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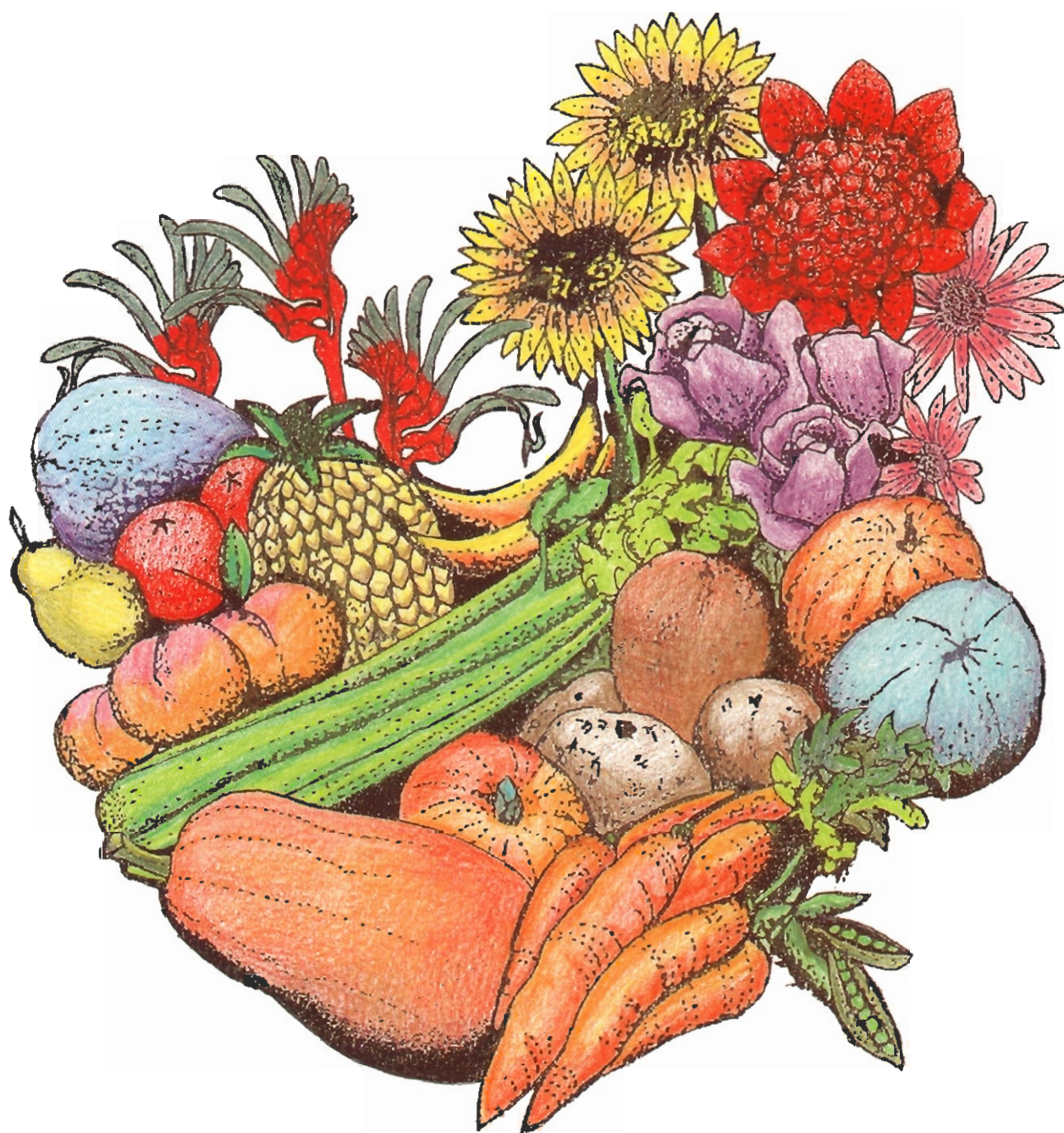


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REGISTRAR'S REMARKS



Dr Mick Lloyd
Director: Plant Variety Rights Office

I confidently assumed the Directorship of the Plant Variety Rights Office in January 1991 having assured myself that the PVR scheme in Australia had succeeded: its supporters fully vindicated; its detractors silenced by the success.

Individual rights, recognition and reward for intellectual endeavor enshrined in PVR legislation, have been sought by many local and overseas breeders in preference to patent protection, thus underlining the need for separate legislation. As a consequence the genetic diversity and quality of the nation's plant resources have been enriched. There is a freer inflow of new varieties because of protection afforded in Australia by well administered PVR legislation. Similarly the economic benefits of increasing the export potential for Australia's new varieties is promoted by reciprocal rights available to individual breeders from member nations of the UPOV Convention.

The Diplomatic Conference of UPOV to ratify several new provisions and member states' international obligations, is imminent. Australia has actively participated in this revised Convention which will serve to encourage plant breeding and international cooperation in the exchange of varieties well into next century. Accession to a revised convention is important for Australia's interests and future in plant breeding. The Registrar and Ambassador Ronald Walker will be the Australian Delegation to the Geneva Conference to be held from 4-19 March.

The location of the PVR Office in the Crops Division of DPIE symbolises its strong market orientation. The Office's staff will be in close proximity to considerable agricultural expertise in DPIE which will strengthen its commitment to client groups in the agriculture, horticulture and forest industries.

The review of Patent and PVR Legislation in Australia by Dr Noel Byrne commissioned by the Ministers for Industry, Technology and Commerce and Primary Industries and Energy is complete. The Report has been submitted to the Ministers.

In its endeavors to become financially self reliant the Plant Variety Rights Office has annually increased its fees. Notwithstanding the considerable national benefits of soundly administered PVR legislation, the cost of procuring and maintaining variety rights for the individual are high and, in some cases, may be prohibitive. Since the latter may militate against the purpose of PVR and in order to strike a cost-benefit balance, in 1991 the fee structure of PVR will be reviewed. I intend that this office achieve financial self-reliance by increasing the number and the efficiency with which applications are processed rather than by progressively increasing fees.

CLOSING DATE FOR JUNE ISSUE: 24 APRIL 1991

PART 1 — ITEMS OF GENERAL INTEREST

Amendments to the *Plant Variety Rights Act 1987*

Effective from 28 December, 1990, the Plant Variety Rights Act 1987 has been amended. There are three changes which serve more to clarify than to change any functions or policy. See Appendix 3 for the precise wording.

Section 3 — Extended definition of breeding
Sub-section 3(3A) includes selection from a plant population as a valid method of originating a new variety (see PVJ Vol.3 No.3).

Section 23 — Trial data from overseas
Sub-section 23(aa) validates the acceptance of data from trials conducted under bilateral PVR testing arrangements between Australia and other member states of UPOV.

Section 22 — Sales during provisional protection
Paragraph 22(2)(b) has been repealed, removing any conditions of sale affecting provisional protection on varieties prior to the grant. Provisional protection under Section 22 (as amended) covers varieties during the period between first applying and the actual granting of rights. It means that if rights are eventually granted, the grantee can then take action retrospectively on infringements made over this period. Previously, sales of a variety before grant of rights meant forfeiture of provisional protection. Now, varieties can be commercialised prior to rights being granted and still retain provisional protection. Once an application has been made and accepted, the variety can, as in the past, be sold without disqualifying the eventual grant of rights.

Sale of a variety **prior** to application still disqualifies it from PVR because, under Section 14, it is then considered no longer new. This provision has not changed. Section 14 could also prevent re-application for a variety if rights were refused the first time and the variety was sold while under provisional protection. For example, if fees were not paid, the granting of rights shall be refused under Section 26. The applicant could later reapply but only if the variety had not been sold.

This is the second set of amendments in response to public need since the PVR Act was proclaimed in May, 1987. If Australia wishes to accede to a revised UPOV Convention after 1991, further amendments to the PVR Act may be necessary.

Labelling of Varieties under Provisional Protection

The *Plant Variety Rights Act 1987* has been amended and provisional protection remains in effect whether or not new varieties are sold prior to grant. Varieties sold while

under provisional protection are not actually the subject of a granted right and claiming that they are protected by PVR is an offence under Section 52 of the Act.

The use of the PVR logo on labels or claims of PVR protection are restricted to grantees of rights only **after** rights have been granted (see PVJ Vol. 1 No. 4). It is, however, necessary to clearly inform any buyers that a PVR application is pending by using the phrase:

“Australian PVR pending: Application No:...”

In cases where an application has been rejected or rights have been refused the variety label must not carry any inference that it is subject to PVR.

Advertising in Plant Varieties Journal

To offset journal production costs, the PVR Office is considering carrying paid advertisements in the Plant Varieties Journal. Expressions of interest and/or enquiries about the journal's circulation and rates may be made to The Director, PVR Office, GPO Box 858, Canberra, ACT 2601.



Staff

In January the PVR Office welcomed Dr Mick Lloyd to the position of Director and Registrar of Plant Variety Rights. He is a plant breeder and plant pathologist with a PhD from the University of London and has qualifications and experience in business management. Mick was a former consultant to Ciba-Geigy, a Professor of Microbiology at the University of Natal, and was Senior Lecturer at the Victorian College of Agriculture and Horticulture until his appointment as Registrar of PVR. Mick has published extensively in plant pathology, genetics and biotechnology, having conducted research in the United States, Switzerland, United Kingdom and Australia.

In January we also welcomed Mark Kethro as an examiner. Mark studied Agricultural Science at the University of Tasmania and has a background in agricultural research, plant breeding and analytical chemistry. Mark joined the Department in 1988 and has worked in the Crops and Corporate Policy Divisions, most recently in the water branch of Land Resources Division, administering the National Water Research Program.

In January, Libby Pulsford became the mother of a healthy baby girl, Laura Alice. Congratulations Libby and Matthew.

Miriam Nauenburg retired at the end of February from her position as the office's Administrative Officer. Miriam has been with PVR Office from the start in March 1988 and she has been instrumental in the smooth running of the office and the successful establishment of PVR. We will all miss Miriam and her efficiency, knowledge and love of plants and wish her well in her retirement.

On the subject of farewells, Andrew Keal has recently accepted an offer of promotion and will be leaving PVR to work in the Horticulture Branch of the Department. Andrew's understanding and helpful approach to applicants and his work on the PV Journal were greatly appreciated during his twelve months with us.

Qualified Persons and Comparative Trials

Applications must be submitted and signed by a suitably qualified person, as outlined in the Explanatory Notes accompanying application forms. The role of the Qualified Person is vitally important in the PVR scheme to ensure the rights granted are technically valid and defensible if challenged. Applicants themselves are sometimes able to fulfill this role but PVR Office examiners cannot assume the role of the qualified person in the course of their duties. Examiners routinely check trial results and conduct field inspection of growing trials. Any incomplete work or discrepancies reported by examiners will probably result in, at best, delays to the granting of rights and, at worst, lost sales and further expense.

The Qualified Person should be involved when planning comparative trials to ensure:

- trials are conducted with scientific procedures adequate to validate claims of distinctness, uniformity and stability but conducted simply and at minimum cost to the applicant;
- growing conditions and treatments are the same for all varieties being compared;
- the new variety is compared with the closest known varieties, that is, the ones most likely to be confused with it in the market place. Comparison with contrasting varieties is of little value unless no other varieties exist or they are standard reference varieties; and
- the results yield a description suitable for publication in PV Journal and inclusion in the Register of Plant Variety Rights.

When appointing a Qualified Person applicants for PVR should be aware that, in the event of a challenge, an expert's (the qualified person's) objective description can be challenged in the courts on three grounds:

- qualifications and experience of the Qualified Person;
- trial design, assumptions, conduct, collation and analysis of the data by the Qualified Person; and
- conclusions drawn from that data and the logic involved in arriving at those conclusions.

Applicants should establish if a Qualified Person has appropriate qualifications and they have a reputation for competence and professionalism. The PVR Office can be of assistance with an applicant's choice of Qualified Person.

Scientific method is adaptable and it is not essential that a Qualified Person has experience of a particular species of plant. The PVR Office is able to provide advice on suitable strategies for assessment. Experience has shown that comparative growing trials run most smoothly when the Qualified Person contacts the PVR Office during the planning of the comparative trial.

PART 2 — MATTERS FOR PUBLIC NOTICE

PVR Granted

Plant Variety Rights have been granted to the following varieties under Section 26 of the *Plant Variety Rights Act 1987*. Entries to this effect have been made in the Plant Varieties Register.

1. **'Birthday Candles'** (Application No. 89/128)
Banksia spinulosa spp *spinulosa*
Grantee: W M Molyneux
Certificate No. 87
Expiry Date: 7 December, 2009
2. **'Nuba'** (Application No. 90/004)
Trifolium subterraneum spp *brachycalicinum*
Grantee: L C Nungesser GMBH,
Certificate No. 88
Expiry Date: 19 January, 2010
3. **'Winlock'** (Application No. 90/045)
Solanum tuberosum
Grantee: Minister for Agriculture and
Rural Affairs in right of the state of
Victoria
Certificate No. 89
Expiry Date: 24 April, 2010
4. **'Christmas Fantasy'** (Application No. 90/043)
Schlumbergera truncata
Grantee: B L Cobia Inc
Certificate No. 90
Expiry Date: 12 April, 2010
5. **'Petula'** (Application No. 90/031)
Impatiens hawkeri hybrid
Grantee: Kientzler KG
Certificate No. 91
Expiry Date: 26 February, 2010
6. **'Isopa'** (Application No. 90/030)
Impatiens hawkeri hybrid
Grantee: Kientzler KG
Certificate No. 92
Expiry Date: 26 February, 2010
7. **'Scarlet Pimpernel'** (Application No. 90/049)
Dipladenia sanderii
Grantee: Redlands Greenhouses Holding Pty
Ltd
Certificate No. 93
Expiry Date: 26 April, 2010
8. **'Mini-haha'** (Application No. 90/050)
Hardenbergia violacea
Grantee: Alexander Bruce Wilkie
Certificate No. 94
Expiry Date: 4 May, 2010
9. **'Kooiana Daybreak'** (Application No. 90/022)
Rosa hybrida
Grantee: P Elphick and P Gibson
Certificate No. 95
Expiry Date: 27 February, 2010
10. **'Tanschaubud'** (Application No. 90/033)
Rosa hybrida
Grantee: Rosen-Tantau
Certificate No. 96
Expiry Date: 8 March, 2010
11. **'Korbolak'** (Application No. 89/129)
Rosa hybrida
Grantee: W Kordes Sohne
Certificate No. 97
Expiry Date: 19 January, 2010
12. **'Korkunde'** (Application No. 89/130)
Rosa hybrida
Grantee: W Kordes Sohne
Certificate No. 98
Expiry Date: 19 January, 2010
13. **'Kormador'** (Application No. 89/131)
Rosa hybrida
Grantee: W Kordes Sohne
Certificate No. 99
Expiry Date: 19 January, 2010
14. **'Korokis'** (Application No. 89/132)
Rosa hybrida
Grantee: W Kordes Sohne
Certificate No. 100
Expiry Date: 19 January, 2010
15. **'Korveril'** (Application No. 89/133)
Rosa hybrida
Grantee: W Kordes Sohne
Certificate No. 101
Expiry Date: 19 January, 2010
16. **'Macerupt'** (Application No. 89/134)
Rosa hybrida
Grantee: Sam McGredy Roses International,
New Zealand
Certificate No. 102
Expiry Date: 19 January, 2010
17. **'Stebigpu'** (Application No. 90/027)
Rosa hybrida
Grantee: Paddy Stephens, New Zealand
Certificate No. 103
Expiry Date: 19 January, 2010
18. **'Arobipy'** (Application No. 90/028)
Rosa hybrida
Grantee: Bear Creek Garden Inc,
California, USA
Certificate No. 104
Expiry Date: 19 January, 2010
19. **'Arotrusim'** (Application No. 90/029)
Rosa hybrida
Grantee: Bear Creek Garden Inc,
California, USA
Certificate No. 105
Expiry Date: 19 January, 2010
20. **'Bisset'** (Application No. 90/021)
Bothriochloa insculpta
Grantee: The Minister for Primary
Industries for and on behalf of the Crown
in right of the State of Queensland
Certificate No. 106
Expiry Date: 20 February, 2010

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

LECHENAULTIA (*Lechenaultia biloba*)



Variety: 'Autumn Blue' Application No. 89/028
Accepted: 6 November 1990
Applicant: George Lullfitz, of Lullfitz
Nursery, Wanneroo, Western Australia.

Diagnosis

This variety is distinct from all other varieties in having the following combination of characters: a 9 month flowering period; a compact, erect growth habit; small, blue flowers.

Varieties used for comparison

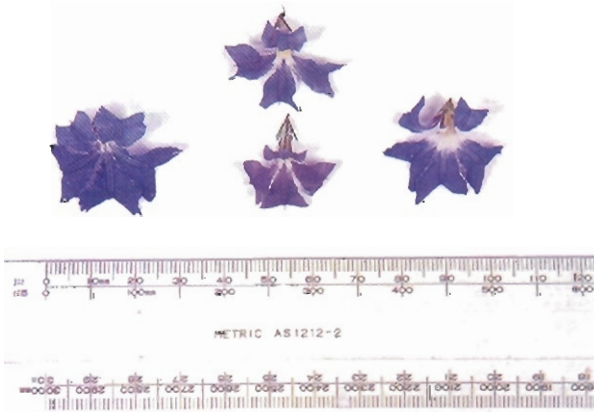
A blue form of *Lechenaultia biloba*, and *Lechenaultia biloba* 'White Flash'.

Comparative Growing Trials

All characteristics described for 'Autumn Blue' and the blue form of *L. biloba* are from 20 potted plants of each variety grown at Wanneroo, Western Australia. The plants were grown in 140 mm plastic pots in a mix of jarrah sawdust, medium grade pine bark, and washed white sand. The characteristics of 'White Flash' are described from specimens growing in the same soil mix in similar conditions at Kings Park, Perth. Measurements were taken in August 1990 from 20 specimens of each variety, the plants being aged 12 months.

Origin

The variety arose as a chance seedling of *Lechenaultia biloba* found on the applicant's property at Wanneroo, Western Australia. Selection was on the basis of growth habit and duration of flowering. Subsequent asexual



From left to right; flowers of 'White Flash', 'Autumn Blue', *L. biloba* blue form. (Photograph supplied by applicant)

propagation over 4 years formed the variety 'Autumn Blue'.

Morphology — see comparison tables.

'Autumn Blue' is a compact, upright, herbaceous plant which flowers during autumn, winter and spring. In comparison, the blue form of *Lechenaultia biloba*, and 'White Flash', flower only in spring. 'Autumn Blue' leaves are the same width as the comparative varieties, but are shorter than those of 'White Flash'. 'Autumn Blue' has an upright growth habit in contrast to the semi-erect growth habit of the comparative varieties. 'Autumn Blue' flowers are narrower in diameter and shorter in height and corolla length than the comparative varieties. The newly opened flowers of 'Autumn Blue' are slightly darker violet-blue than the comparative varieties, and when fully opened they are blue. The aged flowers of 'Autumn Blue' are violet-blue, whereas those of the blue form of *L. biloba* and 'White Flash' are blue.

Table of Comparison of *Lechenaultia biloba* Varieties

(* = varieties used for comparison)

	'Autumn Blue' *	'L. biloba' * blue form	'White Flash'
FLOWERING SEASON	autumn winter spring	spring	spring
GROWTH HABIT ranking 1 — 9	erect 1	semi-erect 5	semi-erect 5
FLOWER WIDTH			
mean	25.2 mm	29.2 mm	28.4 mm
range	24 — 28	25 — 35	25 — 30
std. deviation	0.8	2.4	1.6
FLOWER HEIGHT			
mean	25.2 mm	27.6 mm	28.0 mm
range	22 — 30	22 — 36	24 — 30
std. deviation	1.9	3.8	2.3
COROLLA LENGTH			
mean	7.8 mm	9.8 mm	8.4 mm
range	6 — 10	8 — 10	5 — 10
std. deviation	1.4	0.6	1.3
OVARY LENGTH			
mean	17.4 mm	17.9 mm	18.3 mm
range	15 — 20	15 — 20	15 — 20
std. deviation	1.9	3.7	1.6
FLOWER WING WIDTH			
mean	5.8 mm	9.3 mm	5.6 mm
range	4 — 7	8 — 12	5 — 7
std. deviation	0.7	1.0	0.6
UPPER PETAL WING ranking 1 — 9	small 3	large 9	medium 6
PETAL COLOURS	blue	blue	blue with white
RHS No.			
just open	outer 95A centre white	outer 95C centre white	outer 95B centre white
fully open	outer 104A centre white	outer 104B centre white	whole 100A with white flash
aged	outer 95A centre white	whole 101A	whole 100A
COROLLA TUBE	orange-white	orange-white	white
RHS No.	158A	158B	155D

GOLDEN CYPRESS (*Cupressus macrocarpa*)



Variety: 'Golden Halo' Application No. 90/035
Accepted: 28 February 1990
Applicant: Donald J Liddle, of Waidanae, New Zealand.
Australian Agent: Plant Growers
Australia Pty Ltd, of Wonga Park, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a low spreading growth habit; a drooping branch attitude; the absence of a central leader; branchlets yellow on the upper surface in summer and yellow/green below; pliable and fine textured new branchlet growth and short needle type leaves.

Varieties Used for Comparison

'*Lambertiana Aurea*' and '*Brunniana Aurea*', both having similar foliage colours.

Comparative Growing Trials

All characteristics described below are from comparative growing trials conducted at Wonga Park, Victoria from March 1990 to December 1990. Measurements were taken in December 1990 from 15 specimens. Plants were propagated by cuttings taken in winter 1989 and subsequently grown in 200 mm containers in a mixture of ligna peat, pinebark and sand enriched with a time release fertiliser. The trial used a random block design and was conducted in full sun and protected from prevailing winds.

Origin

'Golden Halo' was developed in New Zealand in 1977 by Waikanae nurseryman D. J. Liddle. The plant arose as a sport of *Cupressus macrocarpa* 'Golden Spread' and was subsequently propagated asexually by cutting. Distinguishing features are perpetuated through generations of cutting propagation. 'Golden Halo' has been protected by Plant Variety Rights in New Zealand since 1983, in the United Kingdom since 1984 and by Plant Patent in the USA since 1985. 'Golden Halo' has been sold in New Zealand since 1 March 1984.

Morphology — see comparison tables.

'Golden Halo' is a low, spreading golden cypress and is shorter than the comparative varieties. The branches of 'Golden Halo' are arching and branch tips attain a drooping habit in contrast to the stiffly erect branch attitude of the upright growing '*Brunniana Aurea*' and the horizontal '*Lambertiana Aurea*'. 'Golden Halo' and '*Lambertiana Aurea*' both lack a central leader. The branchlets of 'Golden Halo' are finer and more pliable than either comparative variety and the foliage possesses a strong citrus fragrance.

Pigmentation in new summer growth on the upper sides of branchlets is more yellow in 'Golden Halo' than either comparative variety. Both the tips of scale leaves (RHS 7A) and the stem colour of new growth (RHS 5B) are yellow. The same tissues in both comparative varieties are greener and correspond to RHS 1A and 154A for '*Brunniana Aurea*' and RHS 7B and 1B for '*Lambertiana Aurea*'. The underside colour of branchlets in both comparative varieties is also greener than that of 'Golden Halo' which is yellow-green (RHS 154B).

'*Brunniana Aurea*' has significantly longer needle type leaves than either 'Golden Halo' or '*Lambertiana Aurea*'.



Foliage colours and growth habit of '*Lambertiana Aurea*' (left), '*Brunniana Aurea*' (centre) and '*Golden Halo*' (right). (Photograph supplied by applicant)

Table of Comparison of Cupressus Varieties

(* = varieties used for comparison)

	'Golden Halo'	'Brunniana' Aurea'	'Lambertiana' Aurea'
PLANT HEIGHT			
mean	226 mm	718 mm	322 mm
range	140-310	580-930	220-410
std. deviation	5.75	9.24	5.31
BRANCHLET STEM COLOUR			
colour	yellow	yellow-green	green-yellow
RHS No.	5B	154A	1B
BRANCHLET TIP COLOUR			
last order branchlet, scale leaf tip, upper side, summer:			
colour	yellow	green-yellow	yellow
RHS No.	7A	1A	7B
last order branchlet, scale leaf tip, lower side, summer:			
colour	yellow-green	green	yellow-green
RHS No.	154B	143C	144C
STEM DIAMETER			
mean	1.9 mm	2.5 mm	2.4 mm
range	1.6-2.1	2.0-2.9	2.0-2.8
std. deviation	0.12	0.21	0.22
NEEDLE LEAF LENGTH (10 cm from apex)			
mean	3.1 mm	6.3 mm	3.0 mm
range	2.3-4.0	5.5-7.1	2.5-3.8
std. deviation	0.47	0.48	0.38
BRANCH ATTITUDE			
	drooping	erect	semi-erect
CENTRAL LEADER			
	absent	present	absent

KALANCHOE

(*Kalanchoe blossfeldiana*)



Comparative Growing Trials

All characteristics described below are from comparative growing trials conducted at Toolangi, NE of Melbourne, Victoria from May 1990 to January 1991. Measurements were made on 2 December 1990 and are based on 20 measurements from each variety. Twenty plants of each variety were potted as struck cuttings into a peat-based potting mixture and grown in a glasshouse with the temperature maintained above 18°C and humidity within the range 70 to 75 per cent.

Variety: 'Blues' Application No. 90/041

Accepted: 30 March 1990

Applicant: **Kientzler KG**, of Gensingen, Germany.

Australian Agent: **RW Rother**, of Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a dwarf bushy growth habit; glabrous, dark green, ovate leaves; two colours appearing in the inflorescence, corresponding on the upper side of the petal to RHS 66A as the flowers first develop, and RHS 57A as they mature.

Varieties Used for Comparison

'Sensation', a commonly known variety in Australia.

Origin

The breeder was L Kientzler of Kientzler KG, Gensingen, Germany. 'Blues' was produced by the controlled

pollination of a seedling code-named #3-5-82 by pollen from a seedling code-named #2-03-83. 'Blues' was subsequently propagated by cuttings. 'Blues' has been protected by Plant Variety Rights in West Germany since December 1987 and in the Netherlands since May 1988. Plant Variety Rights have been applied for in Denmark in 1988. 'Blues' has been sold in West Germany since 1987.

Morphology — see comparison tables.

'Blues' is a dwarf bushy perennial shrub; the fleshy leaves are ovate, glabrous, lobed, dark green on the upper side and a lighter green on the lower side; the stems are glabrous and waxy; the flowers are borne on paniced cymes and have four petals corresponding in colour on the upper side to RHS 66A when first formed and RHS 57A when mature and on the lower side to RHS 66C at the tips and midriff and RHS 65C in the centre.

'Blues' is more vigorous than 'Sensation', being taller and wider. The leaves and petioles of 'Blues' are shorter and the leaves thinner than those of 'Sensation'. 'Blues' is less vigorous than 'Mazurka', being shorter and narrower and carrying fewer flower stems. 'Blues' differs from 'Mazurka' in the expression of flower colour. 'Blues' exhibits two basic colours in the inflorescence (RHS 57A and RHS 66A) whereas 'Mazurka' exhibits only one (RHS 57A).



Variety: 'Mazurka' Application No. 90/042

Accepted: 30 March 1990

Applicant: **Kientzler KG**, of Gensingen, Germany.

Australian Agent: **RW Rother**, of Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a dwarf bushy growth habit; glabrous, dark green, broad-elliptic leaves; red-purple petals corresponding to RHS 57A on the upper side and bicoloured (RHS 57B and RHS 62C) on the lower side.



'Blues' left rear; 'Mazurka' right rear; 'Tarantella' left middle; 'Polka' right middle; 'Sensation' front.
(Photograph supplied by applicant)

Varieties Used for Comparison

'Sensation', a commonly known variety in Australia.

Origin

The breeder was L Kientzler of Kientzler KG, Gensingen, Germany. 'Mazurka' was produced by the controlled pollination of the variety 'Singapur' by pollen from a seedling code-named #2-19-84. 'Mazurka' was subsequently propagated by cuttings. 'Mazurka' has been protected by Plant Variety Rights in West Germany since December 1987. Plant Variety Rights have been applied for in the Netherlands and in Denmark in 1988. 'Mazurka' has been sold in West Germany since 1987.

Morphology — see comparison tables.

'Mazurka' is a dwarf bushy perennial shrub; the fleshy leaves are broad elliptic to ovate, glabrous, lobed, dark green on the upper side and a lighter green on the lower side; the stems are glabrous and waxy. The flowers are borne on paniced cymes and have four petals

Table of Comparison of Kalanchoe Varieties

(* = varieties used for comparison)

	'Mazurka'	'Blues'	'Sensation'
PLANT HEIGHT			
mean	34.6 cm	27.6 cm	17.5 cm
range	27-42	23-34	15-21
std deviation	4.4	6.5	1.7
PLANT WIDTH			
mean	25.3 cm	18.4 cm	17.9
range	20-31	14-27	11-24
std deviation	3.3	2.8	4.7
LEAF LENGTH			
mean	93.3 mm	76.1 mm	79.7 mm
range	80-135	58-92	50-114
std deviation	12.4	9.6	17.7
LEAF WIDTH			
mean	67.0 mm	58.9 mm	62.9 mm
range	55-78	44-74	52-76
std deviation	7.5	8.2	8.0
LEAF THICKNESS			
mean	2.41 mm	2.28 mm	3.23 mm
range	1.74-3.18	1.80-2.86	1.84-4.42
std deviation	0.34	0.34	0.74
PETIOLE LENGTH			
mean	30.5 mm	16.2 mm	22.4 mm
range	24-45	10-22	12-30
std deviation	6.7	4.6	5.6
PETAL COLOURS			
upper side	red-purple	red-purple	red-purple
RHS No	57A	57A/66A	57A/66A
lower side — tips, margins or midriff			
colour	red-purple	red-purple	red-purple
RHS No	57B	66C	57B
lower side — centres			
colour	red-purple	red-purple	green-white
RHS No	62C	65C	157B
FLOWER DIAMETER			
mean	16.95 mm	17.30 mm	16.95 mm
range	15-18	16-20	15-18
std deviation	0.83	0.86	0.89
FLOWER LENGTH			
mean	13.90 mm	13.95 mm	12.85 mm
range	13-15	13-15	12-14
std deviation	0.79	0.76	0.67

corresponding in colour, on the upper side, to RHS 57A and on the lower side to RHS 57B at the tips and midriff, and RHS 62C in the centre.

'Mazurka' is more vigorous than 'Sensation', being taller and wider. The mature leaves are longer and wider and have longer petioles. The leaves are not as thick as those of 'Sensation'. 'Mazurka' differs from 'Blues' in the expression of flower colour. 'Mazurka' exhibits only one basic colour in the inflorescence whereas 'Blues' exhibits two.

LEUCADENDRON (*Leucadendron* hybrid)



Variety: 'Katie's Blush' Application No. 90/061

Accepted: 1 June 1990

Applicant: R A Eggleton, of Seville, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a medium plant height; variegated leaves with approximately 50% chlorophyll, the chlorophyll negative area being commonly red; tendency for immature leaf apical region to be recurved.

Varieties Used for Comparison

'Silvan Red' being the closest known variety and parent of 'Katie's Blush'.

Comparative Growing Trials

All characteristics described below are from comparative growing trials conducted at Seville, Victoria, from July to December 1990. Measurements were taken in November 1990 from 20 specimens selected at random from 2 plots containing a total of 6 plants of 'Silvan Red' and 10 of 'Katie's Blush'. Cuttings were struck at the end of July 1989, potted in October 1989, and planted out in February 1990 with spacing of 1 metre. The trial plots were 6 metres apart on a west facing slope of silty clay loam having a pH of approximately 6.

Origin

This variety arose in 1987 as a sport of 'Silvan Red' on the applicant's property in Seville. 'Katie's Blush' was selected for its foliage variegation, and subsequently propagated by cuttings to bulk up material. Several buddings were also made to 'Silvan Red' plants. No reversion to green foliage has occurred.

Morphology — see comparison tables.

'Katie's Blush' is a medium height shrub, with variegated, alternate leaves. 'Katie's Blush' is a shorter plant than 'Silvan Red', having both shorter main leaders and shorter branches, with shorter internode lengths. The leaves of 'Katie's Blush' are shorter than those of 'Silvan Red', but are the same width. The young leaves of 'Katie's Blush' sometimes have a slightly reflexed apex whereas this is not apparent in 'Silvan Red'.

The leaves of 'Katie's Blush' are variegated, while those of 'Silvan Red' are green. The apical leaves of 'Silvan Red' are uniformly purple (RHS 185A). In contrast the apical leaves of 'Katie's Blush' are variegated, with the central zone light green in colour corresponding to RHS 147C-D. The margins of the apical leaves of 'Katie's Blush' are sometimes yellow (RHS 16C, 10A-B), mainly purple in appearance (RHS 184A-C).

Older leaves of 'Silvan Red' are uniformly dark green in colour corresponding to RHS 147A. Those of 'Katie's Blush' have a green central zone, varying in colour from dark to light green, in the range of RHS 147 A-D. The margins appear, varying in intensity (RHS 184A-C).



1. Leaf of 'Katie's Blush'. 2. Leaf of 'Silvan Red'. 3. Mature sprig of 'Katie's Blush'. 4. Mature sprig of 'Silvan Red'. 5. Young sprig of 'Katie's Blush'. 6. Young sprig of 'Silvan Red'. (Photograph supplied by applicant)

Table of Comparison of *Leucadendron* Varieties

(* = varieties used for comparison)

	'Katie's Blush'	*'Silvan Red'
LEAF COLOUR - Apical Leaves		
centre zone	green	purple
RHS number	147C-D	185A
margin	purple	purple
RHS number	184A-C	185A
- Other Leaves		
apical tip	purple	purple
RHS number	185A	185A
centre zone	green	green
RHS number	147A-D	147A
margin (RHS)	variable; purple	green
	184A-C to yellows 16C, 10A-B	147A
LEAF LENGTH		
mean	50.0 mm	54.6 mm
range	44-55	45-64
std deviation	3.62	4.74
MAIN LEADER LENGTH		
mean	51.9 mm	115.7 mm
range	0 - 118	40 - 185
std deviation	39.3	46.9
SHOOT LENGTH		
mean	38.3 mm	85.0 mm
range	0 - 86	29 - 151
std deviation	27.5	35.9
INTERNODAL LENGTH		
mean	4.8 mm	6.5 mm
range	3 - 7	4 - 11
std deviation	1.2	1.9

GERALDTON WAX FLOWER (*Chamelaucium uncinatum*)



Variety: 'Elegance' Application No. 90/100

Accepted: 6 December 1990

Applicant: Australian Wax Farms of West Perth, Western Australia.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a grey-purple immature stem; long pedicel; purple and orange floral tube; orange or purple nectary in newly opened flowers; small leaves; and purple flowers.

Varieties Used for Comparison

'Mullering Brook', being the closest known variety.

Comparative Growing Trials

All characteristics described below are from comparative growing trials conducted at Muchea, near Perth, Western Australia. Plants were propagated from cuttings planted out in mid-1988 at 1-metre intervals in rows 1 metre apart in sandy soil. Water and fertiliser were supplied with trickle irrigation. The plants were pruned annually. Insecticides and herbicides were applied when considered necessary.



'Elegance', top, 'Mullering Brook', bottom. (Photograph supplied by applicant)

Measurements are from samples taken at random during flowering in September 1990 for both 'Elegance' and 'Mullering Brook'.

Origin

'Elegance' originated from open pollinated plants in the bush and was selected on the basis of growth form, lateness of flowering and, flower characteristics. 'Elegance' was propagated by cuttings through 2 generations at the Muehea farm.

Morphology — see comparison tables.

'Elegance' grows to approximately 1.5 metres. The plants have thinner stems, smaller arching linear leaves, and longer pedicel lengths than 'Mullering Brook'. The floral tube colour of 'Elegance' is orange-green, corresponding to RHS 177A, in contrast to 'Mullering Brook', which has a green floral tube (RHS 143A). The apex of the immature stem of 'Elegance' is grey-purple (RHS 187A), while in 'Mullering Brook' it is yellow-green (RHS 144A). 'Elegance'

Table of Comparison of Geraldton Wax Flower

Varieties (* = variety used for comparison)

	'Elegance'	*'Mullering Brook'
STEM THICKNESS — 30 cm from apex of branch		
mean	2.16 mm	4.10 mm
range	1.9-2.7	2.5-4.6
std deviation	0.33	0.43
LENGTH OF MATURE LEAVES		
mean	1.60 cm	1.84 cm
range	1.24-2.03	1.31-2.46
std deviation	0.24	0.33
WIDTH OF MATURE LEAVES		
mean	0.98 mm	1.13 mm
range	0.9-1.1	1.0-1.3
std deviation	0.08	0.08
PEDICEL LENGTH		
mean	0.97	0.72
range	0.5-1.5	0.4-1.1
std deviation	0.28	0.18
FLORAL TUBE COLOUR — top region — below sepals		
	grey-orange	green
RHS No	177A	143A
FLORAL TUBE COLOUR — middle section		
newly-opened flowers	grey-purple	grey-orange
RHS No	187B	166B & 164A
old flowers	grey-purple	grey-orange
RHS No	187A	166C, 176A & 175A
FLORAL TUBE COLOUR — cup/nectary		
newly-opened flowers	grey-orange & grey-purple	yellow-orange
RHS No	175B, 165A & 183A	15A
old flowers	grey-purple & brown	grey-purple
RHS No	187A & 200A	187B, 183A & 183B
COLOUR OF IMMATURE STEMS AT STEM APEX		
	grey-purple	yellow-green
RHS No	187A	144A
PETAL MARGINS		
	smooth	undulated

petal margins are generally smooth, occasionally with undulated edges, while those of 'Mullering Brook' generally have undulating edges. The petal lobes of 'Elegance' open to near horizontal whereas those of 'Mullering Brook' open to only approximately 45°. The flowers of 'Elegance' are not concentrated at the upper regions of the flowering branches as they are in 'Mullering Brook'.

CALLISTEMON (*Callistemon salignus*)



Variety: 'Great Balls of Fire' Application No. 90/115
Accepted: 7 November 1990

Applicant: Mr Stephen Membrey and Mr Rex Trimble, of Facey's Nursery Pty Ltd, Five Ways, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a dwarf, multibranching growth habit; pubescent young shoots; new foliage pubescent on upper and lower sides, and grey-purple in colour; mature foliage glabrous on upper and lower sides.

Varieties Used for Comparison

A wild form of *Callistemon salignus*.

Comparative Growing Trials

All characteristics described below are from comparative growing trials conducted at Five Ways (near Cranbourne), Victoria, between February and October 1990. 'Great Balls of Fire' was propagated asexually from cuttings and *C. salignus* from seed. Twenty plants of each variety were grown outdoors under ambient conditions in 150mm pots



'Great Balls of Fire' (Photograph supplied by applicant)

in a medium consisting of pine bark and coarse sand fertilised with "Osmocote", lime, and micronutrients.

Origin

'Great Balls of Fire' arose as a chance seedling on the applicant's property. Selection by the applicant was on the basis of its compact growth habit and the colour of its new foliage. 'Great Balls of Fire' has been propagated by cuttings through 3 generations.

Morphology — see comparison tables.

The plant is a compact well-branched dwarf shrub. The young leaves are usually pendulous, narrow elliptic, non-petiolate, entire, pubescent on both sides, and greyed purple (RHS 183C). Mature leaves are yellow green (RHS 144A to 147A) and glabrous on both sides. Young stems are pubescent and variably pigmented with anthocyanin. The stems are upright and branch readily.

'Great Balls of Fire' differs from *C. salignus* in having shorter stems and many more branches. The young leaves are more pubescent and are a lighter shade of grey-purple. The mature leaves of 'Great Balls of Fire' are a lighter shade of yellow green (RHS 144A-147A) in comparison to *C. salignus*. In both varieties the leaf colour passes through intermediate bronze shadings but these are brighter (more yellowed) in 'Great Balls of Fire'. The young stems of 'Great Balls of Fire' have less anthocyanin pigmentation than *C. salignus*.

Table of Comparison of *Callistemon* Varieties

(* = varieties used for comparison)

	'Great Balls of Fire'	*'Callistemon salignus'
PLANT HEIGHT		
mean	20.8 cm	48.3 cm
range	17.5-23.5	32-61
std. deviation	1.9	6.8
PLANT WIDTH		
mean	24.2 cm	30.3 cm
range	19-30	20-44
std. deviation	3.3	8.6
NUMBER OF STEMS PER PLANT		
mean	23.6	10.8
range	13-91	6-14
std. deviation	5.6	2.4
LENGTH OF LONGEST SHOOT		
mean	17.9 cm	40.7 cm
range	9.5-22.5	24.5-53.0
std. deviation	3.9	6.4
LEAF LENGTH		
mean	75.2 mm	79.6 mm
range	59-89	53-102
std. deviation	7.8	10.6
LEAF WIDTH		
mean	16.7 mm	21.0 mm
range	14-19	17-31
std. deviation	1.9	3.4
FLUSH COLOUR		
	grey-purple	grey-purple and grey-orange
RHS No		
	183C	183A, 177A, 166A
MATURE LEAF COLOURS		
RHS No	yellow-green 144A, 147A	yellow-green 147A

IMPATIENS

(*Impatiens hawkeri* hybrid)

Comparative Growing Trials

All characteristics and comparisons described below are from comparative growing trials conducted at Emerald, near Melbourne, Victoria. Growing conditions were the same as used for commercial production. The plants were grown in a pinebark based medium enriched with time release fertiliser in a whitewashed poly-tunnel maintained between 16 and 35°C in 50% shade. Measurements are based on 20 random selections from these plants, taken in January 1991, 3 months after potting on.



Variety: 'Sesia' Application No. 90/116
Accepted: 10 December 1990
Applicant: Kientzler KG, of Gensingen, Germany.
Australian Agent: RW Rother, of Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a small plant; ovate leaves, dark green on the upper surface and light green on the underside; simple, red flowers.

Varieties Used for Comparison

'Melissa', a Kientzler hybrid *Impatiens*, being the closest known variety. Six plants of 'Sesia' and twelve of 'Melissa' were grown.

Origin

The breeder was L Kientzler of Kientzler KG, Gensingen, Germany. 'Sesia' was selected in 1985 on the basis of flower size, flower colour, and plant growth habit, from the seedling progeny of two breeder selections. Plant Variety Rights have been granted in Germany, Holland, and Denmark.

Morphology — see comparison tables.

'Sesia' is a hybrid *Impatiens* of compact growth habit. Plants of 'Sesia' are shorter and narrower in diameter than those of 'Melissa'. 'Sesia' leaves are dark green on the upper surface (RHS 139A), in contrast to those of 'Melissa', which are in the yellow-green colour group (RHS 147A). On the lower surface 'Sesia' leaves are also dark green (RHS 138B), with some red pigmentation. 'Melissa'



Flower and leaf of 'Sesia' (Photograph supplied by applicant)

leaves, in contrast, are grey-purple on the underside (RHS 184B). 'Sesia' leaves are longer than those of 'Melissa', but are the same width. 'Sesia' leaves are ovate in shape, while those of 'Melissa' tend to be lanceolate. Neither 'Sesia' nor 'Melissa' have leaf blade markings.

The flowers of 'Sesia' are smaller in diameter than those of 'Melissa'. Both 'Sesia' and 'Melissa' flowers are red, and close in colour. The presence of an eye zone in 'Melissa' flowers is the main feature which distinguishes 'Sesia' flowers from 'Melissa'.

Table of Comparison of *Impatiens* Varieties

(* = varieties used for comparison)

	'Sesia'	*'Melissa'
FLOWER COLOUR		
primary colour	red	red
RHS No	52C	50B
secondary colour	red	red
RHS No	43C	52A
eye zone	absent	red-purple at centre
RHS No		74A white ring around centre
PLANT HEIGHT		
mean	233 mm	310 mm
range	200-250	280-360
std deviation	15.2	17.6
PLANT DIAMETER		
mean	390 mm	511 mm
range	380-420	350-670
std deviation	19.7	22.6
LEAF LENGTH		
mean	83 mm	98 mm
range	70-96	85-120
std deviation	9.0	9.9
FLOWER DIAMETER		
mean	46 mm	54 mm
range	42-50	50-60
std deviation	6.8	7.4



Variety: 'Celsia' Application No. 91/008

Accepted: 21 January 1991

Applicant: **Kientzler KG**, of Gensingen, Germany.

Australian Agent: **RW Rother**, of 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, elliptic in shape with serrated margins; grey-green to light red underside lamella; simple, red-purple flowers with a red-purple eye zone.

Varieties Used for Comparison

'Phoebis', a Kientzler hybrid *Impatiens*, is the closest known variety and commonly available in Australia. 10 plants of 'Celsia' and 6 of 'Phoebis' were grown.

Origin

The breeder was L Kientzler of Kientzler KG, Gensingen, Germany. 'Celsia' was selected in 1988 from the seedling progeny of 'Caligo' and a breeder selection. Plant Variety Rights were applied for in Germany in November 1989.

Morphology — see comparison tables.

'Celsia' is a hybrid *Impatiens* of compact growth habit and dark green leaves. The underside lamella is grey-green to light red in 'Celsia' and dark red in 'Phoebis'. The leaves of 'Celsia' are both shorter and narrower than those of 'Phoebis'. 'Celsia' has simple flowers which are smaller than those of 'Phoebis'. Flowers of 'Celsia' have red-purple petals (corresponding to RHS 68D) while those of 'Phoebis' are purple (corresponding to RHS 75B). The eye zone is red-purple in both varieties, corresponding to RHS 66D in 'Celsia' and to RHS 67B in 'Phoebis'.



Flower and leaf of 'Celsia' (Photograph supplied by applicant)

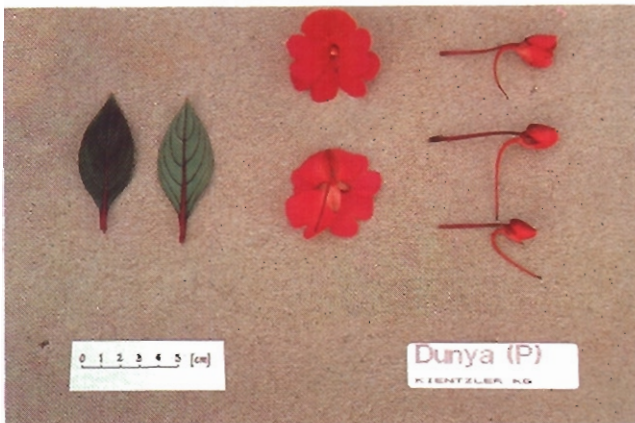
Table of Comparison of *Impatiens* Varieties

(* = varieties used for comparison)

	'Celsia'	*'Phoebis'
LEAF LENGTH		
mean	73 mm	110 mm
range	62-90	92-122
std deviation	8.5	12.0
LEAF WIDTH		
mean	25 mm	30 mm
range	20-35	28-32
std deviation	5.0	2.0
LEAF COLOURS		
upper surface	green	green
RHS No	139A	147A
lower surface	light red	red
RHS No	197A-B	183A
FLOWER DIAMETER		
mean	49 mm	61 mm
range	43-56	58-62
std deviation	7.0	1.5
FLOWER COLOUR		
RHS No	red-purple 68D	purple 75B
EYE ZONE COLOUR		
RHS No	red-purple 66D	red-purple 67B



Variety: 'Dunya' Application No. 91/009
 Accepted: 21 January 1991
 Applicant: **Kientzler KG**, of Gensingen, Germany.
 Australian Agent: **RW Rother**, of Emerald, Victoria.



Flower and leaf of 'Dunya' (Photograph supplied by applicant)

Table of Comparison of *Impatiens* Varieties
 (* = varieties used for comparison)

	'Dunya'	*'Apollon'
PLANT HEIGHT		
mean	279 mm	330 mm
range	240-300	300-350
std deviation	16	18
PLANT WIDTH		
mean	414 mm	520 mm
range	360-450	440-570
std deviation	20	23
LEAF LENGTH		
mean	69 mm	116 mm
range	54-86	98-137
std deviation	8.4	14.0
LEAF WIDTH		
mean	33 mm	52 mm
range	26-39	37-55
std deviation	5.7	5.0
LEAF COLOURS		
upper surface	green	green
RHS No	147A	137A
lower surface	green	red
RHS No	138B	187A
LEAF SHAPE		
	ovate	elliptic-lanceolate
LEAF MARKINGS		
	absent	present
RHS No	—	11A
FLOWER DIAMETER		
mean	52 mm	60 mm
range	45-60	54-63
std deviation	7.2	5.0
FLOWER COLOUR		
	red-purple	red-purple
RHS No	66A	66B

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a small to medium size plant; dark green ovate leaves with medium length petioles and without leaf markings; simple, red-purple flowers which fade to purple.

Varieties Used for Comparison

'Apollon', a Kientzler hybrid *Impatiens*, is the closest known variety and commonly available in Australia. 12 plants of 'Dunya' and 6 of 'Apollon' were grown.

Origin

The breeder was L Kientzler of Kientzler KG, Gensingen, Germany. 'Dunya' was selected in 1988 from the seedling progeny of two breeder selections. Plant Variety Rights were applied for in Germany in November 1989.

Morphology — see comparison tables.

'Dunya' is a hybrid *Impatiens* of compact growth habit and small ovate dark green leaves with medium length petioles and without blade markings. The underside lamella is light green in 'Dunya' and red in 'Apollon'. The leaves of 'Dunya' are shorter and narrower than those of 'Apollon'. Flowers of 'Dunya' fade to purple, giving the plant the appearance of having two flower colours when the faded and newly-opened flowers are seen together.



Variety: 'Anaea' Application No. 91/010
 Accepted: 21 January 1991
 Applicant: **Kientzler KG**, of Gensingen, Germany.
 Australian Agent: **RW Rother**, of Emerald, Victoria.

Diagnosis

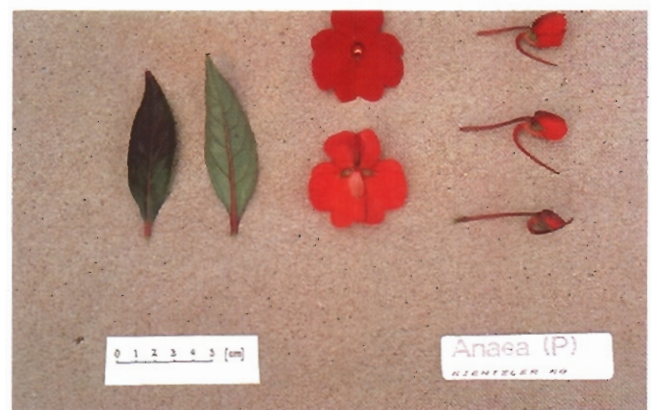
This variety is distinct from all other known varieties in having the following combination of characters: a small plant; lanceolate to elliptic leaves, dark green on the upper surface and light green on the underside; simple, red flowers without an eye zone.

Varieties Used for Comparison

'Apollon', a Kientzler hybrid *Impatiens*, is the closest known variety and commonly available in Australia. 20 plants of 'Anaea' and 6 of 'Selenia' were grown.

Origin

The breeder was L Kientzler of Kientzler KG, Gensingen, Germany. 'Anaea' was selected in 1988 from the seedling progeny of two breeder selections. Plant Variety Rights were applied for in Germany in November 1989.



Flower and leaf of 'Anaea' (Photograph supplied by applicant)

Morphology — see comparison tables.

'Anaea' is a hybrid *Impatiens* of compact growth habit and dark green leaves corresponding to RHS 139A. Leaf width and flower diameter are similar in 'Anaea' and 'Selenia'. Neither 'Anaea' nor 'Selenia' has leaf blade markings or flowers with an eye zone. 'Anaea' is taller and narrower than 'Selenia'. Flowers of 'Anaea' are red, corresponding to RHS 43A-44A whereas those of 'Selenia' are orange-red, corresponding to RHS 33A.

Table of Comparison of *Impatiens* Varieties

(* = varieties used for comparison)

	'Anaea'	*'Selenia'
FLOWER COLOUR	red	orange-red
RHS No	43A-44A	33A
PLANT HEIGHT		
mean	278 mm	232 mm
range	230-290	190-270
std deviation	22.1	15.2
PLANT WIDTH		
mean	419 mm	428 mm
range	310-460	390-470
std deviation	19.5	20.7
LEAF LENGTH		
mean	105 mm	116 mm
range	85-132	92-128
std deviation	10.5	5.0
FLOWER DIAMETER		
mean	61 mm	61 mm
range	46-67	50-64
std deviation	7.8	0.5

ANTHURIUM

(*Anthurium scherzianum*)



Variety: 'ARABELLA' (commercial synonym Arndt's

Flamenco ARABELLA) Application No. 90/118

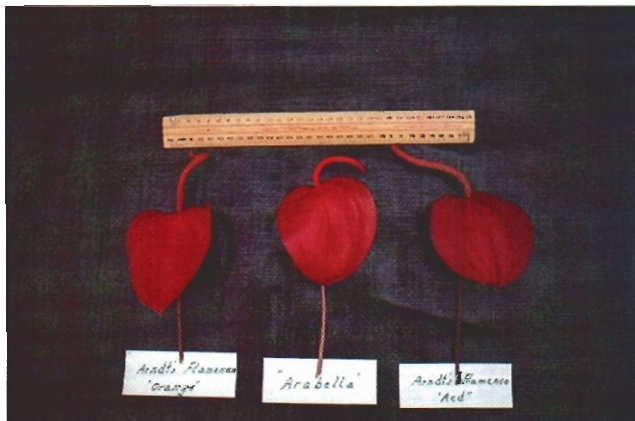
Accepted: 26 November, 1990

Applicant: Gunter Arndt of Borken/Westf, Germany.

Australian Agent: Messrs W & E Sieverding of Kemps Creek, NSW.

Diagnosis

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



Spathes of 'Arndt's Flamenco Orange' (left), 'Arabella' (centre) and 'Arndt's Flamenco Red'. (Photograph supplied by applicant)

size, early flowering, acuminate leaf blade tips, broad ovate red spathe with free lobes and a recurving spadix. See also under morphology.

Varieties used for comparison

'Arndt's Flamenco Red' and 'Arndt's Flamenco Orange' which are two currently available varieties of close parentage and similar spathe colour.

Comparative Growing Trials

All characteristics and comparisons below are from comparative growing trials conducted at the agents' wholesale nursery at Kemps Creek in spring 1990. Plants were grown under controlled conditions at temperatures between 16 and 24 Celsius and in 125mm containers of peat and polystyrene. Ten stock plants of the comparative varieties were selected at random for measurement.

Origin

'Arabella' arose from a selection and controlled pollination program beginning in June 1979 and ending in April 1985. Plants are propagated by tissue culture.

Morphology — See comparison tables.

'Arabella' is a more uniform and compact plant than the comparative varieties. Leaves are dark green, shorter (but not narrower) with lobes absent and tip acuminate. The peduncle cross-section is circular and medium green. The spathe is broad with free lobes and a shallow sinus, rounded distal end with a near right angle tip. Spathe blistering is weak, the cross-section of the distal part is convex and makes a near right-angle with the peduncle. The spadix is thicker than the comparative varieties, round in cross-section, recurving with weak taper towards the top. Its colour is red paling to orange at the top. Stigmas are small.

Table of Comparison of *Anthurium* Varieties

(* = varieties used for comparison)

	'Arabella'	'Arndt's Flamenco' Red'	'Arndt's Flamenco' Orange'
PLANT HEIGHT			
mean	23.5 cm	23.7 cm	27.6 cm
range	22-25	18-34	20-33
std deviation	0.90	3.70	3.88
LEAF BLADE LENGTH			
mean	18.9 cm	23.5 cm	23.5 cm
range	18-20	19-30	18-26
std deviation	0.72	3.2	1.91
PLANT BRANCHING	very strong	medium	medium
SPATHE LENGTH			
mean	9.25 cm	8.6 cm	8.15 cm
range	8-11	8-9.5	6-10
std deviation	0.80	0.50	1.10
PEDUNCLE LENGTH			
mean	21.95 cm	25.00 cm	27.05 cm
range	21-24	20-32	22-36
std deviation	1.00	3.40	3.46
LEAF BLADE WIDTH			
mean	9.15 cm	8.65 cm	9.8 cm
range	8-10	7-10	7-12
std deviation	0.59	0.85	1.04
PETIOLE LENGTH			
mean	9.8 cm	14.2 cm	16.5 cm
range	8-12	10-17	13-20
std deviation	0.78	1.96	1.50

CARNATION (*Dianthus* sp.)

Comparative Growing Trials

All characteristics described below are from comparative growing trials conducted in glasshouse conditions in Aalsmeer, Holland and represent measurements of 20 plants. The temperature regime of the trial was between 10-24°C. Natural light conditions operated. Further comparative growing trials are currently in progress in Australia.

Varieties used for comparison

'Statropur', the closest known and parent variety from Holland. 'White Sim' and 'Amadeus', a small pink variety and closest known in Australia are being used in the local trials.



Variety: 'Stagilac' (commercial synonym: 'Lilac Gypsy') Application No. 90/125
Accepted: 11 December 1990

Applicant: **Van Staaveren BV**, of Aalsmeer, Holland.
Australian Agent: **Van Wijk & Son Flower Supply Pty Ltd**, Keysborough, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A small diameter single flower with few petals of lilac colour corresponding to RHS 73A.

Origin

This variety arose from a sport of 'Statropur' also bred by Van Staaveren's. Plant Variety Rights have been applied for in Holland, Germany, Japan and the United Kingdom. 'Stagilac' has been sold in Holland since September 1990.

Morphology — see comparison tables

'Stagilac' is a small single flower carnation similar to 'Statropur' but differs in flower colour and size. It has 5 lilac petals (RHS 73A) with dentate margins and a strong perfume. The buds are cylindrical with the calyx having 5 flat lobes of colour RHS 139C. The ovary is columnar. The styles, of medium length, have no shoulder but pigments are present.



Variety: 'Stagidark' (commercial synonym: 'Bright Eye Gypsy') Application No. 90/124
Accepted: 11 December 1990

Applicant: **Van Staaveren BV**, of Aalsmeer, Holland.
Australian Agent: **Van Wijk & Son Flower Supply Pty Ltd**, Keysborough, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A small diameter single flower with few petals of lilac and white corresponding to RHS 71A/155D.

Origin

This variety arose from a controlled pollination of *Dianthus barbatus* by the pollen parent *D. superbus*. Plant Variety Rights have been applied for in Holland, Germany, Japan and the United Kingdom. 'Stagidark' has been sold in Holland since September 1990.

Morphology — see comparison tables.

'Stagidark' is a small single flower carnation similar to 'Statropur' but differs in flower colour and size. It has 5 lilac petals (RHS 71A) with white dentate margins. The corolla profile is flat and the flowers have a strong perfume. The buds are cylindrical with the calyx having 5 flat lobes of colour RHS 139C. The ovary is columnar. The styles, of medium length, have no shoulder and no pigments.



Variety: 'Stagigi' (commercial synonym: 'Giant Gypsy') Application No. 90/121
Accepted: 11 December 1990
Applicant: **Van Staaveren BV**, of Aalsmeer, Holland.
Australian Agent: **Van Wijk & Son Flower Supply Pty Ltd**, Keysborough, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A small diameter single flower with few petals of lilac colour corresponding to RHS 74B.

Origin

'Stagigi' arose from the controlled pollination of *Dianthus barbatus* and *D. superbus* followed by the selection of progeny on the basis of flower colour, petal and calyx characteristics. Plant Variety Rights have been applied for in Holland, Germany, Japan and the United Kingdom. 'Stagigi' has been sold in Holland since September 1990.

Morphology — see comparison tables.

'Stagigi' is a small single flower carnation similar to 'Statropur' but differs in flower colour and size. It has 5 lilac petals (RHS 74B) with dentate margins. The corolla profile is flat and the flowers have a strong perfume. The buds are cylindrical with the calyx having 5 flat lobes of colour RHS 139C. The ovary is columnar. The styles, of medium length, have no shoulder and pigments are present.



Variety: 'Stagiten' (commercial synonym: 'Pink Gypsy') Application No. 90/123
Accepted: 11 December 1990
Applicant: **Van Staaveren BV**, of Aalsmeer, Holland.
Australian Agent: **Van Wijk & Son Flower Supply Pty Ltd**, Keysborough, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A small diameter single flower with few petals of pink and white corresponding to RHS 62B/155D.

Origin

'Stagiten' arose from the controlled pollination of *Dianthus barbatus* and a breeders seedling followed by the selection of progeny on the basis of flower colour, petal and calyx characteristics. Plant Variety Rights have been applied for in Holland, Germany, Japan and the United Kingdom. 'Stagiten' has been sold in Holland since September 1990.

Morphology — see comparison tables.

'Stagiten' is a small single flower carnation similar to 'Statropur' but differs in flower colour and shape of the

spray. 'Stagiten' has 5 pink petals (RHS 62B) with white dentate margins. The corolla profile is flat and the flowers have a strong perfume. The buds are cylindrical with the calyx having 5 flat lobes of colour RHS 139C. The ovary is columnar. The styles, of medium length, have no shoulder and pigments are present.



Variety: '**Stagibrig**' (commercial synonym: 'Dark Eye Gypsy') Application No. 90/122
Accepted: 11 December 1990
Applicant: **Van Staaveren BV**, of Aalsmeer, Holland.
Australian Agent: **Van Wijk & Son Flower Supply Pty Ltd**, Keysborough, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A small diameter single flower with few petals of lilac colour corresponding to RHS 71A/155D.

Origin

'Stagibrig' arose from the controlled pollination of *Dianthus barbatus* and *D. superbus* followed by the selection of progeny on the basis of flower colour, petal and calyx characteristics. Plant Variety Rights have been applied for in Holland, Germany, Japan and the United Kingdom. 'Stagibrig' has been sold in Holland since September 1990.

Morphology — see comparison tables.

'Stagibrig' is a small single flower carnation similar to 'Statropur' but differs in flower colour and shape. 'Stagibrig' has 5 purple/red petals (RHS 71A) with white dentate margins. The corolla profile is flat and the flowers have a strong perfume. The buds are cylindrical with the calyx having 5 flat lobes of colour RHS 139C. The ovary is columnar. The styles, of medium length, have no shoulder and no pigments.



Flowers of 'Stagilac'. (Photograph supplied by applicant).



Flowers of 'Stagidark'. (Photograph supplied by applicant).



Flowers of 'Stagigi'. (Photograph supplied by applicant).



Flowers of 'Stagibrig'. (Photograph supplied by applicant).



Flowers of 'Stagiten'. (Photograph supplied by applicant).

Table of Comparison of Carnation Varieties

(* = varieties used for comparison)

	'Stagilac'	'Stratopur'	'Stagidark'	'Stagigi'	'Stagiten'	'Stagibrig'
FLOWER DIAMETER						
mean	3.1 cm	3.2 cm	2.7 cm	3.7 cm	2.5 cm	2.5 cm
range	2.8-3.3	2.7-3.7	2.4-3.1	3.4-4.0	2.3-2.7	2.3-2.7
std deviation	0.4	0.6	0.4	0.4	0.4	0.4
OUTER PETAL WIDTH						
mean	1.7 cm	1.7 cm	1.6 cm	2.2 cm	1.6 cm	1.4 cm
range	1.6-1.7	1.6-1.8	1.4-1.6	2.0-2.4	1.5-1.8	1.3-1.4
std deviation	0.1	0.2	0.1	0.3	0.2	0.1
CALYX HEIGHT						
mean	2.2 cm	2.3 cm	2.1 cm	2.4 cm	2.3 cm	2.3 cm
range	2.1-2.4	2.0-2.4	2.0-2.2	2.2-2.6	2.0-2.5	2.1-2.3
std deviation	0.2	0.3	0.3	0.2	0.3	0.2
CALYX DIAMETER						
mean	0.3 cm	0.3 cm	0.3 cm	0.4 cm	0.3 cm	0.3 cm
range	0.2-0.4	0.3-0.4	0.3-0.4	0.3-0.4	0.3-0.4	0.3-0.4
std deviation	0.2	0.1	0.1	0.1	0.1	0.1
STEM THICKNESS						
mean	0.3 mm	0.4 mm	0.4 mm	0.4 mm	0.4 mm	0.4 mm
range	0.3-0.4	0.3-0.5	0.3-0.4	0.3-0.4	0.3-0.5	0.3-0.5
std deviation	0.1	0.1	0.1	0.1	0.1	0.2
STEM LENGTH						
mean	59.3 cm	53.5 cm	46.2 cm	50.7 cm	46.5 cm	42.1 cm
range	53-64	49-59	40-54	45-56	44-59	36-57
std deviation	6.9	5.0	8.5	7.2	7.0	12.4
LEAF LENGTH						
mean	9.9 mm	7.8 mm	9.4 mm	9.6 mm	9.0 mm	7.5 mm
range	8.7-11.1	6.8-8.5	8.7-10.0	8.5-10.6	7.9-10.2	5.8-9.2
std deviation	1.6	1.8	0.8	1.4	1.6	2.0
LEAF WIDTH						
mean	1.6 mm	1.7 mm	2.2 mm	2.5 mm	1.9 mm	1.5 mm
range	1.5-1.8	1.4-1.9	2.0-2.4	2.4-2.6	1.7-2.2	1.3-1.7
std deviation	0.2	0.5	0.3	0.1	0.4	0.3

LUCERNE (*Medicago sativa*)



Variety: 'Prime' Application No. 90/133
Accepted: 8 January 1991
Applicant: **Bristar, Evansville, Wisconsin, USA**
Australian Agent: Heritage Seeds Pty Ltd
Bayswater, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: semi-erect growth habit; very dark green leaves; a very high leaf/stem ratio; dark purple to purple flowers.

Varieties Used for Comparison

'WL Southern Special' and 'WL 318' being the closest known varieties in Australia.

Comparative Growing Trials

All characteristics described below are from comparative growing trials conducted in the field at Evansville, Wisconsin, USA in 1987 and 1988 and under glasshouse conditions at Highland, Maryland, USA in 1990. These trials used a randomised complete block design with four replicates and five harvests per season. 'Poast' was applied in spring 1987 for grass control and 'Furadan' in

July 1987 and June 1988 for insect control. All measurements are from 100 specimens. These characteristics have been confirmed in trials at Dubbo, Canowindra, Naracoorte, Gatton and Albury.

Origin

'Prime' is a 274 clone synthetic variety. Clones were selected for resistance to blue green aphid from within 24 experimental cage combinations. All experimentals had been previously screened for resistance to bacterial and fusarium wilt, phytophthora root rot, stem nematode, pea and spotted aphid. All experimentals were subject to four or more cycles of selection, recombination and evaluation in field plots and nursery tests.

'Prime' has been sold in Argentina since 1987 under the name 'Alpha 50'.

Morphology — see comparison tables.

'Prime' is a semi-dormant, dark green, moderately erect lucerne with medium height at flowering. 'Prime' retains its leaf to the crown and has a very high leaf/stem ratio. 'WL Southern Special' is more upright than 'Prime' which is more upright than 'WL 318'. 'Prime' is shorter than both 'WL Southern Special' and 'WL 318' and has thinner stolons than either variety. 'Prime' has darker leaves than either 'WL Southern Special' or 'WL 318'. 'Prime' has more dark purple to purple flowers (95%) than either 'WL Southern Special' or 'WL 318'.

In addition to morphological data from growing trials, the applicant has submitted evidence of the variety's resistance to nine pests and diseases. 'Prime' was found to be more resistant to *Colletotrichum trifolii* (anthracnose) than 'WL 318' according to the method of Ostazeski, Barnes and Hanson described in *Crop Science* 9: 351-354. 'Prime' is more resistant to *Corynebacterium insidiosum* (bacterial wilt) than 'WL Southern Special' and less resistant than 'WL 318' according to the method of Elling and Frosheiser described in *Agronomy Journal* 52:241-242. 'Prime' has approximately the same degree of resistance to *Fusarium oxysporum* (Fusarium wilt) as 'WL 318' and less resistance than 'WL Southern Special' according to the method of Frosheiser and Barnes described in *Phytopathology* 68:943-946. 'Prime' is more resistant to *Verticillium albo-atrum* (Verticillium wilt) than 'WL 318' according to the method of Peadar described on p. 26 of *USDA-ARS Misc. Pub. #1434*, 1984. 'Prime' has approximately the same degree of resistance to *Phytophthora megasperma* (Phytophthora root rot) as 'WL Southern Special' and less resistance than 'WL 318' according to the method of Frosheiser and Barnes described in *Crop Science* 13:735-738. 'Prime' is more resistant to *Ditylenchus dipsaci* (stem nematode) than 'WL 318' and slightly less resistant than 'WL Southern Special' according to the method of Eljin, Evans and Faulkner described in *Crop Science* 15: 275-276. 'Prime' is more resistant to *Acyrtosiphon kondoi* (blue alfalfa aphid) than 'WL 318' and has approximately the same degree of resistance as 'WL Southern Special' according to the

method of Nielson and Lehman described in the *Journal of Entomology* 70:13-14. 'Prime' has approximately the same degree of resistance to *Acyrtosiphon pisum* (pea aphid) as 'WL 318' and is less resistant than 'WL Southern Special' according to the method of Ortman, Sorensen and Pointer described in the *Journal of Economic Entomology* 53:881-887. 'Prime' is more resistant to *Therioaphis maculata* (spotted alfalfa aphid) than both 'WL 318' and 'WL Southern Special' according to the method of Nielson, Schonhorst and Don described in the *Journal of Economic Entomology* 64:506-510.

Agronomy

'Prime' is suited to most lucerne growing areas.

Table of Comparison of Lucerne Varieties

(* = varieties used for comparison)

	'Prime'	'WL Southern Special'	'WL 318'
GROWTH HABIT (1 erect, 9 prostrate)			
habit	3	2	4
PLANT HEIGHT			
mean	22 cm	34 cm	25 cm
range	11-29	25-41	19-31
std deviation	1.8	2.1	1.9
STOLON THICKNESS			
mean	1.9 mm	2.9 mm	2.1 mm
range	1.7-2.2	2.2-3.4	1.8-2.3
std deviation	0.2	0.3	0.2
LEAF COLOUR (1 light, 5 dark)			
	5	2	3
FLOWER COLOUR			
	dark purple to purple (95%) variegated (5%)	dark purple (28%) purple to light purple (70%) green (1%) white (1%)	purple (80%) blue and blue variegated (19%) white (1%)
<i>Colletotrichum</i> RESISTANCE (percentage resistant)			
PERCENTAGE	39	not supplied	21
<i>Corynebacterium</i> RESISTANCE (percentage resistant)			
PERCENTAGE	26	15	36
<i>Fusarium</i> RESISTANCE (percentage resistant)			
PERCENTAGE	60	75	62
<i>Verticillium</i> RESISTANCE (percentage resistant)			
PERCENTAGE	24	not supplied	16
<i>Phytophthora</i> RESISTANCE (percentage resistant)			
PERCENTAGE	17	16	35
<i>Ditylenchus</i> RESISTANCE (percentage resistant)			
PERCENTAGE	22	24	21
<i>Acyrtosiphon kondoi</i> RESISTANCE (percentage resistant)			
PERCENTAGE	27	28	16
<i>Acyrtosiphon pisum</i> RESISTANCE (percentage resistant)			
PERCENTAGE	32	44	34
<i>Therioaphis</i> RESISTANCE (Average Severity Index, 1 resistant, 5 dead)			
INDEX	2.3	2.0	2.2



'Prime' specimens at the centre of a plot illustrating the fine stems and the retention of leaves to the base, a result of good foliar disease resistance. (Photograph supplied by applicant)

ROSE (*Rosa hybrida*)

Comparative growing trials

All characteristics and comparisons below are from comparative growing trials conducted at the University of Western Sydney, Hawkesbury, Richmond, N.S.W., in October to December, 1990. Two year old plants were grown on their own rootstock, potted in growing medium, spaced 30 cm apart in a polytunnel fertilized with "Nutricote" fertilizer. Measurements and observations are based on 20 random selections from these plants in October and December 1990.



Variety: 'Interlien' (commercial synonym 'Evelien')
Application No: 91/011
Date accepted: 24 January, 1991
Applicant: G.P. IIsink, of Interplant B.V., Leersum, Netherlands
Australian Agent: Kenneth A. Langton, of Langton Roses, Mudgee, New South Wales

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a light pink glasshouse rose with bud pointed in profile; stems with medium-sized thorns from base to pedicel; no thorns or prickles on pedicel; foliage with very glossy upper surfaces and medium-sized terminal leaflets rounded at the base.

Varieties used for comparison

'Pink Delight' which is the closest known to 'Interlien' in flower colour, and 'Bluesette' which is a commonly known standard variety of miniature rose in Australia.

Origin

The breeder is G.P. IIsink in Netherlands. 'Interlien' was selected from the progeny of a controlled pollination of two unnamed seedlings. 'Interlien' has been protected by Plant Variety Rights in Germany since 1987.

Morphology — see comparison tables.

'Interlien' is a light pink spray rose, grown on its own roots with heads bigger than either 'Pink Delight' or 'Bluesette'. 'Interlien' has less petals than 'Pink Delight' and a similar number of petals to 'Bluesette' but has no petal undulation. 'Interlien's' growth habit is rated as upright-bushy whereas 'Pink Delight' and 'Bluesette' are both rated as bushy. Foliage is uniformly medium-green with



Rose 'Interlien' (centre) between 'Pink Delight' (left) and 'Bluesette' (Photograph supplied by applicant)

very glossy upper sides and thorns present on the lower midrib. The terminal leaflet has a rounded base and is concave in cross-section. Fragrance is rated weak in all three varieties.



Variety: 'Interprince' (commercial synonym 'Princess')
Application No: 91/012
Date accepted: 24 January, 1991
Applicant: G.P. IIsink, of Interplant B.V., Leersum, Netherlands.
Australian Agent: Kenneth A. Langton of Langton Roses, Mudgee, N.S.W.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a multiheaded white glasshouse rose of upright growth habit; sparse concave thorns mostly close to the base; pointed bud shape; stigma above anthers; foliage light green with dull upper side of leaves; terminal leaflet rounded at the base and thorns on back of leaves.

Varieties used for comparison

'Pink Delight' the seed parent, and 'Bluesette' a similar sized well known miniature rose in Australia.

Origin

'Interprince' arose from controlled pollination of 'Pink Delight' by an unnamed seedling. The breeder was G.P. IIsink in Netherlands. Plant Variety Rights have been granted in the Netherlands in 1989.

Morphology — see comparison tables

'Interprince' is a white spray rose grown on its own roots and of upright habit. Shoots show red anthocyanin and buds are pointed. Flowers are flat in profile with up to 50 small petals with mild reflexing, and have no fragrance. Stamen filaments are yellow, style colour is green with stigma above level of anthers. Foliage is light green with terminal leaflets rounded at the base, unlike 'Pink Delight' and 'Bluesette' whose terminal leaflets are obtuse at the base. Sepal extensions are weak, often absent.



Rose 'Interprince' (centre) between 'Pink Delight' (left) and 'Bluesette' (Photograph supplied by applicant)



Variety: 'Intermotto' (commercial synonym 'Joy')
Application No: 91/013
Date accepted: 24 January, 1991
Applicant: G.P. IIsink, Interplant B.V., Leersum, Netherlands.
Australian Agent: Kenneth A. Langton, of Langton Roses, Mudgee, N.S.W.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a medium pink spray rose with style colour yellow/green; a terminal leaflet convex in cross-section and small concave thorns on back of leaves.

Varieties used for comparison

'Pink Delight' which is a well known standard miniature rose variety in Australia and 'Bluesette' which is the closest known to 'Intermotto' in flower form and growth habit.

Origin

The breeder is G.P. IJssink in Netherlands. 'Intermotto' arose from controlled pollination of 'Amanda' by an unknown seedling. Plant Variety Rights were granted in the Netherlands and Germany in 1987.

Morphology — see comparison tables

'Intermotto' is a medium pink glasshouse rose grown on its own roots with a bushy growth habit. The multiple flower heads are smaller than either those of 'Pink Delight'

or 'Bluesette', and have a similar number of petals to 'Bluesette' but less petals than 'Pink Delight'. Style colour is yellow/green. Foliage is uniformly medium green with the terminal leaflet convex in cross-section. 'Intermotto' has thorns which are longer than those of either comparative varieties and thorns are also present on back of leaves. Fragrance is rated weak in all three varieties.



Variety: 'Interniki' (commercial synonym 'Nikita')

Application No: 91/014

Date accepted: 24 January, 1991

Applicant: G.P. IJssink, Interplant B.V., Leersum, Netherlands.

Australian Agent: Kenneth A. Langton, of Langton Roses, Mudgee, N.S.W.

Diagnosis

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

Table of Comparison of Rose Varieties

(* = varieties used for comparison)

	'Interlien'	'Interprince'	'Intermotto'	'Interniki'	* 'Pink Delight'	* 'Bluesette'
FLOWER COLOUR GROUP	light pink	white	med. pink	red blend	light pink	mauve
FLOWER DIAMETER						
mean	74.0 mm	58.8 mm	45.1 mm	60.1 mm	57.5 mm	59.1 mm
range	53-95	45-86	38-51	48-75	45-65	40-70
std deviation	11.3	12.2	3.7	7.3	7.5	7.6
PETAL COLOURS — Royal Horticulture Society (RHS) Charting						
midzone outside	49D	157D	52C	47D	55C	62C
midzone inside	49C	157D	52C	43B	56A	64C
margin outside	49D	157D	52B	47C	55C	63D
margin inside	49C	157D	52B	53A	56A	64C
basal spot outside	—	—	—	158D	—	155D
basal spot inside	49C	—	159D	158D	—	155B
PETAL NUMBERS	26-50	26-50	26-50	26-50	>50	26-50
— REFLEXING	medium	mild	medium	mild	medium	mild
— UNDULATION	absent	absent	absent	present	absent	present
STAMEN FILAMENT	yellow	yellow	yellow	yellow	yellow	green
STYLE COLOUR	green	green	yellow/green	yellow/green	red	green
STIGMAS... ANTHERS	below	above	below	above	same level	below
TERMINAL LEAFLET LENGTH						
mean	49.7 mm	55.1 mm	41.7 mm	46.0 mm	44.2 mm	32.3 mm
range	36-60	32-75	30-50	30-80	35-50	27-45
std deviation	8.03	11.1	5.88	12.81	5.13	4.56
TERMINAL LEAFLET WIDTH						
mean	34.55 mm	36.4 mm	23.25 mm	30.4 mm	24.9 mm	18.0 mm
range	25-45	30-50	15-30	22-53	20-30	15-21
std deviation	6.13	6.44	3.73	8.74	2.69	2.18
TERMINAL PETIOLE LENGTH						
mean	19.2 mm	16.9 mm	17.1 mm	16.5 mm	20.5 mm	9.6 mm
range	15-25	9-27	11-27	12-25	14-28	8-17
std deviation	3.09	5.60	3.69	4.07	4.11	2.06
THORN PROFILE (above)concave (below) v-concave		concave v-concave	concave v-concave	concave v-concave	flat concave	concave v-concave
THORN LENGTH						
mean	9.65 mm	6.90 mm	7.05 mm	5.35 mm	4.25 mm	5.35 mm
range	5-14	4-10	5-10	4-7	3-6	4-9
std deviation	2.21	1.8	1.36	1.09	0.97	1.53
PEDICEL THORNS/ PRICKLES	absent	few	few	few	few	few

headed type of red blend glasshouse rose of upright to bushy habit; foliage uniformly light green with terminal leaflets rounded at the base; style colour yellow/green and stigma above level of anthers.

Varieties used for comparison

'Pink Delight' and 'Bluesette' both well known miniature rose varieties in Australia.

Origin

The breeder is G.P. IJssink in Netherlands. 'Interniki' arose from a controlled cross of two unnamed seedlings. The variety has been protected by Plant Variety Rights in Germany and the Netherlands since 1988 and 1989 respectively.

Morphology — see comparison tables

'Interniki' is a spray rose grown on its own roots with light green medium sized leaves which have thorns on the lower midrib; the base of the terminal leaflet is rounded. Sepal extensions are weak in all three varieties. The flower shape and size is similar to that of 'Pink Delight' and 'Bluesette'. The style colour is yellow/green and the stigma is above the level of the anthers. Fragrance is rated weak in all three varieties.



Rose 'Internotto' (centre) between 'Pink Delight' (left) and 'Bluesette' (Photograph supplied by applicant)



Rose 'Interniki' (centre) between 'Pink Delight' (left) and 'Bluesette' (Photograph supplied by applicant)

PEA (*Pisum sativum*)



Variety: 'Bluey' Application No. 91/016

Accepted: 20 February 1991

Applicant: The Minister, Department of Agriculture and Rural Affairs, in right of the State of Victoria.

Agent: Daratech Pty Ltd

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: semi-leafless; semi-dwarf; medium early flowering; white flowers; a medium large globular seed with a translucent grey-green seed coat and green cotyledons.

Varieties used for comparison

'Dinkum' being the closest known variety and 'Buckley' being an industry standard variety.

Comparative Growing Trials

All characteristics described below are from comparative growing trials conducted at the Plant Breeding Centre, Victorian Crops Research Institute at Horsham in 1988 and 1989. In 1988, plots were sown on 28 June in a randomised block design with four replications and a plot density of 50 plants per square metre. Measurements were made on 20 plants (five from each plot) taken at random. In 1989, plots were sown on 20 June in a non-replicated trial at a plant density of about 50 plants per square metre. Measurements in this trial are from 20 plants taken at random from within each plot. The soil type was a grey, cracking self-mulching clay loam.

Origin

'Bluey' is derived from a convergence crossing strategy. It is the single plant progeny selected from an F2 and F3 generations, out of crosses between accessions of 'Parvus', 'PS386' and 'Viktoria Dippes Gelbe' (seed parent) and 'Dun', 'L58' and 'Viktoria Dippes Gelbe' (pollen parent). The final cross was made in 1982. Selection was based on grain yield, early vigour and seed type, while combining the traits of semi-leaflessness and semi-dwarfness to give an erect growth habit. 'Bluey' was bred by Grain Legume Breeding Group of the Victorian Crops Research Institute.

Morphology — see comparison tables.

'Bluey' is a semi-dwarf but erect growing field pea of medium early flowering habit. It has many large tendrils



Seeds of 'Bluey' (left), 'Dinkum' (centre) and 'Buckley' (right), split (top) and whole (bottom). (Photograph supplied by applicant).

per petiole, leaflets are absent and no anthocyanin is present. The white flowers appear moderately early, lasting only a short period. The pods of 'Bluey' are slightly curved and mostly with an obtuse angled point. 'Bluey' differs from 'Dinkum' by having green cotyledons, and from 'Buckley' by being semi-leafless, semi-dwarf and by having larger seeds. The seeds of 'Bluey' are globose, have a white seed coat and an occasional dimple.

Agronomy

'Bluey' is intended for cropping in low to medium rainfall (300-500 mm p.a.) regions.

Table of Comparison of Pea Varieties

(* = varieties used for comparison)

	'Bluey'	* 'Dinkum'	* 'Buckley'	* 'PSA3'
PLANT HEIGHT				
mean	72.8 cm	65.3 cm	116.6 cm	78.0 cm
range	61-83	34-80	84-148	62-102
std deviation	6.64	11.33	14.45	10.57
DAYS TO FLOWERING				
mean	107.0	107.4	101.1	110.4
range	104-111	102-112	96-105	106-114
std deviation	2.87	2.78	2.74	2.08
PEDUNCLE LENGTH				
mean	69.3 mm	58.0 mm	81.0 mm	72.2 mm
range	54-82	42-74	59-105	62-90
std deviation	7.23	7.47	12.98	7.13
POD LENGTH				
mean	70.1 mm	64.3 mm	51.5 mm	69.2 mm
range	58-81	57-72	35-62	37-84
std deviation	5.77	4.88	8.07	11.32
POD WIDTH				
mean	13.5 mm	12.9 mm	12.2 mm	13.2 mm
range	12-16	12-14	11-13	11-15
std deviation	0.97	0.79	0.68	1.21
OVULES PER POD				
mean	6.3	7.3	6.4	6.8
range	5-7	5-9	4-8	5-8
std deviation	0.62	0.89	0.91	1.26
SEEDS PER POD				
mean	4.3	4.4	3.7	4.2
range	3-6	3-6	2-6	1-7
std deviation	0.94	1.06	1.35	1.42
SEED WEIGHT PER 1000 SEEDS (from 4 samples at 11% moisture)				
mean	222 g	206 g	135 g	232 g
range	216-226	204-207	132-138	230-235
std deviation	4.2	2.0	2.7	2.1

OBJECTIONS

Formal objections (S20, PVR Act 1987): against any of the above applications can be lodged with the Registrar by a person who:

- considers their commercial interests would be affected by a grant of PVR to the applicant; AND
- considers that the provisions of S26 cannot be met.

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

Comment: Any person may make written comment at no charge on the eligibility of the above applications for PVR.

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 September, 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.

CHERRY (*Prunus avium*)

Applicant: **Her Majesty the Queen, in right of Canada**
Agent in Australia: **South Australian Cherry Improvement Committee** of Adelaide South Australia
'Lapins' Application No.: 90/117
Accepted: 26 November, 1990

RYEGRASS (*Lolium perrene*)

Applicant: **Department of Primary Industry** Tasmania of Kings Meadow, Tasmania
'Jackaroo' Application No.: 90/119
Accepted: 6 December, 1990

RED CLOVER (*Trifolium pratense*)

Applicant: **Department of Primary Industry** Tasmania of Kings Meadow, Tasmania
'Astred' Application No.: 90/120
Accepted: 10 December, 1990

DIANTHUS (*Dianthus caryophyllus*)

Applicant: **Van Staaveren B V**, Aalsmeer, Netherlands,
Agent in Australia: **Van Wijk & Son Flower Supply Pty Ltd**, Keysborough, Victoria
'Statas' commercial synonym 'Tasman'
Application No.: 90/126
Accepted: 11 December, 1990

ROSE (*Rosa hybrida*)

Applicant: **Sam McGredy Rose International**, of Auckland, New Zealand
Agent in Australia: **Swane Brothers Nursery**

Pty Ltd, Dural. New South Wales
'Macseatri' commercial synonym 'Happy Days' Application
No.: 90/127
Accepted: 17 December, 1990

Applicant: **Sam McGredy Rose International**, of
Auckland, New Zealand
Agent in Australia: **Swane Brothers Nursery
Pty Ltd**, Dural. New South Wales
'Macbucpal' commercial synonym 'Precious Michelle'
Application No.: 90/128
Accepted: 17 December, 1990

Applicant: **Sam McGredy Rose International**, of
Auckland, New Zealand
Agent in Australia: **Swane Brothers Nursery
Pty Ltd**, Dural. New South Wales
'Macfirwal' commercial synonym 'Rock & Roll'
Application No.: 90/129
Accepted: 17 December, 1990

ROSE *(Rosa grandiflora)*

Applicant: **Bear Creek Gardens**, of Medford, Oregon, U S A
Agent in Australia: **Swane Brothers Nursery
Pty Ltd**, Dural. New South Wales
'Aroshrel' commercial synonym 'Michelle Joy'
Application No.: 90/130
Accepted: 17 December, 1990

ROSE *(Rosa hybrida)*

Applicant: **Poulsen Roser Aps**, Fredensborg, Denmark
Agent in Australia: **Swane Brothers
Nursery Pty Ltd**, Dural. New South Wales
'Poulander' commercial synonym 'Hans
Christian Andersen'
Application No.: 90/131
Accepted: 17 December, 1990

ORNAMENTAL CHERRY *(Prunus yedoensis)*

Applicant: **Treesearch**, Kingston, New Jersey, U S A
Agent in Australia: **Ian Moss**, Mossmont
Nurseries Pty Ltd, Monbulk. Victoria
'Afterglow'
Application No.: 90/132
Accepted: 17 December, 1990

SOYBEAN *(Glycine max)*

Applicant: **Asgrow Seed Co of Kalamazoo**, Michigan
USA
Agent in Australia: **Annand Robinson Co**,
Toowoomba. Queensland
'A5980'
Application No.: 90/134
Accepted: 8 January, 1991

ALSTROEMERIA *(Alstroemeria hybrid)*

Applicant: **Van Staaveren, B V** Aalsmeer, Netherlands
Agent in Australia: **Tesselaar's Padua Bulb
Nurseries**, Silvan. Victoria
'Staranlo' commercial synonym 'Vera'
Application No.: 91/001
Accepted: 10 January, 1991

Applicant: **Van Staaveren B V**, Aalsmeer, Netherlands
Agent in Australia: **Tesselaar's Padua Bulb
Nurseries**, of Silvan, Victoria
'Stapripur' commercial synonym 'Mira'
Application No.: 91/002
Accepted: 10 January, 1991

Applicant: **Van Staaveren B V**, Aalsmeer, Netherlands
Agent in Australia: **Tesselaar's Padua Bulb
Nurseries**, of Silvan, Victoria
'Stasilva' commercial synonym 'Silvia'
Application No.: 91/003
Accepted: 10 January, 1991

Applicant: **Van Staaveren B V**, Aalsmeer, Netherlands
Agent in Australia: **Tesselaar's Padua Bulb
Nurseries**, of Silvan, Victoria
'Staterpa' commercial synonym 'Marita'
Application No.: 91/004
Accepted: 10 January, 1991

Applicant: **Van Staaveren B V**, Aalsmeer, Netherlands
Agent in Australia: **Tesselaar's Padua Bulb
Nurseries**, of Silvan, Victoria
'Stajured' commercial synonym 'Claudia'
Application No.: 91/005
Accepted: 10 January, 1991

PROTEA *(Protea amplexicaulis hybrid)*

Applicant: **Proteafloa Enterprises Pty Ltd**, Monbulk.
Victoria
'Joey' Application No.: 91/007
Accepted: 22 January, 1991

PROTEA *(Protea magnifica hybrid)*

Applicant: **Proteafloa Enterprises Pty Ltd**, Monbulk.
Victoria
'Possum Magic' Application No.: 91/008
Accepted: 22 January, 1991

GALTONIA *(Galtonia candicans)*

Applicant: **N & D Stidolph**, Masterton, New Zealand
Agent: **Phytotech Australia Pty Ltd**, St Marys.
South Australia
'Moonbeam' Application No.: 91/017
Accepted: 20 February, 1991

Applications Withdrawn

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

'Rainbow' Application No.: 89/027
'Lich' Application No.: 89/020

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:

'Elegance' Application No. 90/100
'Sesia' Application No. 90/116
'Lapins' Application No. 90/117
'Arabella' Application No. 90/118
'Jackaroo' Application No. 90/119
'Astred' Application No. 90/120
'Stagigi' Application No. 90/121
'Stagibrig' Application No. 90/122
'Stagiten' Application No. 90/123
'Stagidark' Application No. 90/124
'Stagilak' Application No. 90/125
'Statas' Application No. 90/126
'Macseatri' Application No. 90/127
'Macbucpal' Application No. 90/128
'Macfirwal' Application No. 90/129
'Aroshrel' Application No. 90/130
'Poulander' Application No. 90/131
'Afterglow' Application No. 90/132
'Prime' Application No. 90/133
'A5980' Application No. 90/134
'Staranlo' Application No. 91/001
'Stapripur' Application No. 91/002
'Stasilva' Application No. 91/003
'Staterpa' Application No. 91/004
'Stajured' Application No. 91/005
'Possum Magic' Application No. 91/006
'Joey' Application No. 91/007
'Celsia' Application No. 91/008
'Dunya' Application No. 91/009
'Anaea' Application No. 91/010
'Interlien' Application No. 91/011
'Interprince' Application No. 91/012
'Intermotto' Application No. 91/013
'Interniki' Application No. 91/014
'Leura' Application No. 91/015
'Bluey' Application No. 91/016
'Moonbeam' Application No. 91/017

Variation to Applications

The following submissions have 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**'

Application No. 90/099
(Published in PVJ Vol 3 No 4)
Applicant: **S Membrey & R Trimble of Faceys Nursery Pty Ltd**

Variety: 'Milky Way' (*Anigozanthos hybrida*)
Variation: Change name to '**Lemon Whizz**'

Application No. 90/115
(Published in PVJ Vol 3 No 4)
Applicant: **S Membrey & R Trimble of Faceys Nursery Pty Ltd**
Variety: 'Fireball' (*Callistemon salignus*)
Variation: Change name to '**Great Balls of Fire**'

Corrigenda

CLOVER (*Trifolium subterraneum spp brachycalicinum*)

Variety: 'Nuba'

In Vol 3 No 1, March 1990 the Applicants name should read —

Applicant: **L H Nungesser GMBH**, Darmstadt, West Germany
Australian Agent: **South Australian Seedgrowers Co-op Ltd** of Adelaide

STYLO (*Stylosanthes scabra*)

Variety: 'Bahia'
In Vol 3 No 4, December 1990 on p.33, **Origin** of the variety, the second sentence in the second paragraph should commence 'Selection in the F5 generation was based.....'

APPENDIX 1

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.

Ian Aberdeen, Valley Seeds Pty Ltd, RMB 1480, Alexandra VIC 3714; 057 976203

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

Keith Bodman, Redlands Horticultural Research Station, PO Box 327, Cleveland QLD 4163; 07 286 1488

Geoff Butler, Australian Cultivar Registration Authority, National Botanic Gardens, GPO Box 1777, Canberra ACT 2601; 06 267 1802

Chivers Computing & Agriculture, 3/258 Koorang RD Carnegie VIC 3163; 03 5697538; Ian Chivers.

Colourwise Nursery, PO Box 162, Glenorie, NSW, 2157; PH 045 666 177, FAX 045 666 219; Ian Collins

Colourwise Nursery Queensland, PO Box 14, Redlands Bay, QLD 4165; PH 07 206 8818; Stephen Collins

Jan Dekker, Tesselaar's Padua Bulb Nurseries, Monbulk Road, Silvan VIC 3795; 03 737 9305

DR. John Doran, CSIRO, Division of Forestry & Forest Products, PO Box 4008, Queen Victoria Terrace, Canberra ACT 2600

John Fennell, Department of Primary Industry Tasmania, PO Box 303, Devonport, TAS 7310; 004 240 233

Flemings Nurseries Pty Ltd, Flemings Lane, Monbulk Victoria 3793; 03 7566105; Liz Darmody

Dr Roger Kirkham, Department of Agriculture and Rural Affairs, Potato Research Station, Private Bag, Healesville VIC 3630; 059 629218

David McDonald, Agrisearch Services Pty Ltd, PO Box 1387, Shepparton VIC 3630; 058 212021

Graeme McGregor, Department of Agriculture and Rural Affairs, Potato Research Station, Private Bag, Healesville VIC 3630; 059 629218

Dr Geraldine McGuire, PO Box 3230, Loganholme, QLD 4127; 07 801 2929

Dr Neville Mendham, Department of Agricultural Science, University of Tasmania, GPO Box 252C, Hobart TAS 7001; 002 202 598

Les Mitchell, Agrisearch Services Pty Ltd, PO Box 1387, Shepparton VIC 3630; 058 212021

Murdoch University, School of Horticulture, Murdoch WA 6150; 09 3322810; Prof John Considine.

Navy Bean Marketing Board, PO Box 252, Kingardy QLD 4610; 071 621408/621666; Mr Kerry Heit.

Paradise Plants, RMB 2117, Kulnura, NSW, 2250; 043 76 1330; Ian Pannanen

Radcliffe and Till; 42 Moss St West Ryde NSW 2114; 02 8046973; Sharon Till.

Dr Malcolm Ryley, QLD Department of Primary Industries, Tor Street, Toowoomba QLD 4350; 076 314200

Robert Boden & Associates, 36 Carstenz Street, Griffith ACT 2603; 06 295 7720; Robert Boden.

Scholefield Robinson Horticultural Services Pty Ltd, PO Box 145, Kingswood, SA 5062; 08 373 2488, OR 364 2071; Dr P Scholefield/Dr B Robinson

Turf Grass Research Institute (Australian), PO Box 190 Concord West NSW 2138; 02 736 1233; Ian McIver/Alexandra Shakesby.

Turfgrass Technology, PO Box 416 Seaford VIC 3198; 03 786 3300; Terry Woodcock, Michael Robinson, J Neylan.

University of Western Sydney, Hawkesbury, Bourke St, Richmond NSW 2753; 045 701333; Robert Spooner-Hart.

Rob Van Der Staay PO Box 41, Moonah TAS 7009; 002 284 622

Jim Webb, 86 Johnson Street, Wagga Wagga NSW 2650.

State Departments of Agriculture and CSIRO May Do Trials on a Fee for Service basis for some species.

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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.

APPENDIX 2

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.

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 (if required)	800
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 3

Amendments to the Plant Variety Right Act 1987

The following amendments are contained in the Primary Industries and Energy Legislation Amendment Act No 134 of 1990. The amendments are in italics.

Part I — Preliminary

(3) For the purposes of the Act, where a plant variety is originated by the selective breeding of plants, the person who carried out that breeding shall be taken to have originated that variety.

(3A) For the purposes of this Act, a person who selects a plant variety from a plant population that the person has grown, being a plant variety that is distinguishable by one or more important morphological, physiological or other characteristics from all other plant varieties whose existence at the time is a matter of common knowledge, is taken to have originated that variety.

(4) For the purposes of the Act, where a plant variety is originated by humanly induced genetic mutation, the person who induced that mutation shall be taken to have originated that variety.

(5) Where —

(a) a person carries on activities in relation to particular plants or particular reproductive material of plants in the hope that a plant variety derived from those plants or that material will originate by natural processes; and

(b) a plant variety so derived, or apparently so derived, originates by natural processes,

that person shall be taken to have originated the plant variety referred to in paragraph (b).

PART III Plant Variety Rights

Division 2 — Applications for PVR

Provisional protection

22. (1) Where an application for plant variety rights in respect of a plant variety has been accepted, the applicant shall, for the purpose of sections 40 and 41, be deemed to be the grantee of plant variety rights in respect of that plant variety during the period commencing on the acceptance of the application and ending —

(a) when the application is disposed of; or

(b) if the Secretary has given the applicant notice under sub-section (2) — at the expiration of the prescribed period after the notice is given,

whichever occurs first.

(2) Subject to sub-section (3), where the Secretary is satisfied, in relation to an application for plant variety rights in respect of a plant variety, that—

(a) plant variety rights will not be granted, or are unlikely to be granted, to the applicant in respect of that plant variety;

(c) the applicant has given an undertaking to a person, whether or not for consideration, not to institute proceedings for the infringement of the rights of which the applicant is deemed to be the grantee by virtue of sub-section (1),

the Secretary may give the applicant notice, in writing, that this section shall cease to apply to that variety.

(3) The Secretary shall not give notice under sub-section (2) in relation to an application unless and until the Secretary has given the applicant particulars of the grounds for the proposed notice and a reasonable opportunity to make a written submission to the Secretary in relation to the proposed notice.

(4) Where a person ceases to be deemed to be the grantee of plant variety rights by virtue of a notice under sub-section (2), the Secretary shall give public notice that the person has ceased to be so deemed.

(5) For the purposes of paragraph (1) (b), the prescribed period is the period commencing on the day on which the notice referred to in that paragraph is given and ending —

(a) subject to paragraph (b), at the expiration of the period within which an application may be made to the Administrative Appeals Tribunal for a review of the giving of notice; or

(b) if such a application is made to the Administrative Appeals Tribunal — at the time at which the application is withdrawn or finally determined by the Tribunal or by a court.

(6) Nothing in this section shall be taken to affect the powers of the Federal Court under sub-section 44A(2) of the *Administrative Appeals Tribunal Act 1975* where an appeal is instituted in that court from a decision of the Administrative Appeals Tribunal in respect of an application referred to in paragraph (5) (b).

(7) A person who is deemed by sub-section (1) to be the grantee of plant variety rights in respect of a plant variety is not entitled to institute an action or proceeding for an infringement of those rights occurring during the period in respect of which the person is deemed by that sub-section to be the grantee of those rights unless and until plant variety rights in respect of that plant variety are granted to the person under section 26.

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;

(aa) a test growing of the variety carried out at a place outside Australia has demonstrated that the variety has that characteristic and Australia is required, under an agreement between Australia and the country in which the test growing was carried out, to accept that the variety has that characteristic; or

(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;

(ii) any test growing of the variety 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.

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