medium length pedicels. The main flower colour of 'Stayelor' is yellow-orange. 'Stayelor' flowers are medium sized, with a medium spread of tepals. The outer lateral tepals of 'Stayelor' are broadly obovate in shape and bear no stripes. 'Stayelor' inner lateral tepals are narrowly obovate, predominantly yellow, and bear a medium number of large, red-brown stripes. The stamens of 'Stayelor' have orange-red filaments and orange-red anthers. The pistil of 'Stayelor' has a mid green ovary with a weak intensity of anthocyanin coloration, an orange-red style, and an orange-red stigma bearing no spots.



Flowers of 'Stayelor' (Photograph supplied by applicant)

Variety: 'Stayelor' Application No. 90/059

Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Stayelor' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. Plant Variety Rights have been applied for in Germany and Holland. 'Stayelor' has not been sold overseas.

Variety: 'Stabuwit' Application No. 90/057

Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Stabuwit' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. Plant Variety Rights have been applied for in Germany, Holland, and France. 'Stabuwit' has not been sold overseas.

Morphology — see comparison tables. 'Stabuwit' is a medium height plant with a medium to thick stem. 'Stabuwit' leaves are long, broad to very broad, and medium green, with weak to medium glossiness on the upper side. 'Stabuwit'

inflorescences have a medium number of long umbel branches, and long pedicels. The main flower colour of 'Stabuwit' is white. 'Stabuwit' flowers are medium sized, with a medium spread of tepals. The outer lateral tepals of 'Stabuwit' are broadly obovate in shape and bear no stripes. 'Stabuwit' inner lateral tepals are obovate, predominantly white, and bear many small, red-brown stripes. The stamens of 'Stabuwit' have pink filaments and grey anthers. The pistil of 'Stabuwit' has a medium green ovary with a strong intensity of anthocyanin coloration, a pink style, and a pink stigma bearing no spots.



Flowers of 'Stabuwit' (Photograph supplied by applicant)

Variety: 'Stalbel' Application No. 89/105

Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Stalbel' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. 'Stalbel' has been protected by Plant Variety Rights in Holland, Germany, France, England, Denmark, and New Zealand, and by Patent in the USA. Plant Variety Rights have been applied for in Italy and Israel. 'Stalbel' was first sold overseas in Holland in September 1987.

Morphology — see comparison tables. 'Stalbel' is a medium height plant with a stem of medium thickness showing weak anthocyanin coloration. 'Stalbel' leaves are long and broad, dark green, with mid to strong glossiness on the upper side. 'Stalbel' inflorescences have a medium number

of medium length umbel branches, and medium length pedicels. The main flower colour of 'Stalbel' is light pink. 'Stalbel' flowers are mid sized, with a medium spread of tepals. The outer lateral tepals of 'Stalbel' are broadly obovate in shape and bear stripes. 'Stalbel' inner lateral tepals are narrowly obovate, predominantly yellow with a light pink tip, and bear a medium number of small to medium, dark brown stripes. The stamens of 'Stalbel' have salmon pink filaments and yellow-green anthers. The pistil of 'Stalbel' has a mid green ovary with a weak intensity of anthocyanin coloration, a salmon pink style, and a purple-pink stigma bearing spots.



Flowers of 'Stalbel' (Photograph supplied by applicant)

Variety: 'Stabelstri' Application No. 89/101

Accepted: 25 May 1990

Applicant; Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose as a mutation of 'Stalbel'. Rhizomes of 'Stalbel' were irradiated to induce mutations, and 'Stabelstri' was selected on the basis of flower colour, and subsequently propagated vegetatively. The work was done by the applicant in cooperation with Dr C Broertjes, Ital-Institute in Wageningen, Holland. 'Stabelstri' has been protected by Plant Variety Rights in Holland and Germany. Plant Variety Rights have been applied for in France, England, New Zealand, Denmark and Italy. 'Stabelstri' was first sold overseas in Holland in September 1988.

Morphology — see comparison tables. 'Stabelstri' is a medium height plant with a stem of medium thickness. 'Stabelstri' leaves are long and broad, light green, with medium glossiness on the upper side. 'Stabelstri' inflorescences have a medium number of medium length umbel branches, and medium length pedicels. The main flower colour of 'Stabelstri' is light pink. 'Stabelstri' flowers are medium to large in size, with a medium to large spread of tepals. The outer lateral tepals of 'Stabelstri' are broadly elliptic in shape and bear stripes. 'Stabelstri' inner lateral tepals are elliptic, predominantly yellow with a light pink tip, and bear a medium number of large, purple-brown stripes. The stamens of 'Stabelstri' have salmon pink filaments and yellow-green anthers. The pistil of 'Stabelstri' has a medium green ovary with a weak intensity of anthocyanin coloration, a salmon pink style, and a purple-pink stigma bearing spots.

Flowers of 'Stabelstri' (Photograph supplied by applicant)

number of medium length umbel branches, and medium length pedicels. The main flower colour of 'Stalibla' is cream-white. 'Stalibla' flowers are large in size, with a medium spread of tepals. The outer lateral tepals of 'Stalibla' are broadly obovate in shape and sometimes bear a small stripe. 'Stalibla' inner lateral tepals are narrowly obovate, predominantly yellow with a white tip, and bear a medium number of medium sized, dark brown stripes. The stamens of 'Stalibla' have salmon pink filaments with a greenish base, and yellow-green anthers. The pistil of 'Stalibla' has a medium green ovary with a weak intensity of anthocyanin coloration, a salmon pink style, and an orange-pink stigma bearing spots.



Flowers of 'Stalibla' (Photograph supplied by applicant)

Variety: 'Stalibla' Application No. 89/106 Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose as a mutation of 'Stalbel'. Rhizomes of 'Stalbel' were irradiated to induce mutations, and 'Stalibla' was selected on the basis of flower colour, and subsequently propagated vegetatively. The work was done by the applicant in cooperation with Dr C Broertjes, Ital-Institute in Wageningen, Holland. Plant Variety Rights have been applied for in Germany, Holland, and France. 'Stalibla' has not been sold overseas.

Morphology — see comparison tables. 'Stalibla' is a medium height plant with a medium thickness stem. 'Stalibla' leaves are long and broad, medium green, with medium glossiness on the upper side. 'Stalibla' inflorescences have a medium

Variety: 'Zelblanca' Application No. 89/121 Accepted: 25 May 1990 Applicant: GJ van Zelderen BV, of De Kwakel, Holland.

#### Origin

This variety arose from controlled pollination of 2 unnamed varieties in De Kwakel, Holland. 'Zelblanca' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. 'Zelblanca' has been protected by Plant Variety Rights in Holland, Germany, England, Denmark, and New Zealand, and by Patent in the USA. Plant Variety Rights have been applied for in France, Italy, and Israel. 'Zelblanca' was first sold overseas in Holland in September 1988.

**Morphology** — see comparison tables. 'Zelblanca' is a tall plant with a stem of medium

thickness showing weak anthocyanin coloration. 'Zelblanca' leaves are medium in length and width, dark green, with medium to strong glossiness on the upper side. 'Zelblanca' inflorescences have a medium number of long umbel branches, and long pedicels. The main flower colour of 'Zelblanca' is white, 'Zelblanca' flowers are medium to large in size, with a large spread of tepals. The outer lateral tepals of 'Zelblanca' are broadly obovate in shape and bear stripes. 'Zelblanca' inner lateral tepals are obovate, predominantly yellow with a white tip, and bear many medium to large sized, dark brown stripes. The stamens of 'Zelblanca' have yellow filaments and yellow-green anthers. The pistil of 'Zelblanca' has a medium green ovary with a very weak intensity of anthocyanin coloration, a yellow style, and a yellow stigma bearing no spots



Flowers of 'Zelblanca' (Photograph supplied by applicant)

Variety: 'Stajugro' Application No. 90/058

Accepted: 25 May 1990

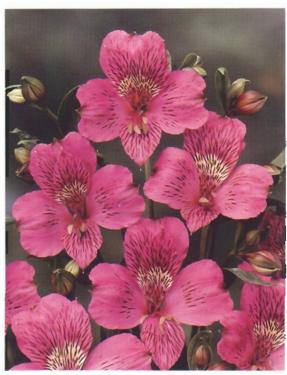
Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Stajugro' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. Plant Variety Rights have been applied for in Germany and Holland. 'Stajugro' has not been sold overseas.

Morphology — see comparison tables. 'Stajugro' is a tall plant with a thick stem showing medium anthocyanin coloration. 'Stajugro' leaves are long and broad, medium green, with medium glossiness on the upper side. 'Stajugro'

inflorescences have a medium number of long umbel branches, and medium length pedicels. The main flower colour of 'Stajugro' is purple. 'Stajugro' flowers are large, with a large spread of tepals. The outer lateral tepals of 'Stajugro' are broadly obovate in shape and bear stripes. 'Stajugro' inner lateral tepals are narrowly obovate, predominantly purple, and bear many medium sized, purple-brown stripes. The stamens of 'Stajugro' have light purple filaments and yellow-green anthers. The pistil of 'Stajugro' has a dark green ovary with a strong intensity of anthocyanin coloration, a purple-red style, and a purple-red stigma bearing no spots.



Flowers of 'Stajugro' (Photograph supplied by applicant)

Variety: 'Stalilas' Application No. 89/108

Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer, Holland.

#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Stalilas' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. 'Stalilas' has been protected by Plant Variety Rights in Holland, Germany, France, England, Denmark, Israel, and New Zealand, and by Patent in the USA. Plant Variety Rights have been applied for in Italy. 'Stalilas' was first sold overseas in Holland in September 1985.

Morphology — see comparison tables. 'Stalilas' is a medium to tall plant with a medium to thick stem showing weak to medium anthocyanin coloration. 'Stalilas' leaves are long and broad, dark green, with medium glossiness on the upper side.

'Stalilas' inflorescences have a medium number of long umbel branches, and long pedicels. The main flower colour of 'Stalilas' is purple. 'Stalilas' flowers are medium sized, with a medium spread of tepals. The outer lateral tepals of 'Stalilas' are broadly obovate in shape and bear stripes. 'Stalilas' inner lateral tepals are elliptic, predominantly purple, and bear a medium number to many, medium sized, dark brown stripes. The stamens of 'Stalilas' have purple filaments and grey-brown anthers. The pistil of 'Stalilas' has a medium green ovary with a strong intensity of anthocyanin coloration, a purple style, and a red-purple stigma bearing no spots.



Flowers of 'Stalilas' (Photograph supplied by applicant)

Variety: 'Stapurzul' Application No. 89/116

Accepted: 25 May 1990

Applicant: Van Staaveren BV, of Aalsmeer, Holland

#### Origin

This variety arose from controlled pollination of 2 research varieties in Aalsmeer, Holland. 'Stapurzul' was selected from seedlings of the cross on the basis of growth habit and flower characteristics, and subsequently propagated vegetatively. Plant Variety Rights have been applied for in Holland, Germany, France, England, Denmark, and New Zealand. 'Stapurzul' has not been sold overseas.

Morphology — see comparison tables.
'Stapurzul' is a tall plant with a thick stem.
'Stapurzul' leaves are long and broad, medium green, with medium glossiness on the upper side.
'Stapurzul' inflorescences have a medium number of long umbel branches, and long pedicels. The main flower colour of 'Stapurzul' is purple. 'Stapurzul' flowers are medium sized, with a medium spread of

tepals. The outer lateral tepals of 'Stapurzul' are obovate in shape and bear stripes. 'Stapurzul' inner lateral tepals are elliptic, predominantly purple with a pale yellow zone, and bear many small, purple-brown stripes. The stamens of 'Stapurzul' have light purple filaments and yellow-green anthers. The pistif of 'Stapurzul' has a medium green ovary with a strong intensity of anthocyanin coloration, a light purple style, and a light purple stigma bearing no spots.



Flowers of 'Stapurzul' (Photograph supplied by applicant)

Variety: 'Zelpado' Application No. 89/122

Accepted: 25 May 1990

Applicant: GJ van Zelderen BV, of De Kwakel,

Holland.

#### Origin

This variety arose from controlled pollination of 2 unnamed varieties in De Kwakel, Holland. 'Zelpado' was selected from seedlings of the cross on the basis of flower characteristics, and subsequently propagated vegetatively. 'Zelpado' has been protected by Plant Variety Rights in Holland, Germany, England, Denmark, and New Zealand, and by Patent in the USA. Plant Variety Rights have been applied for in France, Italy, and Israel. 'Zelpado' was first sold overseas in Holland in September 1988.

Morphology — see comparison tables. 'Zelpado' is a medium height plant with a medium thickness stem showing weak anthocyanin coloration. 'Zelpado' leaves are long and broad, dark green, with medium glossiness on the upper side. 'Zelpado' inflorescences have a medium number to many, mid length umbel branches, and medium length pedicels. The main flower colour of 'Zelpado'

is red-purple. 'Zelpado' flowers are medium sized, with a medium spread of tepals. The outer lateral tepals of 'Zelpado' are obovate in shape and bear stripes. 'Zelpado' inner lateral tepals are narrowly obovate, predominantly yellow with a red-purple tip, and bear many medium sized, dark brown stripes. The stamens of 'Zelpado' have light purple filaments and grey anthers. The pistil of 'Zelpado' has a mid green ovary with a very strong intensity of anthocyanin coloration, a purple-red style, and a purple-red stigma bearing spots.

JUPITER® zelpado

Flowers of 'Zelpado' (Photograph supplied by applicant)

Variety: 'Zelrosa' Application No. 89/123

Accepted: 25 May 1990

Applicant: GJ van Zelderen BV, of De Kwakel,

Holland.

#### Origin

This variety arose from controlled pollination of 2 unnamed varieties in De Kwakel, Holland. 'Zelrosa' was selected from seedlings of the cross on the basis of flower characteristics, and subsequently propagated vegetatively. 'Zelrosa' has been protected by Plant Variety Rights in Holland, Germany, England, Denmark, and New Zealand. Plant Variety Rights have been applied for in France and Italy, and a Patent has been applied for in the USA. 'Zelrosa' has not been sold overseas.

Morphology — see comparison tables. 'Zelrosa' is a medium height plant with a medium thickness stem showing weak anthocyanin coloration. 'Zelrosa' leaves are medium in length and width, mid green, with strong glossiness on the upper side. 'Zelrosa' inflorescences have a medium number to many, medium length umbel branches,

and medium length pedicels. The main flower colour of 'Zelrosa' is purple. 'Zelrosa' flowers are medium sized, with a large spread of tepals. The outer lateral tepals of 'Zelrosa' are broadly obovate in shape and bear stripes. 'Zelrosa' inner lateral tepals are obovate, predominantly pale yellow with a purple tip, and bear many medium sized, red-brown stripes. The stamens of 'Zelrosa' have pink filaments and grey anthers. The pistil of 'Zelrosa' has a mid green ovary with a medium intensity of anthocyanin coloration, a pink style, and a pink stigma bearing no spots.



Flowers of 'Zelrosa' (Photograph supplied by applicant)

# Table of Comparison of Alstroemeria Varieties

	'Stalan'	'Stalvir'	'Staronic'	'Starover'	'Staverpi'
OUTER TEPAL					
main <b>c</b> olour	red-purple	pink	pink	red-purple	pink
RHS	64D	55C	56B	67C	55C-49B
stripes	absent	present	present	present	present
NNER LATERAL TEPAL	11.00				
RHS of yellow region	4D	12D	12C	12B	15B
number of stripes	medium	medium	many	many	many
STAMENS					
colour of filament	purple-pink	light purple	pink	pink	salmon
colour of anthers	grey	purple	green-yellow	grey	yellow-gre <b>e</b> n
PISTIL					
colour of style	purple-red	light purple	white	light pink	salmon
colour of stigma	pink	purple pink	light purple	light pink	salmon
FLOWER SIZE	medium	medium	large	large	large
LEAF					
length	long	long	medium	medium	medium
width	very broad	medium	medium	medium	medium

# Table of Comparison of Alstroemeria Varieties

	'Stadutia'	'Stalibron'	'Stalsam'	'Stayeli'	'Stayelor'
OUTER TEPAL					
main colour	orange-red	yellow	pink	yellow	yellow-orange
RHS	34A — 44C	12C	38A — 39B	6C	18B
stripes	absent	pres <b>e</b> nt	absent	absent	absent
INNER LATERAL TEPAL					
number of stripes	medium	medium	medium	medium	medium
STAMENS					
colour of filament	orange-red	orange-red	salmon	salmon	orange-red
colour of anthers	red-brown	yellow-grey	green-grey	green-yellow	orange-red
PISTIL					
colour of style	orange-red	orange-red	purple-pink	salmon	orange-red
colour of stigma	orange-red	orange-red	orange	salmon	orange-red
FLOWER SIZE	medium-larg	e medium	medium	medium	medium
LEAF					
length	long	long	long	long	long
width	broad	broad	broad	broad	broad

## Table of Comparison of Alstroemeria Varieties

	'Stabuwit'	'Stalbel'	'Stabelstri'	'Stalibla'	'Zelblanca'
OUTER TEPAL					
main colour	white	light pink	light pink	cream	white
RHS	155D	158B-C	158B-C	158C	155B
		tips 65A-B	tips 65A-B		
INNER LATERAL TEPAL					
RHS of yellow portion	_	12A-B	12A-B	12C	-
number of stripes	many	medium	medium	medium	many
STAMENS					
colour of filament	pink	salmon	salmon	salmon	yellow
colour of anthers	grey	yellow-green	yellow-green	yellow-green	yellow-green
PISTIL					
colour of style	pink	salmon	salmon	salmon	yellow
colour of stigma	pink	purple-pink	purple-pink	pink-orange	yellow
FLOWER SIZE	medium	medium	medium-large	large	medium-large
LEAF					
length	long	long	long	long	medium
width	broad-v.broad	broad	broad	broad	medium

# Table of Comparison of Alstroemeria Varieties

	'Stajugro'	'Stalilas'	'Stapurzul'	'Zelpado'	'Zelrosa'
OUTER TEPAL					
main colour	purple	purple	purple	red-purple	pink
RHS	72B-C	71C	77B	64B-C	55B
INNER LATERAL TEPAL					
RHS of yellow portion	3C	155B	not avail.	4C-D	155D
number of stripes	many	medium-man	ymany	many	many
STAMENS					
colour of filament	light purple	light purple	light purple	light purple	pink
colour of anthers	yellow-green	grey-brown	yellow-green	grey	grey
PISTIL					
colour of style	red-purple	purple	light purple	red-purple	pink
colour of stigma	red-purple	re <b>d</b> -purple	light purple	red-purple	pink
FLOWER SIZE	large	medium	medium	medium	medium
LEAF					
length	long	long	long	long	medium
width	broad	broad	broad	broad	medium

## IMPATIENS (Impatiens hawkeri hybrid)

Variety: 'Lysandra' Application No. 90/032

Accepted: 26 February 1990

Applicant: Kientzler KG, of West Germany. Australian Agent: R Rother of Outeniqua

Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters; a medium size plant; dark green leaves mostly lanceolate-elliptic in shape; underside lamella pigmented red; red-purple flowers with overlapping petals.

Varieties used for comparison

'Gemini' and 'Corona', both Royalty Administration International CV varieties, close to 'Lysandra' in flower colour and size, and commonly known varieties in Australia.

Comparative growing trials

All characteristics and comparisons below are from comparative growing trials conducted at Devon Meadows near Melbourne, Victoria. Growing conditions were the same as used for commercial production. Five plants of each variety were grown in a pinebark based medium enriched with time-release fertilizer. They were situated in a heated, whitewashed poly-tunnel maintained between 16 and 30°C in 30% shade. Measurements are based on 20 random selections from these plants, taken in January 1990, six months after potting on.



Impatiens variety 'Lysandra'. (Photograph supplied by applicant)

#### Origin

'Lysandra' was selected from the seedling progeny of '85-17-8' and 'Thecla'. Plant Variety Rights were granted in West Germany in February 1990.

Morphology - see comparison tables.

'Lysandra' is a hybrid Impatiens of compact growth habit. It has green leaves with the underside lamella pigmented red. Unlike the comparative varieties

'Corona' and 'Gemini', 'Lysandra' has leaves which have no variegation. Flowers of 'Lysandra' are redpurple, with some pale pink colour, this colour darkening towards the throat. 'Corona' and 'Gemini' flowers are paler in colour than 'Lysandra'. Flowers of 'Lysandra' have much wider side petals (33mm) than either 'Corona' (20mm) or 'Gemini' (21mm), giving the flower a rounded appearance. This characteristic distinguishes 'Lysandra' from its parent, 'Thecla', which has side petals about half as wide (18mm) as 'Lysandra'.

# Table of Comparison of Impatiens Varieties

(\* = varieties used for comparison)

	'Lysandra'	*'Corona'	*'Gemini'
LEAF LENGTH			
mean	101 mm	128 mm	135 mm
range	91-120	112-144	112-170
std deviation	8.6	14	8
LEAF WIDTH	_		
mean	42 mm	47 mm	43 mm
range	35-48	42-55	33-48
std deviation	3.6	3	1.8
LEAF SHAPE	lanc-ellip	elliptic	Janceolate
LEAF COLOUR RHS	139A	139B	139A
BLADE MARKINGS	absent	12A	151B
FLOWER DIAME	TER		
mean	57 mm	61 mm	63 mm
range	52-62	57-63	59-66
std deviation	2.7	1.0	3.0
FLOWER COLO	JR		
primary RHS	58B	73A	67D
EYE ZONE/COLOUR			
RHS	62D	66A	absent

## BIRCH (Betula pendula)

Variety: 'Barossa Wintergreen' Application No. 90/044

Accepted: 9 April 1990

Applicant: E, A, K, & E Bartsch of Barossa Nursery, Tanunda, South Australia.

#### Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: evergreen foliage; production of male catkins in winter; and glabrous leaves with a serrate margin.

Varieties used for comparison

Betula pendula, common deciduous form, the parent of 'Barossa Wintergreen'.

#### **Comparative Growing Trials**

All characteristics and comparisons below are from comparative outdoor growing trials conducted at K J Nurseries, Renmark, South Australia in 1989/90. The trial consisted of *B. pendula* stock plants planted in nursery field rows at approximately 30 cm spacings. In spring 1989, 'Barossa Wintergreen' was randomly budded to stock plants within the nursery row. Measurements were taken in August 1990 from 10 randomly chosen specimens of each variety.

#### Origin

'Barossa Wintergreen' arose as a sport of *Betula pendula* on the applicants' property in 1978. Subsequent asexual propagation has led to the variety 'Barossa Wintergreen'.

Morphology — see comparison tables. 'Barossa Wintergreen' has leaves which are glabrous with a glossy upper surface, acuminate apex, truncate base, and a serrate margin.

'Barossa Wintergreen' can be distinguished from *B. pendula* by its lack of winter dormancy. Active growth occurs during the winter period. 'Barossa Wintergreen' also produces male catkins during the winter dormancy period. 'Barossa Wintergreen' has a weeping growth habit, while at the time the comparisons were made, *B. pendula* showed an upright habit.



Betula pendula (left), 'Barossa Wintergreen' (right), (Photograph supplied by PVR Office)

#### Table of Comparison of Birch Varieties

(\* = variety used for comparison)

	'Barossa Wintergreen'	*B. pendula
HABIT	evergreen weeping upright	deciduous (dormant wood)
INTERNODE L	.ENGTH	
mean	29 mm	31.2 mm
range	23-38	24-40
std. deviation	3.2	4.2

# PERENNIAL RYEGRASS (Lolium perenne x multiflorum)

Variety: 'Grasslands Greenstone' Application No. 90/080

Accepted: 10 August 1990

Applicant: Grasslands Division, DSIR, of Palmerston North, New Zealand, on behalf of Her Majesty the Queen in Right of New Zealand. Australian Agent: Mr A Stratton, Grasslands Division, DSIR, c/o Rutherglen Research Institute, of Rutherglen, Victoria.

#### Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a tetraploid ryegrass (2n=28); an early heading date; long and wide vegetative leaves, and a wide flag leaf; short culm length and few nodes; few spikelets and few florets per spikelet; few plants with awned lemmas; and a high thousand seed weight.

#### Varieties Used for Comparison

'Grasslands Ariki' and 'Grasslands Manawa' being the closest known varieties.

#### **Comparative Growing Trials**

All characteristics described below are from comparative growing trials conducted at DSIR Grasslands research centre at Palmerston North, New Zealand, in 1987/88. The plants were spaced at 60 cm in a complete randomized block design of 5 replications of 20 plants of each variety. Space between the rows was also 60 cm. Measurements are from 100 specimens. The trial was carried out in soil of recent gley type of the Kairanga silt loam series.

In addition to evidence of distinctness and stability, the applicant has submitted prints of gel electrophoresis of seed protein extractions. These display a difference in banding pattern between the varieties compared and a consistency between the two samples of 'Grasslands Greenstone' (S E Gardiner and M B Forde: Seed Science and Technology, 1987, Vol. 15, pages 663-674. The extraction medium was modified as described by D B Smith and P I Payne: Journal of Nat. Inst. Ag. Bot. 1984, Vol. 16. p. 487-498).

#### Origin

The breeders were the late Dr P Barclay and Mr C Armstrong, both at that time of DSIR Grasslands Division, Palmerston North, New Zealand. 'Grasslands Greenstone' arose from induced tetraploidy of 'Grasslands Ariki'. In 1964, seedlings of 'Grasslands Ariki' were treated with colchicine to induce doubling of the chromosome number. Selected plants were then pair crossed to produce 68 progenies (C1 Generation). In 1965 the best progenies were selected and pair crossed to produce a C2 generation. In 1966, this material was planted in a spaced-plant trial at Palmerston North, and

three glasshouse nucleus isolations were taken from selected plants of the best progenies. These produced seed for a C3 generation in 1969, which was tested as spaced plants at Palmerston North. One of the isolations consisting of 8 parents was selected for further multiplication and the nucleus seed was named 'Grasslands Greenstone'. Plant Variety Rights have been granted in New Zealand since 1989.

Morphology — see comparison tables. 'Grasslands Greenstone' is a tetraploid (2n=28) hybrid ryegrass with long, broad, dark green leaves. 'Grasslands Greenstone' has a more open growth habit than 'Grasslands Ariki' and 'Grasslands Manawa', due to the production of fewer tillers. 'Grasslands Greenstone' is of similar general

appearance to 'Grasslands Manawa' but matures approximately 7 days earlier.

'Grasslands Greenstone' produces fewer heads than 'Grasslands Ariki' and 'Grasslands Manawa'. Heads of 'Grasslands Greenstone' are longer than 'Grasslands Ariki' but of similar length to 'Grasslands Manawa'. 'Grasslands Greenstone' has fewer florets per spikelet than 'Grasslands Ariki' and 'Grasslands Manawa'. Less than 20% of 'Grasslands Greenstone' plants produce awned lemmas, compared to 22% in 'Grasslands Ariki' and 87% in 'Grasslands Manawa'.

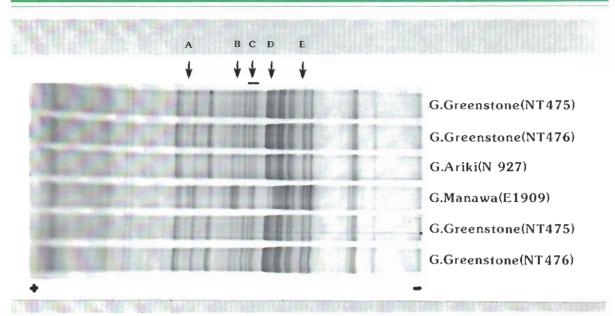
#### Agronomy

'Grasslands Greenstone' is best suited to high fertility soils in temperate or cool temperate regions.

Table of Comparison of Perennial Ryegrass Varieties

(\* = varieties used for comparison)

	'Grasslands Gree	enstone′ *′Grasslands Ariki′	*'Grasslands Manawa
PLOIDY	2n = 28	2n = 14	2n = 14
MEAN HEADING DATE (6	expressed as days after t	the first plant headed)	
mean	30.7	30.9	37.4
range	22-43	15-43	25-50
standard deviation	4.0	5.7	5.2
NUMBER OF NODES		_	
mean	4.4	5.0	6.7
range	2-6	3-8	4-11
standard deviation	1.0	1.0	1.5
NUMBER OF HEADS PRO	ODUCED		
mean	121.7	194.0	285.6
range	27-332	24-472	35-740
standard deviation	64.7	95.8	147.2
FLAG LEAF WIDTH			
mean	8.1 mm	6.8 mm	8.3 mm
range	5-10.5	5-11	4.5-12
standard deviation	1.3	1.3	1.5
NUMBER OF SPIKELETS	PER SPIKE		
mean	28.7	28.0	33.8
range	18-40	17-40	19-43
standard deviation	4.6	5.3	4.4
NUMBER OF FLORETS P	ER SPIKELET		
mean	9.9	11.4	11.7
range	7-13	7-19	9-15
standard deviation	1.5	2.2	1.8
PERCENTAGE OF PLANT	S WITH AWNED LEMM	AS	
	16	22	87
PERCENTAGE OF SEEDL	INGS PRODUCING FLU	ORESCENT ROOTS UNDER ULT	RA VIOLET LIGHT
	30.4	19.7	99.0
THOUSAND SEED WEIGH			_
	4.6 g	2.2 g	2.3 g



SDS-polyacrylamide gel electrophoresis of seed protein of ryegrass varieties. 'Grasslands Greenstone' differs from 'Grasslands Ariki' at A, C, and D; and 'Grasslands Manawa' at A, B, C, D and E. (Photograph supplied by applicant)

# CHRISTMAS CACTUS (Schlumbergera truncatus hybrid)

**Comparative Growing Trials** 

All characteristics and comparisons are from a comparative growing trial conducted at Winter Garden, Florida, USA (latitude 30°N) between January 1988 and December 1989. Plants were grown in light-regulated glasshouses with temperatures between 15.5 -29.9°C in winter and 24-35°C in summer. Relative humidity was maintained above 65%. Plants of each variety were grown from single phylloclades in 9cm pots in a peat/polystyrene growing medium with regular liquid fertilizer. Plants were propagated in winter (January) and pruned to the second tier at about 5 months of age. Flowering occurred in November and December. Measurements were taken from 20 plants chosen at random.

Variety: 'Lavender Fantasy' Application No. 90/088 Accepted: 27 August 1990 Applicant: B L Cobia Inc., of Winter Garden, Florida,

Diagnosis

USA.

This variety is distinct from all other known varieties in having the following combination of characters: a semi-upright growth habit; red-purple tepals with a small white centre zone; broad tepal blades; a short perianth tube; and short, wide, serrated phylloclades with medium sized denticles.

Varieties used for comparison

'Lavender Doll' and 'Christmas Charm', varieties similar in flower colour to 'Lavender Fantasy'.

#### Origin

'Lavender Fantasy' arises from the self-pollination of research variety *S. truncatus* 'ZH 9636-T', at Winter Garden, Florida, USA. A single seedling was selected on the basis of flowering and growth characteristics and propagated asexually to form the variety 'Lavender Fantasy'. 'Lavender Fantasy' is protected in the USA by Plant Patent number 6042, and by Plant Variety Rights in Denmark.

Morphology — see comparison tables. 'Lavender Fantasy', in common with 'Lavender Doll' and 'Christmas Charm' has a semi-upright growth habit. Both 'Lavender Fantasy' and 'Lavender Doll' have a third order phylloclade predominance of 2, while 'Christmas Charm' has a third order phylloclade predominance of 2-3. 'Lavender Fantasy' has denticles which are smaller than those in 'Lavender Doll', but larger than in 'Christmas Charm'. Phylloclades of 'Lavender Fantasy' are shorter and wider than those of 'Lavender Doll' and 'Christmas Charm'.

Tepals of 'Lavender Fantasy', 'Lavender Doll' and 'Christmas Charm' are red-purple with a white middle zone, 'Lavender Fantasy' tepals having a smaller middle zone than the comparative varieties. The border between the white middle zone and the red-purple margin is diffuse in all varieties.

Variety: 'Magic Fantasy' Application No. 90/087 Accepted: 27 August 1990 Applicant: B L Cobia Inc., of Winter Garden, Florida, USA.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a semi-upright growth habit; red-purple tepals; a short

perianth tube; stamens that are predominately redpurple in the distal area; wide, medium length phylloclades with serrated margins; and phylloclades with medium sized denticles.

#### Varieties used for comparison

'Lavender Doll' and 'Christmas Charm', varieties similar in flower colour to 'Magic Fantasy'.

#### Origin

'Magic Fantasy' arises from the cross pollination of *S. truncatus* research variety 'ZH 5915-T' by research variety 'ZH 7505-T' at Winter Garden, Florida, USA. A single seedling was selected on the basis of flowering and growth characteristics and propagated asexually to form the variety 'Magic Fantasy'. 'Magic Fantasy' is protected in the USA by Plant Patent number 5892, and by Plant Variety Rights in Denmark.

Morphology — see comparison tables.

'Magic Fantasy', in common with 'Lavender Doll' and 'Christmas Charm', has a semi-upright growth habit, phylloclades with serrate margins and no undulation of the phylloclade margin (in profile). Both 'Magic Fantasy' and 'Lavender Doll' have a third order phylloclade predominance of 2, while 'Christmas Charm' has a third order predominance of 2-3. 'Magic Fantasy' has denticles which are smaller than those of 'Lavender Doll' but larger than 'Christmas Charm'.

Tepals of 'Magic Fantasy', 'Lavender Doll' and 'Christmas Charm' are red-purple. 'Magic Fantasy' can be distinguished from 'Lavender Doll' and 'Christmas Charm' by the absence of a white middle zone. Stamens in 'Magic Fantasy' are predominately red-purple in the distal area, while in 'Lavender Doll' and 'Christmas Charm', stamens are white.

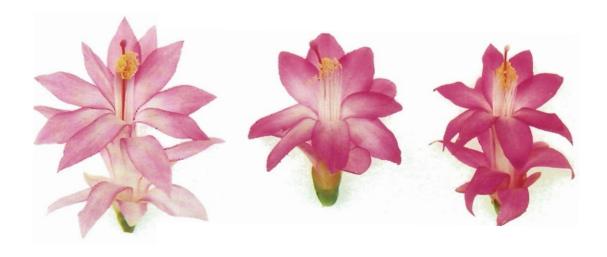
#### Table of Comparison of Christmas Cactus Varieties

(\* = varieties used for comparison)

	'Lavender Fantasy'	'Magic Fantasy'	*'Lavender Doll'	*'Christmas Charm'
FLOWER WIDTH				
mean	70.7 mm	65.0 mm	71.6 mm	63.3 mm
range	63-76	58-79	61-79	56-77
std. deviation	3.4	5.3	4.6	5.6
FLOWER LENGTH				
mean	60.8 mm	68.7 mm	70.8 mm	67.2 mm
range	52-65	64-76	65-72	62-73
std. deviation	2.0	8.0	2.5	2.9
TEPAL COLOUR — CI	ENTRE ZONE			
	white	red-purple	white	white, red-purple
TEPAL MARGIN COLO	OUR			
	red-purple	red-purple	red-purple	red-pu <b>r</b> ple
RHS No.	74B	74A	74B-75A	74A
PERIANTH TUBE LEN	GTH			
mean	26.1 mm	28.3 mm	32.6 mm	29.5 mm
range	22-29	25-33	29-37	28-32
std. deviation	2.2	2.1	2.0	1.2
TEPAL BLADE (tube for	orming) WIDTH			
mean	16.3 mm	15.5 mm	11.4 mm	13.0 mm
range	14-19	13-20	8-14	10- <b>17</b>
std. deviation	1.5	4.0	1.5	1.7
PHYLLOCLADE LENG	TH			
mean	33.1 mm	40.4 mm	45.8 mm	37.2 mm
range	28-48	32-51	32-60	31-44
std. deviation	3.3	5.6	7.5	3.4
PHYLLOCLADE WIDT	Н	-		
mean	36.5 mm	35.7 mm	32.7 mm	30.4 mm
range	30-46	30-44	24-40	26-36
std. deviation	3.7	4.1	6.0	2.9
PHYLLOCLADE: CUR\	VATURE IN CROSS SE	CTION		
	present	absent	present	present
PHYLLOCLADE: DENT	TICLE CURVATURE			
	outcurved	outcurved	incurved	incurved



Flowers of 'Lavender Doll' (left), 'Magic Fantasy' (centre) and 'Christmas Charm' (right). (Photograph supplied by applicant)



Flowers of 'Lavender Doll' (left), 'Lavender Fantasy' (centre) and 'Christmas Charm' (right). (Photograph supplied by applicant)

### BORONIA (Boronia heterophylla)

Comparative Growing Trials

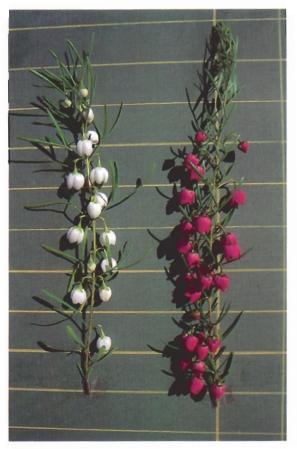
All characteristics and comparisons below are from growing trials conducted at Mundijong, Western Australia in 1990. Plants were planted out in April in the field in sandy soil. Plants were irrigated and fertilised through a drip irrigation system. Twenty plants each of the new varieties were grown alongside 40 of the comparative variety. Measurements were taken in spring 1990 from a random sample of 10 plants of each variety.

Variety: 'Moonglow' Application No. 90/089 Accepted: 29 August 1990 Applicant: Sunglow Flowers Pty Ltd, of Cannington, Western Australia.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: an upright, bushy shrub; white bell shaped flowers; and lack of anthocyanin in young stems.

Varieties used for comparison Boronia heterophylla, common form, being the species from which 'Moonglow' originated and a commonly grown boronia.



Flowers of 'Moonglow' (left) and B. heterophylla (right). (Photograph supplied by applicant)

#### Origin

'Moonglow' originated on the applicant's property as a mutation of *B. heterophylla* in October 1988. The original mutation was cultured and multiplied by tissue culture to form the variety 'Moonglow'. The original selection was on the basis of flower colour.

Morphology — see comparison tables. 'Moonglow' is an upright perennial, flowering once a year from mid September to mid October. Flowers of 'Moonglow' are white compared to the dark pink flowers of *B. heterophylla*. 'Moonglow' filaments are yellow green, unlike filaments of *B. heterophylla* which are pink.

'Moonglow' has leaves which are longer than leaves of *B. heterophylla*, and leaflets which are longer but not wider than those of *B. heterophylla*. Leaves of 'Moonglow' are mid-green, while leaves of *B. heterophylla* have some anthocyanin colouration. Young stems of 'Moonglow' lack anthocyanin unlike young stems of *B. heterophylla*.

Variety: 'Cameo' Application No. 90/094 Accepted: 10 October 1990 Applicant: Sunglow Flowers Pty Ltd, of Cannington, Western Australia.

#### Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: an upright, bushy shrub; bell shaped flowers composed of white petals with pale pink stripes; and pale pink anthocyanin in young stems.

Varieties used for comparison Boronia heterophylla, common form, being the species from which 'Cameo' originated and a commonly grown boronia.

#### Origin

'Cameo' originated on the applicant's property as a mutation of *B. heterophylla* in October 1987. The original mutation was cultured and multiplied by tissue culture to form the variety 'Cameo'. Selection was on the basis of flower colour.

Morphology — see comparison tables. 'Cameo' is an upright bushy perennial, which flowers from approximately mid September to mid October.

Flowers of 'Cameo' are white with a pink stripe at the tip of the back of the petals while flowers of *B. heterophylla* are pink. Filaments of 'Cameo' are pale pink compared to the dark pink filaments of *B. heterophylla*. Both varieties show anthocyanin colouration in young stems, however this is darker in *B. heterophylla* than 'Cameo'. Leaves of 'Cameo' are shorter than *B. heterophylla*, while leaflets of 'Cameo' are of similar length but narrower than leaflets of *B. heterophylla*.



Flowers of 'Cameo' (left) and B. heterophylla (right). (Photograph supplied by applicant)

# Table of Comparison of Boronia Varieties (\* = variety used for comparison)

	'Moonglow'	'Cameo'	*B. heterophyll
PETAL COLOUR	white	white, pink stripe	pink
RHS No.	155D	155D 578	57B
ANTHOCYANIN	COLOUR IN	YOUNG ST	ГЕМ
	pale-green	pink	red
RHS No.	144A	_	184A
LEAF LENGTH			
mean	47.3 mm	33.3 mm	37.9 mm
range	36-56	27-44	29-46
std. deviation	5.4	4.3	5.1
LEAFLET LENGT	H		-
mean	24.5 mm	15.8 mm	17.2 mm
range	18-31	13-21	13-20
std. deviation	3.2	2.1	2.0
LEAFLET WIDTH			
mean	1.8 mm	1.5 mm	1.9 mm
range	1.3-2.4	1.3-1.8	1.1-2.3
std. deviation	0.3	0.1	0.3

# OAT (Avena sativa)

Variety: 'Cleanleaf' Application No. 90/090

Accepted: 19 September 1990

Applicant: Crop and Weed Sciences Department, North Dakota State University, of North Dakota,

USA.

Australian Agent: Pacific Seeds Pty Ltd, of Toowoomba, Queensland.

#### Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a tall, late spring forage oat; long rachis; absence of hairs at the base of the lemma; short seed; possession of the *Puccinia coronata fsp aveneae* (crown rust) resistance genes Pc-38 and Pc-39 and resistance against crown rust races 264 and 241; possession of the pg-a Puccinia graminis aveneae (stem rust) resistance complex.

Varieties used for comparison

'Stout', 'Algerian', 'Minhaffer' and 'Camellia', being commonly grown varieties of forage oat in Australia.

Comparative Growing Trials

All characteristics and comparisons below are from comparative growing trials conducted at Kingsthorpe, Queensland. The trial was sown in March 1989 at a rate of 40 kg per hectare, and consisted of 2 replicates. MAP fertilizer was applied, at sowing, at a rate of 30 kg per hectare. The plots consisted of 4 rows, spaced 15-75cm apart. Forage cuts were taken on 24 May, 28 June, and 15 September 1989.

Plants were sown in disease screening/observation nurseries in single 5m long rows on 15/1/90 in Toowoomba. Reactions to crown rust and stem rust infection were observed on 6/3/90. 'Cleanleaf' was also tested at the Plant Breeding Institute, Castle Hill, against crown rust races 264 and 241, and against stem rust races 11 and 20.

Origin

The breeder is Professor M McMullen of North Dakota State University. 'Cleanleaf' results from the cross of lines ND78A211 and ND78D316. The final cross which produced the population from which 'Cleanleaf' was selected was made in the greenhouse in autumn 1978 in North Dakota. Single panicles from field grown F2 plants exhibiting resistance to stem and crown rust were harvested and seed from these panicles planted in the greenhouse. These plants were inoculated with critical crown rust races to detect the presence of crown rust resistance genes Pc-38 and Pc-39, and with stem rust races to detect the presence of the pg-a stem rust resistance gene complex. Selected plants were grown to maturity. Further selection occurred and the line originated from an F<sub>5</sub> planting in a screening nursery in 1981, 'Cleanleaf' was entered in the 1984 International Oat Rust Nursery.

Mr Geoffrey Smart of Pacific Seeds Pty Ltd, Toowoomba, identified 'Cleanleaf' from this Nursery. Growing trials conducted at the Temora Agricultural Research and Advisory Station showed its resistance to crown rust and stem rust in Australian locations.

Morphology — see comparison tables. 'Cleanleaf' is a very late maturing oat variety. The late maturity is determined by a photoperiod requirement rather than the vernalization requirement of 'Algerian' and 'Camellia'. In 'Cleanleaf', the first leaf below the flag leaf is significantly longer and wider than in 'Stout', but of similar length and width to 'Algerian'. Hairless

glumes are present in 'Cleanleaf' which are longer than half the lemma, as in all the comparative varieties. There are no hairs on the base of the lemma in 'Cleanleaf' and 'Minhaffer', unlike 'Camellia' and 'Algerian'. Seeds of 'Cleanleaf' are ovate, as in 'Camellia' and 'Minhaffer', while seeds of 'Algerian' and 'Stout' are elongated.

The reactions of 'Cleanleaf' when inoculated with crown rust races 264 and 241 were fleck necrotic, and fleck, indicating resistance. Seedling reactions when inoculated with stem rust races 11 and 20 also indicated resistance.

#### Table of Comparison of Oat Varieties

(\* = varieties used for comparison)

	'Cleanleaf'	*'Stout'	*'Camellia'	*'Minhaffer'	*'Algerian
MATURITY (50% of	of heads fully emer	ged)			
	very late	early	late	early	late
MATURITY DATE	AT KINGSTHORPE	QLD, (date sown	15/5/89)		
	16/10/89	28/9/89	1/10/89	28/9/89	8/10/89
PLANT HEIGHT					
mean	105.1 cm	84 cm	83.5 cm	87.4 cm	85 cm
range	88-124	53-110	71-95	72-106	70-93
std. deviation	8.4	9.9	6.4	7.8	5.9
RACHIS LENGTH					
mean	22.9 cm	17.6 cm	14.5 cm	20.3 cm	16.1 cm
range	14.2-36	10-23	8.3-19.5	14-29	12-23.9
std. deviation	4.5	4.3	2.6	3.6	2.5
SEED LENGTH					
mean	7.5 mm	8.6 mm	8.5 mm	8.4 mm	9.1 mm
range	5-10	6-10	6-11	7-10	7-11
std. deviation	1.0	0.9	0.8	0.8	1.0
BASAL HAIRS OF	N LEMMA				
	absent	present	present	absent	present
CROWN RUST RE	SISTANCE (0 = fie	ld resistance, 4 =	susceptibility)		
6/3/90	0	3	3	3-4	4
STEM RUST RESI	ISTANCE (0 = field	resistance, 4 = s	usceptibility)		
6/3/90	0	4	4	4	4

# KANGAROO PAW (Anigozanthos hybrid)

**Comparative Growing Trials** 

All characteristics and comparisons below are from growing trials conducted at Western Flora Nursery, Coorow, Western Australia, from early June 1990 to mid October 1990. Plants were propagated by tissue culture and grown in shadehouse conditions in a standard potting mix. Plants received watering and fungicide controls as needed. Measured characteristics are based on 20 random measurements from each variety.

Variety: 'Masquerade' Application No. 90/111 Accepted: 30 October 1990

Applicant: Multiplant Pty Ltd, of Coorow, Western Australia.

#### Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a

dwarf growth habit; an early flowering season; light green upright leaves; flower with a green perianth which is constricted medially; a yellow ovary covered with red hairs; and a style which is longer than the anthers.

#### Varieties used for comparison

Anigozanthos bicolor common form, a parent of 'Masquerade', and A. gabrielae common form, a species similar in flower colour to 'Masquerade'.

#### Origin

'Masquerade' was bred by Multiplant Pty Ltd of Coorow, Western Australia. 'Masquerade' arises from the controlled pollination of A. bicolor by A. humilis. Seeds were germinated and a seedling selected for development on the basis of growth habit, uniformity, vigor and flower colour. Subsequent plants have been propagated asexually by tissue culture.

Morphology — see comparison tables. 'Masquerade' is a dwarf kangaroo paw with unbranched flower stems. Leaf attitude in 'Masquerade' is upright, as in A. gabrielae and A.

bicolor. Leaf margins of 'Masquerade' and A. gabrielae are slightly pubescent, while margins of A. bicolor are pubescent.

'Masquerade', A. gabrielae and A. bicolor have a similar number of flowers per inflorescence. 'Masquerade' and A. gabrielae have approximately 3 times the number of inflorescences per plant compared to plants of A. bicolor. Flowers of 'Masquerade', A. gabrielae and A. bicolor have a green perianth covered with green hairs and a yellow ovary covered with red hairs. Flowers can be distinguished by perianth tube length and style length. The perianth tube in 'Masquerade' is longer than the perianth tube of A. gabrielae, but shorter than in A. bicolor. Styles in 'Masquerade' and A. bicolor are longer than the anthers while styles in A. gabrielae are level with the anthers.

Variety: 'Uluru Sunset' Application No. 90/110 Accepted: 30 October 1990 Applicant: Multiplant Pty Ltd, of Coorow, Western Australia.

#### Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a dwarf growth habit; late flowering season; medium green arching leaves; perianth tube flared distally; a green perianth tube which is covered with redpurple hairs; and a yellow ovary covered with red hairs.

#### Varieties used for comparison

Anigozanthos viridis common form and A. manglesii common form, parents of 'Uluru Sunset'.

#### Origin

'Uluru Sunset' was bred by Multiplant Pty Ltd of Coorow, Western Australia. 'Uluru Sunset' arises from the controlled pollination of *A. viridis* by *A. manglesii*. Seeds were germinated and a seedling selected for development on the basis of flower colour and suitability as a cut flower. Subsequent plants have been propagated asexually by tissue culture.

Morphology — see comparison tables. 'Uluru Sunset' is a dwarf, late flowering variety. Leaf attitude in 'Uluru Sunset' is arching as in *A. viridis* and *A. manglesii*. Leaf margins are slightly pubescent in 'Uluru Sunset' and the comparative varieties.

'Uluru Sunset' has leaves which are shorter and narrower than leaves of *A. manglesii* and of similar length and width to leaves of *A. viridis*. Flowers of 'Uluru Sunset' can be distinguished from flowers of *A. manglesii* and *A. viridis* by the red-purple hairs covering the green perianth tube. *A. manglesii* and *A. viridis* flowers have green hairs covering the green perianth tube. The yellow ovary in 'Uluru Sunset' and *A. manglesii* is covered by red hairs, while the yellow-green ovary of *A. viridis* is covered by green hairs.



Inflorescences of A. gabrielae (left), 'Masquerade' (centre) and A. bicolor (right) (Photograph supplied by applicant)



Inflorescences of A. viridis (left), 'Uluru Sunset' (centre) and A. manglesii (right). (Photograph supplied by applicant)

# Table of Comparison of Kangaroo Paw Varieties (\* = varieties used for comparison)

	'Masquerade'	'Uluru Sunset'	*A. gabrielae	*A. bicolor	*A. viridis	*A. manglesi
PLANT HEIGHT						
mean	28.8 cm	50.7 cm	20.8 cm	36.3 cm	66.8 cm	100.9 cm
range	18-37.5	33-64	8.4-29.2	20-46.5	48-86.5	91-111
std. deviation	6.1	6.7	6.9	8.3	8.3	12.1
LEAF LENGTH						
mean	13.1 cm	19.7 cm	9.1 cm	14.9 cm	21.3 cm	32.7 cm
range	6-20	15-25.7	6-13	6.4-25.6	10.1-32.5	24-41.5
std. deviation	4.9	3.0	2.5	5.8	6.6	4.2
LEAF COLOUR	light green	medium green	medium green	medium green	light green	light green
RHS No.	137B	146A	189A	189A	137A	137D
LEAF WIDTH						
mean	4.6 mm	5.9 mm	3.5 mm	5.1 mm	4.8 mm	9.6 m/m
range	2-8	3-8	2-5	3-8	3-7	8-13
std. deviation	2.1	1.6	0.8	1.4	1.4	1.9
FLOWER — ANTHER POS	ITION					
	transverse	transverse	surrounding	transverse	transverse	transverse
	arc (2 levels)	arc (2 levels)	(2 levels)	arc (1 level)	arc (3 levels)	arc (3 levels)
FLOWER TUBE OUTLINE						
	constricted	flared	flared	flared	constricted	broadening
	above	distally	distally	distally	above	evenly
PERIANTH TUBE LENGTH		-		-		
mean	30.7 mm	57.6 mm	21.7 mm	53.8 mm	50.1 mm	53.8 mm
range	29-32	55-61	20-24	49-59	42-55	51-57
std. deviation	1.0	2.2	1.2	2.1	4.5	1.6
PERIANTH TUBE WIDTH				_		
mean	7.7 mm	15.6 mm	4.6 mm	5.5 mm	13.3 mm	18.6 mm
range	7-9	14-16	3-5	5-6	11-15	17-20
std. deviation	0.6	0.7	0.6	0.5	1.3	0.8
PERIANTH LOBES	fully	fully	fully	fully	half	fully
	reflexed	reflexed	reflexed	reflexed	reflexed	reflexed
NFLORESCENCES PER PI	_ANT					
mean	19.6	3.0	25.8	7.8	10.0	6.8
range	13-31	2-5	11-37	4-14	6-13	5-8
std. deviation	6.2	1.0	8.9	4.3	2.7	1.3
COLOUR OF OPENED FLO	WER TUBES					
colour	green	green	green	green	green	green
RHS No.	144B	143A	144C	143C	143C	143A
COLOUR OF HAIRS ON TU	JBE					
colour	green	red/purple	green	yellow	green	green
RHS No.	139A	59A	147A	15B	132A	93A
COLOUR OF OVARY						
colour	yellow	yellow	yellow	yellow	yellow	yellow
RHS No.	4D	11A	4D	4B	150C	3D
COLOUR OF HAIRS ON O	VARY					
colour	red	red	red	red	green	red
RHS No.	53A	53A	60A	53B	ar v v v	

### SERRURIA (Serruria florida x rosea)

Variety: 'Sugar 'n' Spice' Application No. 90/097

Accepted: 10 October 1990

Applicant: Proteaflora Enterprises Pty Ltd, of

Monbulk, Victoria

#### Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a small, upright bushy shrub; elliptic involucral bracts with red-purple veins and off-white surround; bracts which reflex as the inflorescence ages; an early commencement to flowering; and small, medium green, finely dissected oblanceolate to rhomboid leaves.

#### Varieties used for comparison

Serruria florida 'Blushing Bride', a variety similar to 'Sugar 'n' Spice'.

#### **Comparative Growing Trials**

All characteristics and comparisons below are from comparative growing trials conducted outdoors at Monbulk, Victoria. Vegetative and young flower characteristics were taken from a trial established in May 1990 from a random sample of 20 plants propagated by cuttings in February to April 1989. Open inflorescence characters of 'Blushing Bride' and aged inflorescence characters of both varieties were taken from 20 two year old plants. All plants were grown in potting mix in 15cm pots with slow release fertiliser added.

#### Origin

The breeder is Mr Andrew Mathews of Proteaflora Enterprises Pty Ltd. 'Sugar 'n' Spice' arose as a chance seedling of hybridisation of *S. florida x rosea*. Selection of progeny of the cross was on the basis of flower colour.

#### Morphology — see comparison tables.

'Sugar 'n' Spice' is a small, perennial, upright bushy shrub with terminal inflorescences opening in late winter and spring. The inflorescences are borne either singly or in a loose cluster.

'Sugar 'n' Spice' has a similar number of stems per plant to 'Blushing Bride' but a greater number of flowering stems per plant than 'Blushing Bride'. 'Sugar 'n' Spice' has a longer flowering period than 'Blushing Bride', with flowering of 'Sugar 'n' Spice' beginning approximately 2 weeks earlier than 'Blushing Bride'. Flowers of 'Sugar 'n' Spice' have pink venation on a white background, while flowers of 'Blushing Bride' are white. Involucral bracts of 'Sugar 'n' Spice' are shorter but of similar width to those in 'Blushing Bride'. As the inflorescence of 'Sugar 'n' Spice' ages, the involucral bracts reflex to completely expose the florets. This does not occur in 'Blushing Bride'.



Inflorescences of 'Sugar 'n' Spice' (top) and 'Blushing Bride' (bottom). Left to right — point of opening, semi-mature, aged. (Photograph supplied by applicant)

#### Table of Comparison of Serruria Varieties

(\* = variety used for comparison)

	'Sugar 'n' Spice'	*'Blushing Bride
FLOWERING S April 1989)	SEASON (plants	propagated Feb —
before 1/9/90	3%	0%
1/9/90-14/9/90	39%	0%
after 14/9/90	58%	100%
FLOWERING S	STEMS PER PLA	ANT
mean	4.7	3.6
range	3-7	0-8
std. deviation	1.5	2.2
	BRACT COLOU	R — RHS No. at
opening:	1051	4000
midrib	185A	160B
venation	63A	-
background	155A	155A
day 14:		
midrib	185A	162C
venation	54A	-
background	62A	155A
aged flower:		
midrib	185A	162C
venation	63A	_
background	63B	155C
INVOLUCRAL	BRACT SHAPE	
	elliptic	narrow elliptic
INVOLUCRAL	BRACT LENGTH	
mean	23.1 mm	32.6 mm
range	21-27	30-38
std. deviation	2.0	2.6
LEAF LENGTH		
mean	55.0 mm	73.8 mm
range	37-70	58-92
std. deviation	7.9	7.8

# WEEPING CHERRY (Prunus subhirtella)

Variety: 'Winter Sun' Application No. 90/098

Accepted: 10 October 1990

Applicant: Russell Sebire, of Wandin North, Victoria.

#### Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters; a weeping habit when used as a scion; broad elliptic and cuspidate leaves; white petals tinged with pink; and a long flowering period with a peak occurring in winter.

#### Varieties used for comparison

Prunus subhirtella 'Rosea', the mother plant.

#### Comparative Growing Trials

All characteristics and comparisons below are from comparative outdoor growing trials conducted at Wandin North, Victoria. Twenty plants were selected at random from rows of stock plants grafted to produce a weeping habit. Plants were growing in red krasnozem soil. Measurements were made from these plants and from two mature plants of each variety.



Flowers of 'Winter Sun'. (Photograph supplied by applicant)

#### Origin

'Winter Sun' arose as a chance seedling of *Prunus subhirtella* 'Rosea' on the applicant's property. A scion from this seedling was grafted to *Prunus avium* 'Mazzard' stock to produce a single weeping tree. Two further generations have been produced.

Morphology — see comparison tables. 'Winter Sun' is a weeping cherry when used as a scion. Young shoots are pubescent with slight anthocyanin pigmentation. Leaves of 'Winter Sun'

anthocyanin pigmentation. Leaves of 'Winter Sun' and 'Rosea' are stipulate, broad elliptic, cuspidate at the apex and serrulate at the margins. Flowers of both 'Winter Sun' and 'Rosea' occur in small umbellike clusters.

'Winter Sun' differs from 'Rosea' in having shorter and broader leaves and less pink pigmentation in the petals. 'Winter Sun' has a longer flowering period than 'Rosea'. The peak flowering of 'Winter Sun' occurs about two months earlier than peak flowering of 'Rosea'. Leaf drop of 'Winter Sun' tends to be later than leaf drop of 'Rosea'.

# Table of Comparison of Weeping Cherry Varieties

(\* = variety used for comparison)

'Winter Sun'		"'Rosea"	
FLOWERING SEAS	ON		
1989			
start of flowering	20.5.89	15.9.89	
end of flowering	5.10.89	10.10.89	
1990	10 5 00	10.000	
start of flowering	12.5.90	12.9.90	
end of flowering	10,10.90	12.10.90	
LEAF LENGTH			
mean	80.6 mm	105.8 mm	
range	72-87	93-116	
std. deviation	4.8	6.8	
LEAF WIDTH			
mean	44.4 mm	36.6 mm	
range	36-50	32-39	
std. deviation	3.4	1,8	
LENGTH:WIDTH RA	TIO		
mean	1.8	2.9	
range	1.7-2.1	2.5-3.2	
std. deviation	0.1	0.2	
PETIOLE LENGTH		·	
mean	13.1 mm	14.5 mm	
range	11-18	11-17	
std. deviation	1.7	1.5	
LEAF FALL 1990	8.6.90 — 15.6.90	1.6.90 - 8.6.90	

### ROSE (Rosa hybrida)

Variety: 'Meilivar' (commercial synonym 'Gina Lollobrigida') Application No. 90/098

Accepted: 30 October 1990

Applicant: **SNC Meilland et Cie**, of Antibes, France. Australian Agent: **Ross Roses**, of Willunga, South Australia.

#### Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a yellow bedding rose; double blooms with more than 50 medium sized petals; yellow filaments and style; pointed buds; thorns concave above and deep concave below; and absence of thorns on the pedicel.

#### Varieties used for comparison

'Gold Bunny', a rose of similar colour to 'Meilivar', and 'Peace' as a well known yellow-blend variety.

#### **Comparative Growing Trials**

All characteristics and comparisons below are from comparative trials conducted at Ross Roses, Willunga, South Australia. Six plants of each variety were grown in clay loam soil with spacing of 70-90 cm between plants. Plants were at least 2 years old and were pruned in August 1989. Measured characteristics were taken in April 1990 and are based on 20 measurements from each variety.

#### Origin

The breeder is Alaine, Antoine Meilland of SNC Meilland et Cie. 'Meilivar' arises from the controlled pollination of 'Meidragelac' by 'Meikinosi'. Plant Variety Rights have been applied for in France, Belgium, Great Britain, Italy, Switzerland and the USA.

#### Morphology - see comparison tables.

'Meilivar' is a bedding rose of upright to bushy habit. It has glossy, dark green leaves with rounded bases. The terminal leaflet of 'Meilivar' is slightly concave in cross section. Shoots of 'Meilivar' and 'Gold Bunny' show red anthocyanin, while shoots of 'Peace' show purple anthocyanin.

Flowers of 'Meilivar' are flat convex and have a medium perfume. 'Meilivar' flowers have more than 50 petals, while flowers of 'Gold Bunny' and 'Peace' have 26-50 petals. Petals of all varieties show medium reflexing and undulation. Sepal extensions are weak in 'Meilivar' and 'Gold Bunny' and absent in 'Peace'. Seed vessels in 'Meilivar', 'Gold Bunny' and 'Peace' are pitcher shaped. 'Meilivar' and 'Gold Bunny' seed vessels are of medium size while those of 'Peace' are large.



Characteristics of 'Meilivar'. (Photograph supplied by applicant)

#### Table of Comparison of Rose Varieties

(\* = varieties used for comparison)

	'Meilivar'	"Gold Bun	ny'*'Peace'
FLOWER COLOUR GROUP	medium yellow	medium yellow	yellow blend
PETAL COLOUR	_		
midzone outside RHS	3B	3A	2D
midzone inside RHS	3B	3A	2C
margin outside RHS	3C	3B	24C
margin inside RHS	3B	3B	24D
FLOWER DIAMETER			
mean	96 mm	93 mm	107 mm
range	77-115	85-110	B9-120
std. deviation	8.6	7.3	5.6
TERMINAL LEAFLET I	ENGTH		
mean	59 mm	71 mm	82 mm
range	45-68	62-79	69-88
std. deviation	3.8	3.4	4.8
TERMINAL LEAFLET	WIDTH		
mean	46 mm	49 mm	62 mm
range	35-49	43-54	52-66
std. deviation	3.6	4.5	2.9
STAMEN — COLOUR	OF FILAMENT		
	yellow	yellow	bronze
STIGMA IN RELATION			
	below	below	same level

## SHRUBBY STYLO (Stylosanthes scabra)

Comparative Growing Trials

Morphological data were obtained in a field trial at Samford in 1990. Seedlings were transplanted at 8 weeks of age, using 'Weed-mat' to prevent weed ingress. Field spacing was 0.5m x 1.5m, with a single row of 8 plants of each generation in 2 row plots and 6 replicates. Plots were irrigated for establishment and measurements made on all plants. Disease resistance was addressed according to the method described in Chakraborty S, Cameron D, Irwin J and Edye L (1988): Quantitatively expressed resistance to anthracnose (Colletotrichum gloeosporioides) in Stylosanthes scabra. Plant Pathology 37, 529-37.

Variety: 'Bahia' Application No. 90/112

Accepted: 30 October 1990

Applicant: CSIRO Division of Tropical Crops &

Pastures, of Brisbane, Queensland

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: resistant to races 1, 3, and 4 of Colletotrichum gloeosporioides causing Type A anthracnose disease; plants of medium height with dense tertiary branching; relatively long terminal leaflets; and a midseason flowering time.

Varieties used for comparison 'Recife', 'Feira', 'Fitzroy', 'Seca'

Origin

The breeder is Dr D F Cameron, CSIRO Division of Tropical Crops and Pastures, Brisbane.

'Bahia' is an  $\rm F_5$  selection of the cross Q10042 x CPI 93116. Initially 1400  $\rm F_2$  plants from a diallel cross among eight plants were screened for agronomic characters. F<sub>3</sub> and F<sub>4</sub> selections were screened as seedlings for resistance to anthracnose disease and in the field for flowering time and yield. Selection in the F<sub>2</sub> generation was based on anthracnose resistance (in glasshouse and field tests) and on yield performance (in row or spaced plant trials and as mixtures in small seeded plots for a three year period), 'Bahia' was finally selected as the best of four lines derived from the highly resistant parent CPI 93116 on the basis of the resistance of test crosses to the susceptible cultivar 'Fitzroy'.

Morphology — see comparison tables 'Bahia' is a shrubby stylo resistant to Type A anthracnose disease. 'Bahia' flowers earlier than 'Seca' and slightly later than 'Recife'. Plants of 'Bahia' are shorter than 'Seca' or 'Recife'. 'Bahia' has denser tertiary branching than 'Seca' or 'Fitzroy'. Leaves of 'Bahia' are shorter than 'Feira' but longer than 'Seca'.

Agronomy

'Bahia' is to be used in mixture with the varieties 'Recife' and 'Feira' under the name 'Siran'

Variety: 'Recife' Application No. 90/113

Accepted: 30 October 1990

Applicant: CSIRO Division of Tropical Crops & Pastures, and the Minister for Primary Industries in right of the crown for and on behalf of the state of

Queensland, of Brisbane, Queensland

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: resistant to races 1 and 4 of Colletotrichum gloeosporioides causing Type A anthracnose disease; early-midseason flowering; plants of medium height; dense tertiary branching; and relatively long terminal leaflets.

Varieties used for comparison 'Bahia', 'Feira', 'Fitzroy', 'Seca'.

Origin

The breeders are Mr I B Staples, Queensland Department of Primary Industries, Mareeba, and Dr. D F Cameron, CSIRO Division of Tropical Crops and Pastures, Brisbane. 'Recife' is a selection from a genetically variable population of 'Seca'.

Progenies from 250 single plant selections for early flowering and anthracnose resistance (made in a field of 'Seca' near Mareeba in 1983) were inoculated in a glasshouse with race 3 of Colletotrichum gloeosporioides (Type A). The most susceptible 20% of progenies were rejected and the remaining 200 were transplanted to a row trial at Walkamin in 1984. Flowering, disease and agronomic data were recorded in 1984 and 1985. Seed from the best 6 early flowering progenies was used in a spaced plant comparison with F<sub>4</sub> breeding lines at the Samford and Narayen Research Stations in 1986. Seedlings were first screened for resistance to race 1 of C. gloeosporioides (Type A) in a glasshouse and field plants were scored for flowering time and dry matter yield. A single plant selection from one of 6 'Seca' selections was compared with 51 F<sub>5</sub> selections either individually in row or spaced plant trials, or, as mixtures in small seeded plots for a three year period. 'Recife', derived from the single plant of the 'Seca' selection, was chosen in preference to a selection bred from 'Seca', on the basis of test crosses to the susceptible cultivar 'Fitzroy'.

Morphology — see comparison tables. 'Recife' is an early flowering shrubby stylo of intermediate height. 'Recife' is resistant to races 1 and 4, and moderately resistant to race 3 of Colletotrichum gloeosporioides, which cause Type A anthracnose disease. Leaves of 'Recife' are longer than 'Fitzroy' and 'Seca', but shorter than 'Feira' Plants of 'Recife' are taller than 'Bahia' and 'Feira' but shorter than 'Seca'.

Agronomy

'Recife' is to be used in mixture with the varieties 'Bahia' and 'Feira' under the name 'Siran'.

Variety: 'Feira' Application No. 90/114

Accepted: 30 October 1990

Applicant: CSIRO Division of Tropical Crops &

Pastures, of Brisbane, Queensland

#### Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: resistant to races 1, 3, and 4 of *Colletotrichum gloeosporioides* causing Type A. anthracnose disease; midseason flowering time; relatively short plants; dense tertiary branching; and long terminal leaflets.

Varieties used for comparison 'Bahia', 'Recife', 'Fitzroy', 'Seca'

#### Origin

The breeder is Dr D F Cameron, CSIRO Division of Tropical Crops and Pastures, Brisbane.

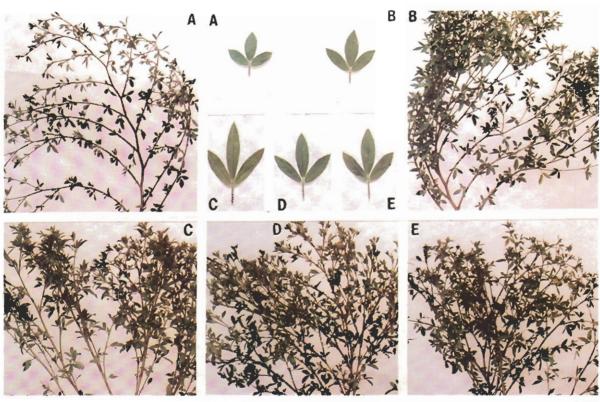
'Feira' is an  $F_5$  selection of the cross Q10042 x CPI 55860. Initially 1400  $F_2$  plants from a diallel cross among eight parents were screened for agronomic characters and  $F_3$  and  $F_4$  selections were screened as seedlings for resistance to anthracnose disease and in the field for flowering time and yield. Selection in the  $F_5$  generation was based on anthracnose resistance in glasshouse and field tests and yield performance in row or spaced plant trials and as mixtures in small seeded plots for a three year period.

Morphology — see comparison tables.

'Feira' is a short, shrubby stylo resistant to races 1, 3 and 4 of *Colletotrichum gloeosporioides*. 'Feira' flowers earlier than 'Seca' but later than 'Recife'. 'Feira' has a greater number of tertiary branches than 'Fitzroy' and 'Seca'. The terminal leaflet of 'Feira' is longer than in 'Bahia', 'Recife', 'Fitzroy' and 'Seca'

#### Agronomy

'Feira' is to be used in mixture with the varieties 'Recife' and 'Bahia' under the name 'Siran'.



Individual leaves and branches of five varieties of Stylosanthes scabra: 'Seca' (A), 'Fitzroy' (B), 'Feira' (C), 'Bahia' (D) and 'Recife' (E). (Photograph supplied by applicant)

# Table of Comparative Varieties of Shrubby Stylo (\* = varieties used for comparison) (+ = varieties identified by number code)

	'Bahia'(1)+	'Recife'(2)+	'Feira'(3)+	''Fitzroy'(4)+	*'Seca'(5)+
LENGTH OF TERMINAL LEAFLET	14.0				
mean	2.9 cm	2.9 cm	3.2 cm	2.6 cm	2.2 cm
range	2.0 - 3.8	2.0 - 3.8	2.2 - 4.5	2.0 - 3.6	1.6 - 3.3
standard deviation	0.3	0.31	0.37	0.27	0.25
sig. different from ( $P \le 0.01$ )	3, 4, 5	3, 4, 5	1, 2, 4, 5	1, 2, 3, 5	1, 2, 3, 4
LEAF LENGTH/BREADTH RATIO					
mean	2.5	2.4	2.7	2.3	2.0
range	1.6 - 3.5	1.8 — 3.5	2.1 — 3.8	1.7 3.1	1.6 2.7
standard deviation	0.28	0.26	0.30	0.25	0.17
sig, different from $\{P \le 0.01\}$	3, 4, 5	3, 5	1, 2, 4, 5	1, 3, 5	1, 2, 3, 4
	-		., -, ., •		
MAIN STEM THICKNESS	1.2	17	1 1 am	1.1	0.0
mean	1.2 cm	1.2 cm	1.2 cm	1.1 cm	0.9 cm
range	0.7 — 1.6	0.7 - 1.6	0.9 1.6	0.8 — 1.4	0.6 — 1.2
standard deviation	0.11	0.12	0.15	0.1	0.11
sig. different from (P ≤ 0.01)	5	5	5	5	1, 2, 3, 4
LONGEST STEM					
mean	77.2 cm	78.8 cm	75.7 cm	73,6 cm	102.5 cm
range	67 — 91	69 - 103	63 - 92	61 - 83	89 - 130
standard deviation	5.14	6.1	5.49	4.52	8.9
sig. different from $\{P \le 0.01\}$	4, 5	4, 5	4, 5	1, 2, 3, 5	1, 2, 3, 4
HEIGHT	CO F	00.4	00.7	04.0	75.0
mean	63.5 cm	68.4 cm	60.7 cm	64.0 cm	75.2 cm
range	43 — 80	51 — 85	48 — 74	51 — 79	46 — 98
standard deviation	6.91	7.24	5.53	6.57	11.67
sig. different from ( $P \le 0.01$ )	2, 5	1, 3, 5	2, 5	5	1, 2, 3, 4
DAYS TO FIRST FLOWER (after 1 February	1990)				
mean	50	45	53	50	68
range	25 - 88	25 - 67	25 — 88	39 - 74	60 - 81
standard deviation	9.3	8.8	9.1	5.8	5.6
sig. different from (P $\leq$ 0.01)	2, 5	1, 3, 5	2, 5	5	1, 2, 3, 4
NO. OF TERTIARY BRANCHES (on first 10	cm of secondary hra	nches helow 10 cm	}		
mean	9.5	8.8	9,2	5.0	1.0
range	4 — 14	5.5 5 — 17	3 — 15	1 12	0 — 3
standard deviation	2.65	2.30	2.24	1.79	0.83
sig. different from (P ≤ 0.01)	4, 5	4, 5			
aig. diverent from (r. 20.01)	4, 0		4, 5	1, 2, 3, 5	1, 2, 3, 4
ANTHRACNOSE DISEASE (rating 0-9), TYP	E A, RACE I				
<del>-</del>	1.7	2.0	1.2	8.8	0.4
ANTHRACNOSE DISEASE (rating 0-9), TYP	E A. RACE 3				
	1.9	2.8	1.2	8.7	2.8
ANTHRACNOSE DISEASE (rating 0-9), TYP					
ARTHRACINOSE DISERSE (rading 0-3), TTF	1.4	1.8	1.0	4.5	0.2
NUMBER OF SEEDS (000'S) PER KG					
mean	436	420	395.6	427.8	655.6
	365-534	347.2-496.4	339-523		
range standard deviation	44.3	43.4		400.3-473.2	601.6-775.8
standard deviation sig. different from (P ≤ 0.01)		43.4 3, 5	44.1 1, 4, 5	13.2 3, 5	48.8
SID DIDEFERT FROM (2 S. U.U.L.)	3, 5	.5. 5	1 4 5	3 h	1, 2, 3, 4

# **Objections**

**FORMAL OBJECTIONS** (S20 of the PVR Act) against any of the above applications can be lodged by a person who:

a) considers their commercial interests would be affected by a grant of PVR to the applicant; AND

b) considers that the provisions of S26 cannot be met

A fee of \$200 is payable at the time of lodging a formal objection and \$70/hour will be charged if the examination of the objection by the PVR Office takes more than 2 hours.

Comment: Any person not falling into the above category may make comment on the eligibility of any of the above applications for PVR. There is no charge for this.

A person submitting a formal objection or a comment must provide supporting evidence to substantiate the claim. A copy of the submission will also be sent to the applicant and the latter will be asked to show why the objection should not be upheld.

All formal objections and comments relating to the above applications must be lodged with the Registrar by close of business on 30 June, 1991.

# b) Descriptions to be Finalised

Descriptions for the Journal are being finalised for the following applications. The six month period for comment or formal objection will not begin until the full descriptions are finalised and published in the Journal.

# CARNATION (Dianthus caryophyllus)

Applicant: Van Staaveren B V, of Aalsmeer, Holland

'Stacorpi' Application No.89/102

Accepted: 12 September, 1990

'Stalipink' Application No.89/109

Accepted: 12 September, 1990

'Stapisou' Application No.89/112

Accepted: 12 September, 1990

'Starotang' Application No.89/114

Accepted: 12 September, 1990

'Stayelpa' Application No.89/119

Accepted: 12 September, 1990

'Statropur' Application No.89/120

Accepted: 12 September, 1990

# ROSE

## (Rosa hybrida)

Applicant: **SNC Meilland et Cie**, of Antibes, France Agent in Australia: **P Lee of TVR Propagators Pty Ltd**, of Rosevears, Tasmania

'Meijaudiair' Application No.90/084

Accepted: 27 August, 1990

Applicant: Pan-Am Northwest Inc of Surrey,

Canada

Agent in Australia: Tesselaar Nominees of Silvan,

Victoria

'Noatraum' Application No. 90/091

Accepted: 6 September, 1990

Applicant: Universal Plants S.A. of Le Cannet der

Maures, France

Agent in Australia: P Lee of TVR Propagators Pty

Ltd, of Rosevears, Tasmania

'Keinoumi' Application No.90/085

Accepted: 22 October, 1990

Applicant: Select Roses B V of de Kwakel,

Netherlands

Agent in Australia: Grandiflora Nurseries Pty Ltd of

Cranbourne, Victoria

'Tineke' Application No. 90/096

Accepted: 16 October, 1990

# COUCH GRASS (Cynodon dactylon)

Applicant: Jacklin Seed Company, of Post Falls, Idaho, USA

'Cheyenne' Application No.90/086

Accepted: 27 August, 1990

# WATTLE (Acacia terminalis)

Applicant: Friendly Beaches Pty Ltd of Bicheno,

Tasmania

'Tasmanian Pink' Application No. 90/092

Accepted: 13 September, 1990

# PUMPKIN (Cucurbita maxima)

Applicant: Old Dept of Primary Industries of

Brisbane, Queensland

'Redlands Trailblazer' Application No. 90/093

Accepted: 25 September, 1990

#### **STRAWBERRY**

(Fragaria species)

Applicant: The Regents of The University of California, of Oakland, California, USA

'Capitola' Application No.90/081

Accepted: 7 November, 1990

'Seascape' Application No.90/082

Accepted: 7 November, 1990

#### YELLOW BOX

(Eucalyptus melliodora)

Applicant: CSIRO Division of Entomology of

Canberra, Australian Capital Territory

'Yelloward' Application No. 90/103

Accepted: 6 November, 1990

## **BLAKELY'S RED GUM**

(Eucalyptus blakelyi)

Applicant: CSIRO Division of Entomology of

Canberra, Australian Capital Territory

'Redward' Application No. 90/104

Accepted: 6 November, 1990

#### **RED IRONBARK**

(Eucalyptus sideroxylon)

Applicant: CSIRO Division of Entomology of

Canberra, Australian Capital Territory

'Blackward' Application No. 90/105

Accepted: 6 November, 1990

#### **FUZZY BOX**

(Eucalyptus conica)

Applicant: CSIRO Division of Entomology of

Canberra, Australian Capital Territory

'Woolward' Application No. 90/106

Accepted: 6 November, 1990

### WHITE BOX

(Eucalyptus albens)

Applicant: CSIRO Division of Entomology of

Canberra, Australian Capital Territory

'Whiteward' Application No. 90/107

Accepted: 6 November, 1990

#### **CANDLEBARK**

(Eucalyptus rubida)

Applicant: CSIRO Division of Entomology of

Canberra, Australian Capital Territory

'Candleward' Application No. 90/108

Accepted: 6 November, 1990

#### **KANGAROO PAW**

(Anigozanthos hybrida)

Applicant: Faceys Nursery Pty Ltd of Five Ways,

Victoria

'Milky Way' Application No. 90/099

Accepted: 10 October, 1990

#### NEW ZEALAND CHRISTMAS TREE

(Metrosideros excelsa)

Applicant: W Robinson of Baxter, Victoria

'Midas' Application No. 90/101

Accepted: 30 October, 1990

#### RADERMACHERA

(Radermachera sinica)

Applicant: Leo van der Knapp of Naaidwijk,

Netherlands

Agent in Australia: Redlands Greenhouses Holdings

Pty Ltd, of Redlands Bay, Queensland

'Kaprima' Application No. 90/102

Accepted: 30 October, 1990

#### **CALLISTEMON**

(Callistemon salignus)

Applicant: Stephen Membrey and Rex Trimble of

Faceys Nursery Pty Ltd, Five Ways, Victoria

'Fireball' Application No. 90/115

Accepted: 7 November, 1990

# **Applications Withdrawn**

The following applications have been withdrawn at the request of the applicant. Provisional protection no longer applies to these varieties.

'Frolic' App 'Harmonie' App

Application No.: 89/026 Application No.: 89/079 Application No.: 90/068

'Meichevil' 'Meidiaplou'

Application No.: 90/065

### 2.2 Provisional Protection

The following varieties have provisional protection under S22 of the *Plant Variety Rights Act 1987* since the last issue of the Journal:

'Stacorpi'	Application No. 89/102
'Stalipink'	Application No. 89/109
'Stapisou'	Application No. 89/112
'Starotang'	Application No. 89/114
'Stayelpa'	Application No. 89/119
'Statropur'	Application No. 89/120
'Grasslands Greenstone'	Application No. 90/080
'Capitola'	Application No. 90/081
'Seascape'	Application No. 90/082
'Meijaudiair'	Application No. 90/084
'Keinoumi'	Application No. 90/085
'Cheyenne'	Application No. 90/086
'Magic Fantasy'	Application No. 90/087
'Lavender Fantasy'	Application No. 90/088
'Moonglow'	Application No. 90/089
'Cleanleaf'	Application No. 90/090
'Noatraum'	Application No. 90/091
'Tasmanian Pink'	Application No. 90/092
'Redlands Trailblazer'	Application No. 90/093
'Cameo'	Application No. 90/094
'Tineke'	Application No. 90/096
'Sugar'n'Spice'	Application No. 90/097
'Winter Sun'	Application No. 90/098
'Milky Way'	Application No. 90/099
'Midas'	Application No. 90/101
'Kapima'	Application No. 90/102
'Yelloward'	Application No. 90/103
'Redward'	Application No. 90/104
'Blackward'	Application No. 90/105
'Woolward'	Application No. 90/106
'Whiteward'	Application No. 90/107
'Candleward'	Application No. 90/108
'Meilivar'	Application No. 90/109
'Uluru Sunset'	Application No. 90/110
'Masquerade'	Application No. 90/111
'Bahia'	Application No. 90/112
'Feira'	Application No. 90/113
'Recife'	Application No. 90/114
'Fireball'	Application No. 90/115
	- FF

#### **Provisional Protection Withdrawn**

Provisional protection has been withdrawn under S22(b) of the *Plant Variety Rights Act 1987* for the following variety(ies) which have been sold other than for purposes of S22(b) after the application for PVR was accepted:

'Golden Ruby' (commercial synonym 'Cocktail' Application No 90/071), Cuphea hyssopifolia Applicant: Ronald Grahame, of Palmerston North, Australian Agent: Malcolm Morgan of Macquarie Fields, New South Wales — With effect from 21/11/90 until the examination of the application is completed and PVR is granted or rejected.

## Variation to applications

The following submission has been made for a variation to an application under subsection 19(1) of the *Plant Variety Rights Act 1987* 

Application No. 88/027 (Published in PVJ Vol 1 No 4)

Applicant: Daratech Pty Ltd., Variety: 'Moss Early' (Vitis vinifera) Variation: Change name to 'Moss Sultana'

#### Corrigenda

#### **IMPATIENS**

(Impatiens hawkeri hybrid)

In Vol 3 No. 2 of June, 1990, page 30, the variety name for Application No. 90/031 was given as 'Patula'. This should be corrected to 'Petula' and provisional protection covers the variety under that name.

#### **POTATO**

(Solanum tuberosum)

Variety: 'Morene' Application No. 88/005

In Vol 3 No. 2 of June, 1990, page 6, the heading should read Applicant: S. Brunia of Kraggenburg, Netherlands

Agent for Australia: Eurogrow Potatoes Ltd of Christchurch, New Zealand

# CREEPING BLUEGRASS (Bothriochloa insculpta)

Variety: 'Bisset' Application No. 90/021

In Vol 3 No. 2 of June, 1990, page 9, the caption under the photograph should read —

Comparison between cv. 'Hatch' (far left, far right) and cv 'Bisset' (centre left, centre right) showing glands on the leaf sheath of cv 'Hatch' (far left) and long hairs on the surface at the base of the leaf blade of cv 'Bisset' (centre right).

# **APPENDIX 1**

# Plant Variety Rights not to be granted in respect of varieties previously sold

- 14. Where an application is made for plant variety rights in respect of a plant variety, those rights shall not be granted if there has been a sale of a plant, or reproductive material of a plant, of that variety by, or with the consent of, the breeder or a breeder, or a successor of the breeder or of a breeder, of the variety, and
  - (a) the sale took place in Australia before the making of the application;

or

(b) the sale took place in another country earlier than 6 years before the making of the application.

- (ii) any test growing of the variety carried out in Australia would probably demonstrate that the variety has that characteristic; and
- (iii) if a test growing of the variety in Australia that would be sufficient to demonstrate whether the variety has that characteristic were to be carried out, the test growing would take longer than 2 years.

# **APPENDIX 3**

#### **Fees**

As from 1 July 1990 the following fee schedule applies.

New rates will also apply to fees, not yet charged, for submissions in progress. The new rates reflect the progressive move towards full cost recovery for PVR.

# **APPENDIX 2**

# Characteristics of plant varieties originated outside Australia

- 23. For the purposes of this Act, where a plant variety in respect of which an application has been accepted was originated outside Australia, the variety shall not be taken to have a particular characteristic unless
  - (a) a test growing of the variety carried out in Australia has demonstrated that the variety has that characteristic;
  - (b) the Secretary is satisfied that -
    - (i) a test growing of the variety carried out at a place outside Australia has demonstrated that the variety has that characteristic; and
    - (ii) the test growing of the variety carried out at that place is equivalent to a test growing of the variety carried out in Australia; or
  - (c) the Secretary is satisfied that -
    - (i) a test growing of the variety carried out at a place outside Australia has demonstrated that the variety has that characteristic;

#### **Function**

	\$
Application	400
Examination of application	1400
Copy of application	70
Variation to application	70
Lodging an objection	200
Copy of objection	70
Certificate of PVR	250
Annual renewal fee	250
Request for re-examination	800
(if required)	
Compulsory licence	140
Transfer of rights	140
Issue of publications	8
(other than the PV Journal)	(first 10 pages,
	then 50c/page)
Other work relevant to PVR	70
	(per hour)

# **APPENDIX 4**

Extract from draft revised UPOV Convention — current wording proposed for the Diplomatic Conference in March, 1991

Words in square brackets are alternative inclusions

#### Article 14

#### Scope of the Breeder's Right

- (1) [Acts requiring the breeder's authorization] Subject to articles 15 and 16, the following acts shall require the authorization of the breeder:
- in respect of the propagating material of the protected variety,
- (i) production or reproduction,
- (ii) conditioning for the purpose of propagation,
- (iii) offering for sale,
- (iv) sale or other putting on the market,
- (v) exporting,
- (vi) importing,
- (vii) stocking for any of the purposes mentioned in(i) to (vi), above,
- (viii) use in any way other than those mentioned in(i) to (vii), above;
- (b) in respect of the harvested material of the protected variety, any of the acts referred to in (a), above, provided that the harvested material was obtained through the use of propagating material whose use, for the purpose of obtaining harvested material, was not authorised by the breeder [and if, but only if, the breeder has had no legal possibility of exercising his right in relation to the propagating material];
- [(c) in respect of products made directly from harvested material of the protected variety, any of the acts referred to in (a), above, provided such products were made using harvested material falling within the provisions of (b) above whose use, for the purpose of making such products, was not authorised by the breeder [and if, but only if, the breeder has had no legal possibility of exercising his right in relation to the harvested material].

# **APPENDIX 5**

### Organisations Offering to Undertake PVR Trials

The following organisations are interested in carrying out PVR trials on behalf of applicants — the PVR Office does not accept any responsibility and is publishing the list for the convenience of applicants.

AGRISEARCH, PO BOX 972 ORANGE NSW 2800; 063 624539; M J HOOD (also at Shepparton, Moree, Ridgehaven, Mackay, Armidale and Innisfail).

AGRITECH, PO BOX 549 TOOWOOMBA QLD 4350; 076 384322; MARY ANN LAW

ANU PLANT CULTURE FACILITY, AUSTRALIAN NATIONAL UNIVERSITY, GPO BOX 4, CANBERRA ACT 2601; 06 249 4158; MR A S CARTER

**PAUL ARMITAGE**, 2/84 SHADY GROVE, FOREST HILL VIC 3131;(BH) 03 756 7233; (AH) 03 877 6539

CHIVERS COMPUTING & AGRICULTURE, 3/258 KOORANG RD CARNEGIE VIC 3163; 03 5697538; IAN CHIVERS.

**COLOURWISE NURSERY**, PO BOX 162, GLENORIE, NSW, 2157; O45 666 177, FAX 045 666 219; IAN COLLINS

COLOURWISE NURSERY QUEENSLAND, PO BOX 14, REDLANDS BAY, QLD 4165; 07 206 8818; STEPHEN COLLINS

FLEMINGS NURSERIES PTY LTD, FLEMINGS LANE, MONBULK VICTORIA 3793; 03 7566105; LIZ DARMODY

DR. GERALDINE MCGUIRE, HORTICULTURE SECTION, CAIRNS COLLEGE OF TAFE, EUREKA ST., CAIRNS QLD 4870: 070 507 533.

MURDOCH UNIVERSITY, SCHOOL OF HORTICULTURE, MURDOCH WA 6150; 09 3322810; PROF JOHN CONSIDINE.

**NAVY BEAN MARKETING BOARD**, PO BOX 252, KINGAROY QLD 4610; 071 621408/621666; MR KERRY HEIT.

PARADISE PLANTS, RMB 2117, KULNURA, NSW, 2250; 043 76 1330; IAN PAANANEN

RADCLIFFE AND TILL; 42 MOSS ST WEST RYDE NSW 2114; 02 8046973; SHARON TILL.

ROBERT BODEN & ASSOCIATES, 36 CARSTENSZ STREET, GRIFFITH ACT 2603; 06 295 7720; ROBERT BODEN.

SCHOLEFIELD ROBINSON HORTICULTURAL SERVICES PTY LTD, PO BOX 145, KINGSWOOD, SA 5062; O8 373 2488, 364 2071; DR P SCHOLEFIELD/DR B ROBINSON

TURF GRASS RESEARCH INSTITUTE (AUSTRALIAN), PO BOX 190 CONCORD WEST NSW 2138; O2 7361233; IAN McIVER/ ALEXANDRA SHAKESBY.

TURFGRASS TECHNOLOGY, PO BOX 416 SEAFORD VIC 3198; 03 7863300; TERRY WOODCOCK.

UNIVERSITY OF WESTERN SYDNEY, HAWKESBURY, BOURKE ST, RICHMOND NSW 2753: 045 701333: ROBERT SPOONER-HART.

STATE DEPARTMENTS OF AGRICULTURE AND CSIRO MAY DO TRIALS ON A FEE FOR SERVICE BASIS FOR SOME SPECIES.

#### Overseas

GPL INTERNATIONAL, LAVSENVAENGET 18 (POSTBOX 29) DK ODENSE V DENMARK : J H Selchau

M. RENE ROYON, CONSEIL EN LICENCES, 128 LES BOIS DE FONT MERLE, 06250, MOUGINS, FRANCE.

# **Photographic Services**

HUGH ELGAR & MARGIE BOND, UKI PHOTOGRAPHY, 7 SUNRISE PLACE, UKI VIA MURWILLUMBAH NSW 2484

# **APPENDIX 6**

<b>Summary of PVR Applications Receive</b>	ved to 9 November 19	90
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GENUS	VARIETY	APPLICANT	DATE ACCEPTED	DESCRIPTION PUBLISHED (Future dates are estimates)	PVJ VOL & ISSUE	DATE PVR GRANTED
Acacia Acacia	GOLD LACE TASMANIAN	GURANGA NATIVE NURSERY	02/05/89	30/06/89	Vol 2:2	19/01/90
	PINK	FRIENDLY BEACHES PTY LTD	13/09/90	31/03/91		
Acalypha	PINK CANDLES	JOHN CHURCHUS	19/09/89	31/12/89	Vol 2:4	12/07/90
Acer	CRIMSON PRINCE	EPRINCETOWN NURSERIES	02/07/90	31/03/91		
Agapanthus	SNOW STORM	STEVE WILKEN	14/02/89	31/03/91		
Alstroemeria	LA PAZ	KÖNST ALSTROEMERIA BV	31/10/89	30/06/90	Vol 3:2	
Alstroemeria	SANGRIA	KÖNST ALSTROEMERIA BV	31/10/89	WITHDRAWN	V-12.2	
Alstroemeria	PALOMA	KÖNST ALSTROEMERIA BV	31/10/89 31/10/89	30/06/90 30/09/90	Vol 3:2 Vol 3:3	
Alstroemeria	WILHELMINA SERENA	KÖNST ALSTROEMERIA BV KÖNST ALSTROEMERIA BV	31/10/89	30/09/90	Vol 3:3	
Alstroemeria Alstroemeria	STABELSTRI	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STABILBRON	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STALILAS	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	ZELPADO GJ	VAN ZELDEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	ZELBLANCA GJ	VAN ZELDEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STAROVER	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STAPURZUL	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STAVERPI	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STAYELI	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STARONIC	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STALSAM	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Istroemeria	STALVIR	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STADUTIA	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STALAN	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STALBEL	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STALIBLA	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	ZELROSA GJ	VAN ZELDEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STABUWIT	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Alstroemeria	STAJUGRO	VAN STAAVEREN BV	25/05/90	31/12/90 31/12/90	Vol 3:4	
Alstroemeria	STAYELOR	VAN STAAVEREN BV	25/05/90	31/12/90	Vol 3:4	
Anigozanthos	FIREFLY	ONAP RESEARCH PTY LTD	15/11/88	31/12/88	Vol 1:4	18/09/89
Anigozanthos	MILKY WAY	FACEYS NURSERY PTY LTD	10/10/90	31/03/91		
Anigozanthos	<b>ULURU SUNSET</b>	MULTIPLANT PTY LTD	30/10/90	31/12/90	Vol 3:4	
Anigozanthos	MASQUERADE	MULTIPLANT PTY LTD	30/10/90	31/12/90	Vol 3:4	
Arachis	AMARILLO	QLD DEPT PRIMARY INDUSTRIES & CSIRO & NSW DEPT OF AGRICULTURE	06/10/89	31/12/89	Vol 2:4	15/08/90
Asplenium	CRINKLE CUT	COLIN A GORREL	26/06/90	31/03/91		
Aster	BLUE BUTTERFLY	K SAHIN ZADEN BV	12/12/89	31/03/91		
Aster	PINK BUTTERFLY	K SAHIN ZADEN BV	12/12/89	31/03/91		
Aster	ROSE BUTTERFLY	YK SAHIN ZADEN BV	12/12/89	31/03/91		
Aster	WHITE	SAHIN ZADEN BV	12/12/89	31/03/91		
Avana	BUTTERFLY K CLEANLEAF	NORTH DAKOTA STATE UNI	19/09/90	31/03/91	Vol 3:4	
Avena		NONTH DAKOTA STATE ON	13/ 03/ 30	31/12/30	VOI 3.4	
Banksia	BIRTHDAY CANDLES	WM MOLYNEUX	07/12/89	31/03/90	Vol 3:1	29/10/90
Betula	BAROSSA WINTERGREEN	EA, KE, AA, & EA BARTSCH	24/04/90	31/12/90	Vol 3:4	
Boronia	MOONGLOW	SUNGLOW FLOWERS PTY LTD	29/08/90	31/12/90	Vol 3:4	
Boronia	CAMEO	SUNGLOW FLOWERS PTY LTD	10/10/90	31/12/90	Vol 3:4	
Bothriochloa Bothriochloa	BISSET DAWSON	QLD DEPT PRIMARY INDUSTRIES QLD DEPT PRIMARY INDUSTRIES		30/06/90 31/03/91	Vol 3:2	

GENUS	VARIETY	APPLICANT	DATE ACCEPTED	DESCRIPTION PUBLISHED (Future dates are estimates)	PVJ VOL & ISSUE	DATE PVR GRANTED
Brassica Brassica Brassica	HOBSON YICKADEE BAROSSA	VALLEY SEEDS PTY LTD NSW DEPT OF AGRICULTURE NSW DEPT OF AGRICULTURE	20/10/88 20/02/90 20/02/90	30/06/89 30/09/90 30/09/90	Vol 2:2 Vol 3:3 Vol 3:3	19/01/90
Callistemon	FIREBALL	FACEYS NURSERY PTY LTD	07/11/90	31/03/91		
Chamelaucium Chamelaucium Chamelaucium	WHITE SPRING ERIC JOHN VARIEGATED	AUSTRALIAN WAX FARMS AUSTRALIAN WAX FARMS	08/02/90 08/02/90	31/03/90 31/03/90	Vol 3:1 Vol 3:1	
Chamelaucium	BLUSH LADY JENNIFER	AUSTRALIAN WAX FARMS AUSTRALIAN WAX FARMS	08/02/90 08/02/90	31/03/90 31/03/90	Vol 3:1 Vol 3:1	
Choisya	LICH	P CATT, LISS FOREST NURSERY	19/05/89	30/06/90	Vol 3:2	
Chrysanthemum	CAMILLA PONTICELLI	INST REG P/L FLORICULTURA	01/08/90	30/03/91		
Cicer Cicer	NARAYEN BARWON	CSIRO DIV'N TROPICAL CROPS NȘW DEPT OF AGRICULTURE	26/09/89 24/04/90	31/12/89 30/06/90	Vol 2:4 Vol 3:2	12/07/90
Citrus	BARNFIELD LATE NAVEL	W M & D BARNFIELD	20/01/89	31/03/93		
Citrus		YANDILLA PARK LIMITED	20/01/89			WITHDRAWN
Citrus		YANDILLA PARK LIMITED	20/01/89			WITHDRAWN
Citrus Citrus	AUTUMN GOLD LATE NAVEL ROHDE SUMMER	JOHN R POLLOCK	20/01/89	31/03/93		
Citius	NAVEL	PW MCLAREN MANAGEMENT CON	20/01/89	31/03/93		
Citrus	POWELL LATE NAVEL	CN & J POWELL	20/01/89	31/03/93		
Citrus	SUMMER GOLD LATE NAVEL	DUDLEY MARROWS	20/01/89	31/03/93		
Citrus	CHISLETT SUMMER NAVEL	NA CHISLETT & CO	20/01/89	31/03/93		
Coreopsis	SUMMER GOLD	ALANA NOMINEES	06/02/90	31/03/90	Vol 3:1	16/10/90
Cucumis	RAINBOW	ARTHUR YATES & CO PTY LTD	24/05/89	31/03/91		
Cuphea	GOLDEN RUBY	RONALD GRAHAME NURSERIES	26/06/90	30/09/90	Vol 3:3	
Cupressus	GOLDEN HALO	D J LIDDLE	28/02/90	31/03/91		
Cucurbita	REDLANDS TRAILBLAZER	QLD DEPT PRIMARY INDUSTRIES	25/09/90	31/03/91		
Cynodon	CHEYENNE	JACKLIN SEED COMPANY	27/08/90	31/03/91		
Dactylis	GRASSLANDS KARA	GRASSLANDS DIVISION DSIR	27/07/89	30/09/89	Vol 2:3	18/04/90
Dianthus	STATROPUR STAYELPA	BIOPROGRESS — SP— 'SELCA' VAN STAAVEREN BV VAN STAAVEREN BV VAN STAAVEREN BV STAAVEREN BV	31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/88 31/08/90 12/09/90 12/09/90 12/09/90	31/03/89 31/03/89 31/03/89 31/03/89 31/03/89 31/03/89 31/03/89 31/03/89 31/03/89 31/03/89 31/03/89 31/03/89 31/03/91 31/03/91 31/03/91 31/03/91 31/03/91	Vol 2:1 Vol 2:1	30/04/90 18/12/89 18/12/89 14/02/90 30/04/90 18/12/89 26/04/90 18/12/89 14/02/90 18/12/89 26/04/90 18/12/89 18/12/89 14/02/90

GENUS	VARIETY	APPLICANT	DATE ACCEPTED	DESCRIPTION PUBLISHED (Future dates are estimates)	PVJ VOL & ISSUE	DATE PVR GRANTED
Dianthus Dianthus Dianthus Dianthus	STALIPINK VAN SREBRINA KOVALYA CANA	STAAVEREN BV BIOPROGRESS —SP— 'SELCA' BIOPROGRESS —SP— 'SELCA' BIOPROGRESS —SP— 'SELCA'	12/09/90 01/05/90 26/07/90 01/05/90	31/03/91 30/09/90 31/03/91 30/09/90	Vol 3:3	
Dipladenia	SCARLET PIMPERNEL	REDLANDS GREENHOUSES HOLDINGS	26/04/90	30/06/90	Vol 3:2	
Eucalyptus Eucalyptus Eucalyptus Eucalyptus Eucalyptus Eucalyptus Eucalyptus	YELLOWARD REDWARD BLACKWARD WOOLWARD WHITEWARD CANDLEWARD	CSIRO DIV OF ENTOMOLOGY CSIRO DIV OF ENTOMOLOGY	06/11/90 06/11/90 06/11/90 06/11/90 06/11/90 06/11/90	31/12/92 31/12/92 31/12/92 31/12/92 31/12/92 31/12/92		
Euphorbia Euphorbia Euphorbia	STILOGA STIGARO STIROT	MARIANNE SCHWAB-STIRNADEL MARIANNE SCHWAB-STIRNADEL MARIANNE SCHWAB-STIRNADEL	08/03/90	30/09/90 30/09/90 30/09/90	Vol 3:3 Vol 3:3 Vol 3:3	
Fragaria Fragaria Fragaria Fragaria Fragaria Fragaria Fragaria Fragaria Fragaria Fragaria	CHANDLER FERN IRVINE MRAK MUIR OSO GRANDE PARKER SANTANA SELVA SOQUEL	UNIVERSITY OF CALIFORNIA	13/09/89 13/09/89 13/09/89 13/09/89 13/09/89 13/09/89 13/09/89 13/09/89 13/09/89	31/12/91 31/12/91 31/12/91 31/12/91 31/12/91 31/12/91 31/12/91 31/12/91 31/12/91		
Fragaria Fragaria Fragaria Fragaria	YOLO TUSTIN CAPITOLA SEASCAPE	UNIVERSITY OF CALIFORNIA UNIVERSITY OF CALIFORNIA UNIVERSITY OF CALIFORNIA UNIVERSITY OF CALIFORNIA	13/09/89 13/09/89 07/11/90 07/11/90	31/12/91 31/12/91 31/12/91 31/12/91		
Glycine Glycine Glycine	A5939 A5474 MANARK	ANNAND ROBINSON CO ANNAND ROBINSON CO QLD DEPT OF PRIMARY INDUSTRIES	26/08/88 26/08/88 13/12/88	30/06/89 30/06/89 30/06/89	Vol 2:2 Vol 2:2 Vol 2:2	19/01/90 19/01/90 19/01/90
Glycine	A6520	ASGROW SEED CO	11/05/89	30/06/89	Vol 2:2	19/01/90
Hardenbergia	MINI-HAHA	ALEXANDER BRUCE WILKIE	04/05/90	30/06/90	Vol 3:2	
Hedysarum	NECTON	NZ AGRISEEDS LIMITED	15/06/90	30/09/90	Vol 3:3	
Hordeum	FRANKLIN	TAS DEPT OF AGRICULTURE	06/04/89	30/06/89	Vol 2:2	19/01/90
Impatiens	APPOLLON ARGUS AURORE CELERIO DELIAS EPIA EUREMA FLAMBEE JASIUS MARUMBA MIMAS SATURNIA SELENIA SESIA THECLA VULCAIN PHOEBIS SYLVINE ISOPA	KIENTZLER KG	17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 17/07/89 10/11/89 10/11/89 26/02/90	31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89 31/12/89	Vol 2:4 Vol 2:4	12/07/90 12/07/90 12/07/90 12/07/90 12/07/90 12/07/90 12/07/90 12/07/90 12/07/90 12/07/90 12/07/90 12/07/90 WITHDRAWN 12/07/90 12/07/90 12/07/90 12/07/90 12/07/90
Impatiens Impatiens	PETULA LYSANDRA	KIENTZLER KG KIENTZLER KG	26/02/90 26/02/90	30/06/90 31/12/90	Vol 3:2 Vol 3:4	

GENUS	VARIETY	APPLICANT	DATE ACCEPTED	DESCRIPTION PUBLISHED (Future dates are estimates)	PVJ VOL & ISSUE	DATE PVR GRANTED
Kalanchoe Kalanchoe Kalanchoe Kalanchoe	POLKA TARANTELLA BLUES MAZURKA	KIENTZLER KG KIENTZLER KG KIENTZLER KG KIENTZLER KG	30/03/90 30/03/90 30/03/90 30/03/90	31/03/91 31/03/91 31/03/91 31/03/91		
Lactuca Lactuca Lactuca Lactuca	BULLS EYE TARGET WINTERSALAD GREENWAY	ARTHUR YATES & CO PTY LTD ARTHUR YATES & CO PTY LTD ARTHUR YATES & CO PTY LTD ARTHUR YATES & CO PTY LTD	23/08/88 23/08/88 24/01/90 24/01/90	31/12/88 31/12/88 31/03/90 31/03/90	Vol 1:4 Vol 1:4 Vol 3:1 Vol 3:1	24/07/89 24/07/89 05/10/90
Lechenaultia Lechenaultia Lechenaultia Lechenaultia	STARBURST ULTRAVIOLET FLAMINGO AUTUMN BLUE	ONAP RESEARCH PTY LTD ONAP RESEARCH PTY LTD ONAP RESEARCH PTY LTD GEORGE LULLFITZ	15/11/88 15/11/88 15/11/88 19/06/89	31/12/88 31/12/88 31/12/88 31/03/91	Vol 1:4 Vol 1:4 Vol 1:4	24/07/89 24/07/89 24/07/89
Leucadendron	KATIES BLUSH	ROGER A EGGLETON	01/06/90	30/03/91		
Lilium Lilium Lilium Lilium Lilium	GENEVE GRAND CRU LUCCA MENTON MONA LISA	GEBR VLETTER EN DEN HAAN GEBR VLETTER EN DEN HAAN GEBR VLETTER EN DEN HAAN GEBR VLETTER EN DEN HAAN GEBR VLETTER EN DEN HAAN	11/08/89 11/08/89 11/08/89 11/08/89 11/08/89	30/06/91		WITHDRAWN WITHDRAWN WITHDRAWN WITHDRAWN
Lilium Lilium Lilium	MONTE ROSA SANCERRE TOSCANE	GEBR VLETTER EN DEN HAAN GEBR VLETTER EN DEN HAAN GEBR VLETTER EN DEN HAAN	11/08/89 11/08/89 11/08/89	20 (20 (24		WITHDRAWN WITHDRAWN WITHDRAWN
Lilium	VENEZIA	GEBR VLETTER EN DEN HAAN	11/08/89	30/06/91		
Limonium		ENZ MINISTRY OF AGRICULT	15/05/90	30/06/91	Vol 1:3	07/04/00
Lolium Lolium Lolium Lolium	YATSYN 1 PROGROW ROPER GRASSLANDS	NZ AGRISEEDS LTD VALLEY SEEDS PTY LTD VALLEY SEEDS PTY LTD	25/07/88 26/08/88 06/04/90	30/09/88 31/12/88 30/06/91	Vol 1:3 Vol 1:4	07/04/89 21/08/89
	GREENSTONE	GRASSLANDS DIVISION DSIR	10/08/90	31/12/90	Vol 3:4	
Macadamia Macadamia	HIDDEN VALLEY A4 HIDDEN VALLEY	HFD MA & DJD BELL	05/05/88	30/06/88	Vol 1:2	24/02/89
	A16	HFD MA & DJD BELL	05/05/88	30/06/88	Vol 1:2	24/02/89
Malus Malus Malus Malus Malus Malus	RAFZUBIN RED ELSTAR JONAGORED LANCEP CEPILAND BIG TIME	HAUENSTEIN LTD INST VOOR DE VEREDELING NV JOMOBEL CENTRE D'EXPERIMENTATION CENTRE D'EXPERIMENTATION WA DEPT OF AGRICULTURE	28/10/88 14/02/89 09/03/89 03/08/89 03/08/89 18/05/90	31/12/91 30/06/91 30/09/92 18/06/92 18/06/92 31/03/91		
Medicago	QUADRELLA	CSIRO DIV'N TROPICAL CROPS	15/05/90	30/09/90	Vol 3:3	
Metrosideros	MIDAS	WILLIAM ROBINSON	30/10/90	31/03/91		
Ornithopus	GRASSLANDS KOHA	GRASSLANDS DIVISION DSIR	15/11/88	31/12/88	Vol 1:4	14/11/89
Panicum Persea Persea Persea	NATSUKAZE ESTHER GWEN WHITSELL	KYUSHU NATIONAL AGRICULT UNIVERSITY OF CALIFORNIA UNIVERSITY OF CALIFORNIA UNIVERSITY OF CALIFORNIA	15/03/89 10/10/89 10/10/89 10/10/89	30/06/89 31/03/91 31/03/91 31/03/91	Vol 2:2	
Phalaris	HOLDFAST	CSIRO DIV OF PLANT INDUST	24/01/90	31/03/90	Vol 3:1	04/10/90
Phaseolus Phaseolus	BRONCO GRESHAM	ASGROW SEED CO BOOKER SEEDS LTD	28/10/88 28/03/89	30/06/89 30/06/89	Vol 2:2 Vol 2:2	22/01/90 19/01/90
Pisum Pisum Pisum	DINKUM SOLARA FROLIC	DARATECH PTY LTD CEBECO-HANDELSRAAD ROGERS BROTHERS SEED CO	15/11/88 20/04/89 19/05/89	31/12/88	Vol 1:4	24/07/89 WITHDRAWN WITHDRAWN
Prunus Prunus Prunus Prunus Prunus Prunus	TASTY ZEE JUNE CREST ZEE LADY GAUDION SYMPHONIE HARMONIE	FLEMINGS NURSERIES & ASSOC FLEMINGS NURSERIES & ASSOC FLEMINGS NURSERIES & ASSOC KEN GAUDION SCEA DOMAINE DE CASTANG SCEA DOMAINE DE CASTANG	29/06/89	30/03/91 30/03/91 30/03/91 30/09/92 31/03/91		WITHDRAWN

GENUS	VARIETY	APPLICANT	DATE ACCEPTED	DESCRIPTION PUBLISHED (Future dates are estimates)	PVJ VOL & ISSUE	DATE PVR GRANTED
Prunus Prunus Prunus	MELODIE RED VELVET WINTER SUN	SCEA DOMAINE DE CASTANG NG & LG BRADFORD R O SEBIRE	22/09/89 20/02/90 10/10/90	31/03/91 30/06/91 31/12/90	Vol 3:4	
Pyrus Pyrus	DAISUI LI SHIN LI	UNIVERSITY OF CALIFORNIA UNIVERSITY OF CALIFORNIA	24/10/89 24/10/89	31/03/91 31/03/91		
Radermachera	KAPRIMA	LEO VAN DER KNAPP	30/10/90	31/03/91		
Rhododendron	COCONUT ICE	R J CHERRY	22/06/90	30/09/90	Vol 3:3	
Robinia	PURPLE CROWN	PRINCETOWN NURSERIES	02/07/90	31/03/91		
Rosa Rosa Rosa Rosa Rosa	YOUNG AT HEART MEIZAIPUR KEIJOURNA MEIPINJID MEIKRUSA	SWANE BROS PTY LTD SNC MEILLAND ET CIE UNIVERSAL PLANTS S A R L SNC MEILLAND ET CIE SNC MEILLAND ET CIE	10/06/88 14/02/89 14/02/89 02/05/89 17/07/89	30/06/88 30/09/89 30/09/89 30/06/89 30/09/89	Vol 1:2 Vol 2:3 Vol 2:3 Vol 2:2 Vol 2:3	19/05/89 12/04/90 12/04/90 19/01/90 12/04/90
Rosa Rosa Rosa Rosa Rosa	MEIROLOUR MEIVOUPLIX MEIVROFIX KORBOLAK KORKUNDE KORMADOR	SNC MEILLAND ET CIE SNC MEILLAND ET CIE SNC MEILLAND ET CIE W KORDES SOHNE W KORDES SOHNE W KORDES SOHNE	18/07/89 18/07/89 30/07/89 19/01/90 19/01/90 19/01/90	30/09/89 30/09/89 30/09/89 30/06/90 30/06/90	Vol 2:3 Vol 2:3 Vol 2:3 Vol 3:2 Vol 3:2 Vol 3:2	12/04/90 12/04/90 12/04/90
Rosa Rosa Rosa Rosa Rosa	KOROKIS KORVERIL MACERUPT MEIBARKE	W KORDES SOHNE W KORDES SOHNE SAM MCGREDY SNC MEILLAND ET CIE	19/01/90 19/01/90 19/01/90 07/02/90	30/06/90 30/06/90 30/06/90 31/03/90	Vol 3:2 Vol 3:2 Vol 3:2 Vol 3:1	04/10/90
Rosa Rosa Rosa Rosa Rosa	MEIGOVIN SCHOBITET MEIPONAL MEIRUTRAL MEITIFRAN	SNC MEILLAND ET CIE UNIVERSAL PLANTS S A R L SNC MEILLAND ET CIE SNC MEILLAND ET CIE SNC MEILLAND ET CIE	07/02/90 08/02/90 08/02/90 07/02/90 17/02/90	31/03/90 31/03/90 31/03/90 31/03/90 31/03/90	Vol 3:1 Vol 3:1 Vol 3:1 Vol 3:1 Vol 3:1	04/10/90 04/10/90 04/10/90 04/10/90 04/10/90
Rosa Rosa Rosa Rosa	MEIXERUL KOOIANA DAYBREAK STEBIGPU AROBIPY	SNC MEILLAND ET CIE P ELPHICK & P GIBSON MRS PADDY STEPHENS BEAR CREEK GARDENS	17/02/90 27/02/90 27/02/90 27/02/90	31/03/90 30/06/90 30/06/90 30/06/90	Vol 3:1 Vol 3:2 Vol 3:2 Vol 3:2	04/10/90
Rosa Rosa Rosa Rosa Rosa	AROTRUSIM TANSCHAUBUD COCDESTIN AUSCOT AUSBLUSH	BEAR CREEK GARDENS	27/02/90 08/03/90 08/03/90 30/04/90 30/04/90	30/06/90 30/06/90 30/06/91 30/06/91 30/06/91	Vol 3:2 Vol 3:2	
Rosa Rosa Rosa	MEIDIAPLOU MEIFRONY MEIXTRAFLO	SNC MEILLAND ET CIE SNC MEILLAND ET CIE SNC MEILLAND ET CIE	01/08/90 01/08/90 01/08/90	30/06/91 30/06/91		WITHDRAWN
Rosa Rosa Rosa Rosa Rosa Rosa	MEICHEVIL KEITAIBU MEIJAUDIAIR KEINOUMI NOATRAUM TINEKE	SNC MEILLAND ET CIE UNIVERSAL PLANTS S A R L SNC MEILLAND ET CIE UNIVERSAL PLANTS S A R L PAN-AM NORTHWEST INC SELECT ROSES BV	01/08/90 01/08/90 27/08/90 22/10/90 06/09/90 16/10/90	30/06/91 30/06/91 30/06/91 30/06/91 30/06/91		WITHDRAWN
Rosa Schlumbergera	MEILIVAR MADAME	SNC MEILLAND ET CIE	30/10/90	31/12/90	Vol 3:4	
Schlumbergera Schlumbergera Schlumbergera	BUTTERFLY BRIDGEPORT CAMBRIDGE CHRISTMAS FLAME	ANDREW SAVIO BL COBIA INC BL COBIA INC BL COBIA INC	21/07/88 31/10/89 31/10/89 31/10/89	30/09/88 31/12/89 31/12/90 31/12/89	Vol 1:3 Vol 2:4 Vol 3:4 Vol 2:4	06/04/89 12/07/90 12/07/90
Schlumbergera	ORANGE FANTASY	BL COBIA INC	31/10/89	31/12/89	Vol 2:4	12/07/90
Schlumbergera Schlumbergera	SANTA CRUZ CHRISTMAS FANTASY	BL COBIA INC BL COBIA INC	31/10/89 12/04/90	31/12/89 30/06/90	Vol 2:4 Vol 3:2	12/07/90
Schlumbergera Schlumbergera	MAGIC FANTASY LAVENDER FANTASY		27/08/90	31/12/90 31/12/90	Vol 3:4 Vol 3:4	

GENUS	VARIETY	APPLICANT	DATE ACCEPTED (Future dates are estimates)	DESCRIPTION PUBLISHED	PVJ VOL & ISSUE	DATE PVR GRANTED
Serruria	SUGAR'N'SPICE	PROTEAFLORA ENTERPRISES	10/10/90	31/12/90	Vol 3:4	
Setaria	SPLENDA	CSIRO DIV'N TROPICAL CROPS	05/08/88	30/09/88	Vol 1:3	06/04/89
Simmondsia Simmondsia	WARADGERY BARINDJI	R DUNSTONE & NSW DEPT OF AG R DUNSTONE & NSW DEPT OF AG	30/01/90 30/01/90	31/03/90 31/03/90	Vol 3:1	04/10/90
Solanum Solanum	MORENE WINLOCK	S BRUNIA VIC DEPT OF AGRICULTURE & RURAL AFFAIRS	31/08/88 24/10/90	30/06/90 30/06/90	Vol 3:2 Vol 3:2	
Stylosanthes Stylosanthes Stylosanthes Stylosanthes	AMIGA BAHIA RECIFE FEIRA	CSIRO DIV'N TROPICAL CROPS CSIRO DIV'N TROPICAL CROPS CSIRO DIV'N TROPICAL CROPS CSIRO DIV'N TROPICAL CROPS	31/07/90 30/10/90 30/10/90 30/10/90	30/09/90 31/12/90 31/12/90 31/12/90	Vol 3:3 Vol 3:4 Vol 3:4 Vol 3:4	
Telopea Telopea	SUNBURST SUNFLARE	UNIVERSITY OF SYDNEY UNIVERSITY OF SYDNEY	15/06/90 15/06/90	30/09/90 30/09/90	Vol 3:3 Vol 3:3	
Trifolium Trifolium Trifolium	KYAMBRO ROSEDALE GRASSLANDS	SA DEPT OF AGRICULTURE SA DEPT OF AGRICULTURE	07/03/89 07/03/89	30/06/89	Vol 2:2	19/01/90 REFUSED
Trifolium	TAHORA GRASSLANDS KOPU	GRASSLANDS DIVISION DSIR GRASSLANDS DIVISION DSIR	02/05/89 02/05/89	30/06/89 30/06/89	Vol 2:2 Vol 2:2	05/04/90
Trifolium Trifolium	NUBA GRASSLANDS COLENSO	SA SEED GROWERS CO-OP LTD GRASSLANDS DIVISION DSIR	08/02/90 19/07/90	31/03/90 30/09/90	Vol 3:1 Vol 3:3	
Vitis	MOSS SULTANA	DARATECH PTY LTD	07/09/88	31/12/90	Vol 3:4	
XCupressocyparis	GOLD RIDER	LEO KEOLWYN	06/02/90	31/03/90	Vol 3:1	04/10/90



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