



PBR
Scanned: 15/9/05
Saved to electronic file: PBR G:
JOURNALS/Journal 2.4



Plant Varieties Journal

Volume 2 Number 4 DECEMBER 1989



CONTENTS

PAGE

| | |
|---|----|
| REGISTRAR'S REMARKS | 1 |
| PART 1 — ITEMS OF GENERAL INTEREST | 2 |
| IMPLEMENTATION OF PVR — PROGRESS | 2 |
| ELIGIBILITY AND EXAMINATION OF APPLICATION | 2 |
| PROVISIONAL PROTECTION — Sale of the variety | 3 |
| ROSE TRIAL GROUND | 3 |
| AVAILABILITY OF PVR OVERSEAS FOR AUSTRALIAN BREEDERS | 4 |
| UPOV | 4 |
| PVR TRIALS — Register of Names | 4 |
| | |
| PART 2 — MATTERS FOR PUBLIC NOTICE | 5 |
| PVR GRANTED | 5 |
| APPLICATIONS ACCEPTED | 5 |
| a) descriptions finalised | 5 |
| b) descriptions to be finalised | 37 |
| APPLICATIONS WITHDRAWN | 38 |
| PROVISIONAL PROTECTION | 39 |
| CORRIGENDA | 39 |
| | |
| APPENDIX 1 — PROPOSED SCHEDULE FOR INCLUDING GENERA/SPECIES | 40 |
| APPENDIX 2 — SECTIONS 16 and 17 OF THE PVR ACT | 41 |
| APPENDIX 3 — SECTION 26 OF THE PVR ACT | 42 |
| APPENDIX 4 — FEES | 43 |
| APPENDIX 5 — PLANT VARIETY RIGHTS ADVISORY COMMITTEE (PVRAC) | 43 |
| APPENDIX 6 — ORGANISATIONS OFFERING TO UNDERTAKE PVR TRIALS | 44 |
| APPENDIX 7 — SUMMARY OF PVR APPLICATIONS TO 9/11/89 | 45 |

Subscription —

Available from the Australian
Government Publishing Service,
GPO Box 84, Canberra, ACT, 2601.

ISSN 1030-9748

This work is copyright. Apart from
any use as permitted under the
Copyright Act 1968, no part may
be reproduced without written
permission from the Director
Publishing and Marketing AGPS.
Inquiries should be directed to the
Manager, AGPS Press, Australian
Government Publishing service,
G.P.O. Box 84, Canberra, A.C.T.
2601.

Typeset and printed in Australia by
Canberra Publishing and Printing Co.,
Fyshwick, A.C.T.

CONTACT NUMBERS:

| | |
|------------------------|------------|
| REGISTRAR | 062 716472 |
| EXAMINERS | 062 716476 |
| | 062 726451 |
| ADMINISTRATION/GENERAL | 062 724228 |
| FACSIMILE | 062 723650 |



REGISTRAR'S REMARKS



Kathryn Adams
Registrar of Plant Variety Rights
PLANT VARIETY RIGHTS OFFICE
GPO BOX 858
CANBERRA ACT 2601

Another year has caught up with us and we are about to launch into the 1990's. This will be an exciting period not only in terms of technological development in the plant world but also in preparing for the future changes in our environment.

At a recent Workshop on climate change sponsored by the Bureau of Rural Resources and the Australian Special Rural Research Council, the uncertainty of the future was highlighted. There was considerable evidence to support the view that temperature and CO₂ levels will increase but no-one could say for sure by how much (will it be a 3° or 6° change in temperature) or identify the associated rainfall pattern.

Evidence suggests that even a 1° change in temperature can effect agricultural requirements such as the number of frost free days, pest and disease conditions, time to maturity etc. The message was clear that if Australia is to take advantage of future climatic changes the two priority areas are plant breeding and pest and disease management.

Another area where plant breeding has been given high priority is in the move towards sustainable agriculture to ensure that our land is capable of supporting production for future generations. The potential for plant breeding is now greater than ever before and the use of new technologies should allow breeders to respond more quickly to the challenges ahead.

From March 1990 all genera and species will be eligible for PVR, providing a commercial incentive for plant breeders to look to the future in their breeding programs and to include species which may have little significance at present but could have potential under different conditions.

A strong emphasis on plant breeding now has the potential to secure the agricultural future of Australia for generations to come. The challenge is whether plant breeders can take a long term view or whether the pressure for short term gain will continue to take precedence. Perhaps this could be an issue for the industry R & D Councils/Corporations, allocating a proportion of their funds to such longer term research.

On a lighter note, 1989 has been an exciting year for the PVR Office, with the first full year of operation. The first Australian PVR was granted in February for the Macadamia varieties bred by Henry, Allison and David Bell and the number of applications has been increasing rapidly. To help you keep up to date we have published a complete list of applications received (Appendix 7).

Since the last issue of the Journal we have welcomed David Thearle as our second Examiner. David will broaden the range of skills already available as he has a background in forestry and tree breeding, one of the most difficult areas for PVR.

PVR is now a commercial reality in Australia and will provide our plant breeders with the long needed opportunity to catch up with the rest of the world in terms of reward for effort.

We hope that 1989 has been prosperous and that 1990 is even better.

MERRY CHRISTMAS AND HAPPY NEW YEAR from the staff of the PVR Office and the members of the PVR Advisory Committee.

CLOSING DATE FOR MARCH ISSUE: 20 JANUARY 1990

PART 1 — ITEMS OF GENERAL INTEREST

IMPLEMENTATION OF PVR — PROGRESS

The number of applications is increasing rapidly, with a further 40 since the last issue and several more in the pipeline. The number received in the 1989/90 financial year already exceeds the total for 1988/9. Breeders are continuing to recognise the need to protect their investments against unauthorised propagation and marketing using the internationally recognised PVR system.

As from 1 March 1990 PVR will be available for all genera and species. Many countries have limited provision of PVR to economically significant species. However, this does not help breeders who are looking at alternative crops or extending the range of products available. Inclusion of all species is necessary to encourage this form of development.



STAFF

We would like to introduce you to David Thearle, the newest member of the PVR team. He has a Bachelor of Science (Forestry) degree and a long time interest in arboriculture and horticulture. David has worked in plantation silviculture in Australia and New Zealand. He joined the Department of Primary Industry in 1982 and supervised a natural resource management information system.

As an Examiner, David will be dealing directly with applicants and brings a wealth of experience to the job, particularly in the field of forestry.

ELIGIBILITY AND EXAMINATION OF APPLICATIONS

The following is a brief summary of the requirements for application and examination of new varieties for PVR.

Eligibility

1. Only the original breeder (or employer), an agent of the original breeder or a person who has been assigned the right to the variety, in writing, by the breeder are eligible to apply. Therefore if someone else tries to register your variety in Australia or overseas they will not be legally entitled to do so.
2. The variety must be new. It cannot have been sold, with the breeder's consent, in Australia at all or overseas for more than six years.
3. The variety must be distinct, uniform and stable (DUS) for characteristics listed in the Objective Description form (available from the PVR Office). It must be distinct from all other known varieties in at least one important characteristic. Important in this context refers to botanical distinguishing features rather than to performance characteristics.

The applicant determines DUS from comparative growing trials using the new variety and the closest existing varieties in the same plots. The data is used to complete the Objective Description form. Only one reference site is required for the trials but the results must be repeatable at that site.

4. Some human intervention must have taken place, resulting in the new variety. Such intervention includes selective breeding (introduction and selection; controlled crossing and selection), establishment of a new cultivar, humanly induced mutation and identification of a natural mutation.

Applications are submitted to the PVR Office on the forms provided. Contact should be made with the Office as early as possible (preferably before beginning the trials) to ensure that the correct procedures are being followed.

Examination

The Examination of the application includes:

1. An assessment of the written information provided, including the data from the comparative growing trials.
2. A field examination of the trials by the PVR Examiner. This is to check the methodology used and to ensure that the data provided is reliable.
3. The publication of the results of the trials and a full description of the variety in the Plant Varieties Journal with a six month period for people to raise objections to the grant of rights — such objections must be based on concrete evidence to demonstrate why the variety is not eligible.

4. Other enquiries made by the PVR Office to establish the eligibility of the variety.

The objective is to demonstrate that the variety is distinct, uniform and stable and can be clearly identified by some form of repeatable assay at a reference site (the site where the original trials were carried out). It is to the applicant's advantage to define the variety as clearly as possible to minimise dispute and ascertain ownership with a high degree of certainty.

Although some field testing will always be needed for visual identification and marketing purposes, these could be minimised with the development of reliable standard methods for variety identification in the laboratory. Such assays would be more objective and repeatable than the field trials and ideally would be independent of environmental and management influences.

Progress is being made in this area but further work is required to identify the most appropriate method for each plant group or species. The inclusion of data from such assays is recommended as part of a PVR application.

There has been some concern that differences are based on botanical rather than merit or performance characteristics. The answer is that the former are more objective and can be measured more accurately. A variety may be different but may not have any greater merit under existing management or environmental conditions. Under different circumstances its performance may be enhanced considerably. The grant of PVR based on such subjective and variable assessments of merit would be of limited assistance to the breeder in defining the variety in sufficient detail to uphold a challenge to ownership.

PVR, based on objective differences, gives breeders the basic tool to promote and sell the variety. It is then up to him to convince the market of its advantages. Poor performers may sell the first year but repeat business is unlikely, as in any form of product marketing.

EXAMINATION OPTIONS

At the time of application, applicants can nominate whether they want the examination to proceed immediately or at a later time determined in conjunction with the PVR Office. In this context, examination includes the four steps listed above. If the "proceed immediately" option is nominated, the assessment and preparation of the description will begin and the description will be published as soon as all the information is supplied. The examination fee will be payable within three months of acceptance of the application.

If the option "not to proceed immediately" is nominated, a mutually agreeable date will be determined. 25% of the Examination fee will be payable within three months of acceptance of the application and the remainder within three months of the nominated date. With this option the PVR Office will not do any further work, after accepting

and inserting brief notification in the Journal, until the nominated date. The full description will not be prepared or published, delaying the commencement of the six month period for public comment. However, provisional protection will apply in the normal way.

PROVISIONAL PROTECTION — sale of the variety

Provisional protection applies from the time the application is accepted to the time PVR is granted or rejected if the variety has not been sold at all or sales have been restricted for scientific purposes or bulking up. Several organisations have raised the possibility of being able to commercially sell their varieties and still retain provisional protection under S22.

Comments received as a result of the request in the September 1989 issue of the Journal support the move to allow commercial sale of the variety during the period of provisional protection, on the basis that an applicant is not able to make any use of the protection unless PVR is actually granted.

An amendment is being proposed to delete S22(2)(b) to allow commercial sale of the variety during the provisional protection period.

In the interim, a regulation under S22 is also being considered to include sale for the purpose of conducting limited market evaluation.

ROSE TRIAL GROUND

The Faculty of Horticulture, University of Western Sydney (Hawkesbury) is currently undertaking a feasibility study on the establishment of an industry funded central trial ground for PVR rose applications. The concept was proposed as part of a National Rose Centre being promoted by the Rose Society of NSW. The Society has offered funds of up to \$10000 if the venture gets the go-ahead.

The Rose Centre would be the focal point for rose shows, competitions and exhibitions in Australia. It would be available as a public facility and could well be incorporated in tourist bus trips of the area.

The University is seeking the views of the rose industry in Australia to determine the management and funding of such an operation. In addition to the PVR field trials for roses, the University is also examining standard methods for laboratory assays, including isozyme analysis, to provide applicants with a complete trial centre.

The advantage to PVR applicants would be that the PVR trials would be done for them and all the reference varieties would be located in a central spot, ensuring that differences between varieties were clearly identified. Security would be maintained for the trials and there would be an agreed management program to ensure the quality of the product.

The advantages to the PVR Office would be significant. All varieties would be together, making identification of the differences more accurate. Field examinations would be more efficient and travel time currently spent visiting applicants around Australia would be reduced. Money saved could be used to assist with the operation of the garden.

The results from the feasibility study will be used as a basis for other industries which may be interested. Further information can be obtained from the Registrar.

AVAILABILITY OF PVR OVERSEAS FOR AUSTRALIAN BREEDERS

The establishment of PVR in Australia and the subsequent joining of UPOV gives Australian breeders the opportunity to apply for PVR overseas and gain the same protection when marketing internationally.

Most of the economically significant species are protected in other countries and Australian breeders are eligible to apply. However, in some places they will also have to apply to have the variety included on the national list, based on its performance relative to the varieties already included. This is often a much more difficult step than PVR.

With Australian native species there is some more work to be done as many overseas countries do not include them in their PVR regulations. The inclusion of such species may be slow in countries which do not accept applicant test results and the authorities do not have the necessary facilities to undertake the trials.

Other countries are expanding their PVR schemes to include all plant species and will accept applicant test results if government trial facilities are not available. The Federal Republic of Germany has agreed to accept the Australian PVR test results for Australian native species while application numbers remain small. Negotiations are underway for similar agreements with other countries.

UPOV

The proposed changes to the Convention were considered at the UPOV meetings in October 1989. The most significant items were:

- deferral of a decision on the coexistence of two systems (such as PVR and patents) for the protection of plant varieties
- clarification of the definition of variety to exclude from PVR plant material which cannot reproduce the whole plant
- a significant change in wording of Article 5 to specify the scope of the Convention and limit its application.

A new paper outlining these changes will be available from UPOV shortly. The group which considered the Convention at the July Workshop on *Intellectual Property Protection for Plants* will be reconvened when the UPOV paper is available. Others who would like to have input should contact the Registrar by 31 January 1990.

PVR TRIALS — Register of Names

The Plant Variety Rights Office is compiling a register of names (Appendix 6) of organisations who undertake PVR trials for other people or who will assist with preparing applications to overseas PVR Offices. This list will be given to anyone who asks and no preference will be given to any organisation. Organisations interested in being on the register should write to the Registrar. The PVR Office does not take any responsibility for the actions of these organisations.

PART 2 — MATTERS FOR PUBLIC NOTICE

PVR GRANTED

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

1. **'Progrow'** (Application No 88/010)
Lolium multiflorum ssp westerwoldicum
Grantee: Valley Seeds Pty Limited
Certificate No 13
Expiry Date: 26th August, 2008
2. **'Firefly'** (Application No 88/031)
Anigozanthos hybrid
Grantee: NSW Agriculture & Fisheries and Ornamental Native Plants (Research) Pty Ltd
Certificate No 14
Expiry Date: 15th November, 2008
3. **'Grasslands Koha'** (Application No 88/035)
Ornithopus sativus
Grantee: Grasslands Division, DSIR on behalf of Her Majesty The Queen in Right of New Zealand
Certificate No 15
Expiry Date: 31st October, 2008

APPLICATIONS ACCEPTED

The PVR applications listed below have been accepted under S18 of the *Plant Variety Rights Act 1987*.

a) *Descriptions Finalised*

IMPATIENS

(*Impatiens hawkeri* hybrid)

Comparative Growing Trials

All characteristics and comparisons below are from comparative growing trials conducted at Devon Meadows near Melbourne, Victoria in October 1989. Growing conditions were the same as used for commercial production. Five plants of each variety were grown in a pinebark based medium enriched with time-release fertilizer. They were situated in a heated, whitewashed poly-tunnel maintained between 16° and 30°C in 30% shade. Measurements represent 20 randomly chosen specimens from these five plants of each variety, taken in the fifth week after the cuttings were potted-on. Colour charting was done at six weeks.



Variety: **'Apollon'** Application No. 89/032
 Applicant: **Kientzler KG** of Gensingen, West Germany

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium size plant, lanceolate to elliptic leaves with dark green upper side, a red abaxial mid rib, lower side lamella pigmented red with red venation and yellow blade markings, a simple magenta flower.

Varieties used for comparison

'Corona', a Royalty Administration International C.V. variety, the closest known to 'Apollon' in flower colour and size, and which is a commonly known standard variety in Australia.

Origin

'Apollon' was selected from the seedling progeny of 3760 and 'Mimas', another Kientzler KG variety, in 1987. It has been protected by Plant Variety Rights in West Germany since 1989. Plant Variety Rights have been applied for in Denmark and Holland.

Morphology — See comparison tables.

'Apollon' is a hybrid Impatiens more compact in growth habit than 'Corona'. 'Apollon' also differs in having no eye-zone and more lanceolate and fewer elliptic leaves than 'Corona'.



Variety: **'Argus'** Application No. 89/033

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium plant, dark green lanceolate to elliptic leaves with a yellow central variegation and rose red simple flower.

Varieties used for comparison

'Red Planet' and 'Solar Red', Royalty Administration International C.V. varieties, the closest known to 'Argus' in flower colour and size, and which are commonly known varieties in Australia.

Origin

'Argus' was selected from the progeny of A505 and A6060. Plant Variety Rights have been applied for in Denmark, Holland and West Germany.

Morphology — See comparison tables.

'Argus' is a hybrid Impatiens, compact in growth habit. It has dark green leaves with persistent yellow markings about a yellow midrib. Stems are lightly pigmented. 'Argus' differs from 'Red Planet' and 'Solar Red' in having larger flowers, a small indistinct 'eye zone' of purple apparent in the rose red flower, and more lanceolate than elliptic leaves.



Variety: **'Aurore'** Application No. 89/034

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium plant, elliptic leaves, dark green upper side, red lower side, yellow central variegation, dutch vermilion red simple flower.

Varieties used for comparison

'Solar Red', a Royalty Administration International C.V. variety, the closest known to 'Aurore' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Aurore' was selected from the seedling progeny of 85-35-4 and 8501-2 in 1986. Plant Variety Rights have been applied for in Denmark, Holland and protected in West Germany since 1989.

Morphology — See comparison tables.

'Aurore' is a hybrid Impatiens, compact in growth habit. It has dark green leaves with narrow yellow markings about a red midrib. On the underside the lamella is also pigmented red. 'Aurore' differs from 'Solar Red' in having much broader leaves and narrow yellow-green leaf markings.



Impatiens 'Apollon' with comparative variety 'Corona'. (Photo supplied by applicant.)



Impatiens 'Argus' with comparative variety 'Red Planet'. (Photo supplied by applicant.)



Impatiens 'Aurore' with comparative variety 'Solar Red'. (Photo supplied by applicant.)

Variety: **'Celerio'** Application No. 89/035

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium size plant, dark green oblanceolate leaves with yellow-green blade markings and a magenta/violet simple flower.

Varieties used for comparison

'Astra', (also known as 'Columbia'), and 'Gemini', Royalty Administration International C.V. varieties, the closest to 'Celerio' in flower colour and size, and which are commonly known varieties in Australia..

Origin

'Celerio' was selected from the progeny of B4015 and B3109 in 1985. Plant Variety Rights have been applied for in Denmark, Holland and West Germany.

Morphology — See comparison tables.

'Celerio' is a hybrid *Impatiens*, compact in growth habit with red stems. It has dark green leaves with a red midrib. On the underside the lamella is also pigmented red. A distinct but pale, salmon pink 'eye zone' is apparent in a simple flower with uneven petal margins. 'Celerio' differs from 'Astra' in having stronger coloured but smaller flowers. It also differs from 'Gemini' in being a smaller plant and having darker flower colour.

Variety: **'Delias'** Application No. 89/036

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium plant, elliptic leaves, dark green upper side, green lower side lamella, light magenta simple flower with a deep magenta eye zone.

Varieties used for comparison

'Gemini' and 'Eclipse', Royalty Administration International C.V. varieties, the closest known to 'Delias' in flower colour and size, and which are commonly known varieties in Australia.

Origin

'Delias' was selected from the seedling progeny of 86-56-12 and 86-11-02 in 1987. Plant Variety Rights have been applied for in Denmark and West Germany.

Morphology — See comparison tables.

'Delias' is a hybrid *Impatiens*, compact in growth habit, smaller than 'Gemini' or 'Eclipse'. It has green leaves with markings absent and lower side venation red. A distinct 'eye zone' is apparent in the flower showing as a more intense magenta. Flower colour is stronger than 'Gemini' and magenta compared to the red of 'Eclipse'.

Variety: **'Epia'** Application No. 89/037

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A small plant, elliptic leaves dark green upper side, red lamella lower side, a large dutch vermilion red simple flower.

Varieties used for comparison

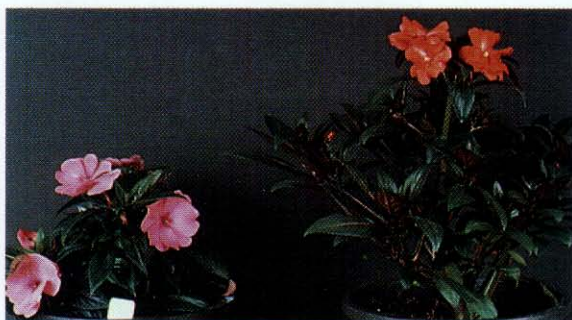
'Red Planet', a Royalty Administration International C.V. variety, the closest known to 'Epia' in flower colour and size, and which is a commonly known variety in Australia.

Origin

The breeder was Kientzler KG of Gensingen, West Germany. 'Epia' was selected from the progeny of A590 and B2870. Plant Variety Rights have been applied for in Denmark and West Germany.

Morphology — See comparison tables.

'Epia' is a hybrid *Impatiens*, compact in growth habit and smaller than 'Red Planet'. It has dark green leaves with a red abaxial midrib and venation unlike 'Red Planet' which has yellow central leaf variegation. A distinct 'eye zone' is not apparent in the flower but the throat can show crimson.



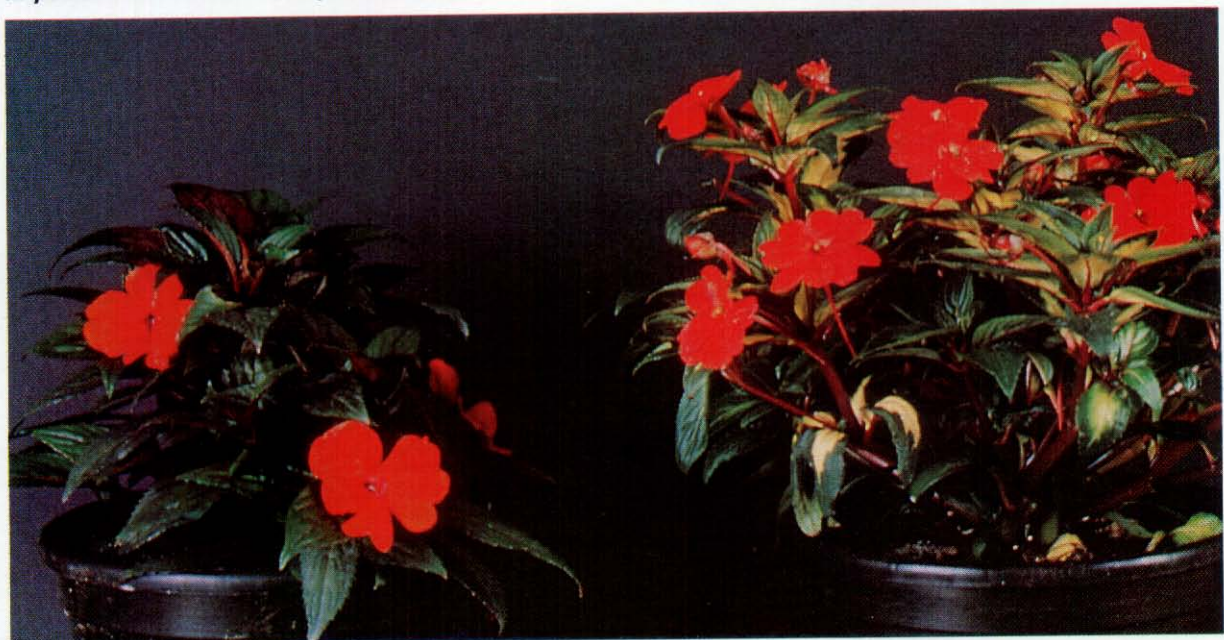
Impatiens 'Delias' with comparative variety 'Eclipse'. (Photo supplied by applicant.)



Impatiens 'Celerio' with comparative variety 'Corona'. (Photo supplied by applicant.)



Impatiens 'Delias' with comparative variety 'Gemini'. (Photo supplied by applicant.)



Impatiens 'Epia' with comparative variety 'Red Planet'. (Photo supplied by applicant.)

TABLE OF COMPARISON OF IMPATIENS VARIETIES

(* = existing varieties used for comparison)

| Characteristic | 'Phoebis' | 'Delias' | 'Arctia' | 'Thecla' | 'Marumba' | **'Gemini' | **'Eclipse' |
|--------------------------------|-----------|----------|----------|----------|-----------|------------|-------------|
| PLANT HEIGHT | | | | | | | |
| mean (mm) | 175 | 74 | 167 | 157 | 174 | 222 | 175 |
| range | 160-180 | 30-90 | 130-190 | 110-170 | 130-190 | 180-240 | 125-200 |
| Std dev. | 7 | 18 | 17 | 14 | 16 | 26 | 23 |
| PLANT WIDTH | | | | | | | |
| mean (mm) | 335 | 296 | 347 | 312 | 347 | 350 | 358 |
| range | 320-360 | 220-320 | 310-370 | 290-320 | 320-395 | 320-360 | 330-380 |
| Std dev. | 12 | 12 | 18 | 6 | 19 | 18 | 16 |
| LEAF LENGTH | | | | | | | |
| mean (mm) | 110 | 112 | 110 | 108 | 94 | 135 | 104 |
| range | 92-122 | 98-128 | 92-122 | 95-131 | 90-118 | 112-170 | 91-140 |
| Std dev. | 12 | 3 | 6 | 4 | 4 | 8 | 7 |
| LEAF WIDTH | | | | | | | |
| mean (mm) | 30 | 35 | 37 | 34 | 36 | 43 | 32 |
| range | 28-32 | 32-41 | 32-42 | 32-42 | 31-40 | 33-48 | 29-36 |
| Std dev. | 2.0 | 1.5 | 1.5 | 1.8 | 2.0 | 1.8 | 1.7 |
| LEAF SHAPE | | | | | | | |
| | elliptic | elliptic | elliptic | elliptic | elliptic | lanceolate | elliptic |
| LEAF COLOUR | | | | | | | |
| | 147A | 147A | 139A | 137A | 147A | 139A | 139A |
| BLADE MARKINGS | | | | | | | |
| | absent | absent | 151A | absent | absent | 151B | absent |
| FLOWER DIAMETER | | | | | | | |
| mean (mm) | 61 | 58 | 66 | 63 | 52 | 63 | 63 |
| range | 58-62 | 52-60 | 58-69 | 58-67 | 46-54 | 59-66 | 53-71 |
| Std dev. | 1.5 | 3.0 | 0.5 | 1.5 | 0.5 | 3.0 | 6 |
| FLOWER COLOUR | | | | | | | |
| primary | 75B | 66C | 57B | 58B | 40A | 67D | 40A |
| TIME TO START FLOWERING | | | | | | | |
| mean (days) | 30 | 32 | 28 | 28 | 32 | 30 | 30 |
| range | 29-32 | 30-32 | 26-29 | 26-30 | 30-33 | 29-32 | 28-31 |
| Std dev. | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 |

TABLE OF COMPARISON OF IMPATIENS VARIETIES

(* = existing varieties used for comparison)

| Characteristic | 'Aurore' | 'Selenia' | 'Argus' | 'Epia' | **Solar Red' | **Red Planet' |
|-------------------------|----------|-----------|---------------|----------|--------------|---------------|
| PLANT HEIGHT | | | | | | |
| mean (mm) | 166 | 148 | 155 | 128 | 168 | 142 |
| range | 130-170 | 110-170 | 125-170 | 90-135 | 130-190 | 140-170 |
| Std dev. | 13 | 25 | 9 | 14 | 17 | 18 |
| PLANT WIDTH | | | | | | |
| mean (mm) | 360 | 358 | 363 | 308 | 358 | 323 |
| range | 330-390 | 330-370 | 345-380 | 302-312 | 330-370 | 310-355 |
| Std dev. | 9 | 14 | 7 | 5 | 14 | 13 |
| LEAF LENGTH | | | | | | |
| mean (mm) | 102 | 116 | 100 | 109 | 98 | 110 |
| range | 87-118 | 92-128 | 96-119 | 92-132 | 79-115 | 87-136 |
| Std dev. | 4.5 | 5 | 2.6 | 2.9 | 5.0 | 3.6 |
| LEAF WIDTH | | | | | | |
| mean (mm) | 52 | 34 | 42 | 34 | 31 | 37 |
| range | 46-56 | 31-42 | 36-46 | 32-38 | 28-33 | 34-41 |
| Std dev. | 1.0 | 0.6 | 1.0 | 1.2 | 0.3 | 1.8 |
| LEAF SHAPE | elliptic | elliptic | lanc-elliptic | elliptic | elliptic | elliptic |
| LEAF COLOUR | 147A | 139A | 147A | 137A | 147A | 147A |
| BLADE MARKINGS | 11A | absent | 7D | absent | 10A | 10A |
| FLOWER DIAMETER | | | | | | |
| mean (mm) | 52 | 61 | 66 | 56 | 51 | 56 |
| range | 44-56 | 50-64 | 62-74 | 43-58 | 47-54 | 50-59 |
| Std dev. | 1.2 | 0.5 | 1.8 | 0.5 | 0.2 | 0.3 |
| FLOWER COLOUR | | | | | | |
| primary | 40AB | 33A | 57B | 40A | 40A | 40A |
| EYE ZONE/COLOUR | absent | absent | 74A | absent | absent | absent |
| TIME TO START FLOWERING | | | | | | |
| mean (days) | 35 | 32 | 30 | 45 | 28 | 30 |
| range | 32-36 | 30-34 | 28-31 | 42 | 26-30 | 28-35 |
| Std dev. | 0.5 | 0.2 | 0.3 | 47 | 0.5 | 1.0 |



Variety: **'Eurema'** Application No. 89/038

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A small plant, dark green elliptic leaves with a yellow central marking about a red abaxial midrib, a light red simple flower.

Varieties used for comparison

'Gemini', a Royalty Administration International C.V. variety, the closest known to 'Eurema' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Eurema' was selected from the progeny of A590 and B2870 cross. Plant Variety Rights have been applied for in Denmark and West Germany.

Morphology — See comparison tables.

'Eurema' is a hybrid Impatiens, compact in growth habit shorter than 'Gemini'. It has larger and elliptic dark green leaves with persistent yellow markings about a red midrib. On the underside the lamella is also pigmented red. A distinct 'eye zone' is not apparent in the flower which may fade at the centre but the throat can show crimson.



Variety: **'Flambee'** Application No. 89/039

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium plant, mid green broad elliptic leaves, simple white flower with pink blush upper side, full orange lower side.

Varieties used for comparison

'Twilight', a Royalty Administration International C.V. variety, the closest known to 'Flambee' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Flambee' was selected from the progeny of B3155 and B3710. Plant Variety Rights have been applied for in Denmark and West Germany.

Morphology — See comparison tables.

'Flambee' is a hybrid Impatiens, compact in growth habit and much smaller than 'Twilight'. It has green leaves with a red midrib and pigmented stems but without central variegation present in 'Twilight'. The simple flowers of white ground colour are blushed with pink on the basal petal and streaked down the centre of the others. The reverse side is an even vermilion.



Variety: **'Jasius'** Application No. 89/040

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium size plant, dark green lanceolate to oblanceolate leaves, and a white simple flower.

Varieties used for comparison

'Milky Way', a Royalty Administration International C.V. variety, the closest known to 'Jasius' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Jasius' was selected from the seedling progeny of B3400 and 'Milky Way' in 1985. It has been protected by Plant Variety Rights in West Germany since 1989. Plant Variety Rights have been applied for in Denmark and Holland.

Morphology — See comparison tables.

'Jasius' is a hybrid Impatiens, compact in growth habit. It has dark green leaves which may be slightly falcate. The flower is larger than 'Milky Way'. Stems are pale green.



Impatiens 'Eurema'. (Photo supplied by applicant.)



Impatiens 'Flambee' with comparative variety 'Twilight'. (Photo supplied by applicant.)



Impatiens 'Jasius' with comparative variety 'Milky Way'. (Photo supplied by applicant.)



Variety: **'Marumba'** Application No. 89/041

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium plant, elliptic leaves, dark green upper side, red pigmented lower side lamella, small dutch vermilion red simple flower.

Varieties used for comparison

'Eclipse', a Royalty Administration International C.V. variety, the closest known to 'Marumba' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Marumba' was selected from the seedling progeny of A615 and B3477 in 1987. 'Marumba' has been protected by Plant Variety Rights in Holland and West Germany since 1989.

Morphology — See comparison tables.

'Marumba' is a hybrid Impatiens, compact in growth habit. It has dark green leaves with a red midrib. On the underside the lamella is also pigmented red in contrast to 'Eclipse' and has smaller flowers.



Variety: **'Mimas'** Application No. 89/042

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium size plant, lanceolate to oblanceolate dark green leaves with a yellow central variegation, lower side lamella green with red venation, fuchsia purple simple flower.

Varieties used for comparison

'Cosmos', a Royalty Administration International C.V. variety, the closest known to 'Mimas' in flower colour and size, and 'Corona' which is a commonly known standard variety in Australia.

Origin

'Mimas' was selected from the seedling progeny of 84-80-6 and 84-07-2 in 1984. It has been protected by Plant Variety Rights in West Germany since 1986. Plant Variety Rights have been applied for in Denmark and Holland.

Morphology — See comparison tables.

'Mimas' is a hybrid Impatiens, compact in growth habit. It has shorter and wider, dark green, more lanceolate leaves than 'Cosmos' with yellow markings about a red midrib. On the underside the lamella is also pigmented red.



Variety: **'Saturnia'** Application No. 89/043

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A small plant, dark green elliptic leaves, no variegation, violet purple simple flower.

Varieties used for comparison

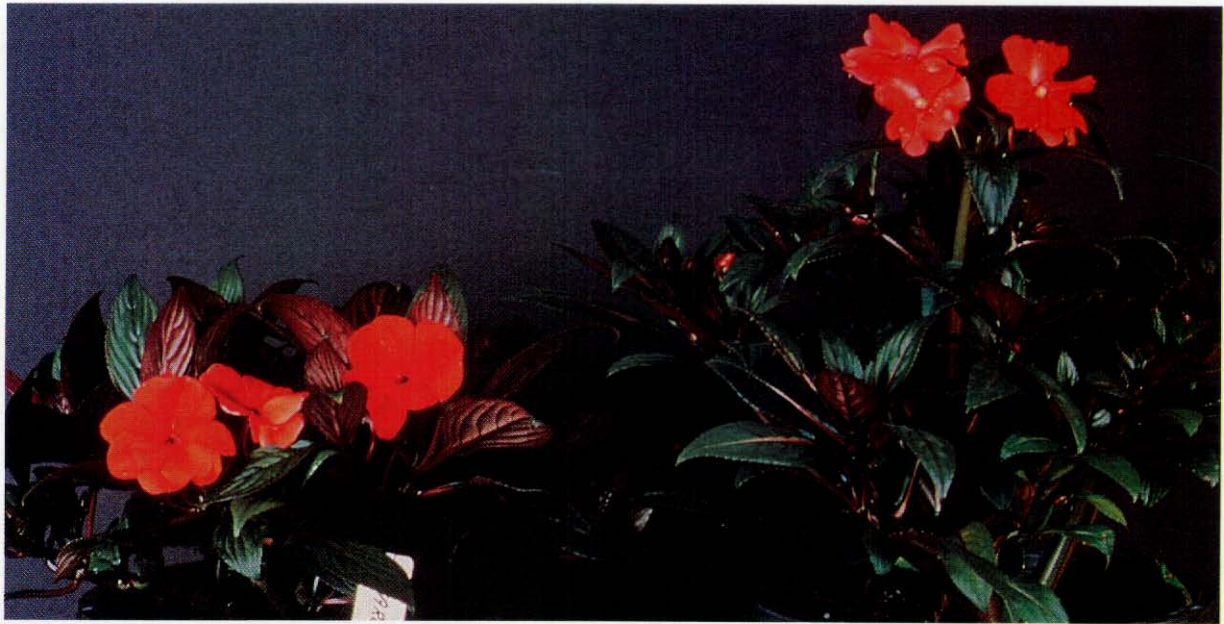
'Corona', a Royalty Administration International C.V. variety, the closest known to 'Saturnia' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Saturnia' was selected from the seedling progeny of A720 and B2880 in 1987. Plant Variety Rights have been applied for in Denmark and Holland, and has been protected in West Germany since 1987.

Morphology — See comparison tables.

'Saturnia' is a hybrid Impatiens, compact in growth habit and smaller than 'Corona'. It has dark green leaves with persistent yellow markings about a red midrib. On the underside the lamella is also pigmented red.



Impatiens 'Marumba' with comparative variety 'Eclipse'. (Photo supplied by applicant.)



Impatiens 'Mimas' with comparative variety 'Cosmos'. (Photo supplied by applicant.)



Impatiens 'Saturnia' with comparative variety 'Corona'. (Photo supplied by applicant.)

TABLE OF COMPARISON OF IMPATIENS VARIETIES

(* = existing varieties used for comparison)

| Characteristic | 'Mimas' | 'Apollon' | 'Saturnia' | 'Sylvine' | *'Cosmos' | *'Corona' |
|-------------------------|------------|---------------|------------|-----------|-----------------|-----------|
| PLANT HEIGHT | | | | | | |
| mean (mm) | 190 | 175 | 170 | 165 | 205 | 230 |
| range | 170-200 | 160-180 | 150-180 | 140-180 | 180-230 | 210-250 |
| Std dev. | 6 | 12 | 8 | 7 | 8 | 12 |
| PLANT WIDTH | | | | | | |
| mean (mm) | 400 | 370 | 370 | 360 | 380 | 440 |
| range | 375-410 | 360-380 | 350-400 | 340-370 | 360-390 | 430-460 |
| Std dev. | 7 | 11 | 12 | 14 | 8 | 16 |
| LEAF LENGTH | | | | | | |
| mean (mm) | 118 | 116 | 106 | 120 | 139 | 128 |
| range | 110-140 | 98-137 | 96-114 | 93-140 | 111-145 | 112-144 |
| Std dev. | 12 | 14 | 12 | 12 | 9 | 14 |
| LEAF WIDTH | | | | | | |
| mean (mm) | 40 | 52 | 38 | 46 | 31 | 47 |
| range | 36-38 | 37-55 | 34-44 | 40-55 | 24-36 | 42-55 |
| Std dev. | 3 | 5 | 4 | 5 | 4 | 3 |
| LEAF SHAPE | lanceolate | lanc-elliptic | elliptic | elliptic | narrow elliptic | elliptic |
| LEAF COLOUR | 137A | 137A | 147A | 137A | 139B | 139B |
| BLADE MARKINGS | 10A | 11A | absent | absent | 12A | 12A |
| FLOWER DIAMETER | | | | | | |
| mean (mm) | 60 | 60 | 60 | 53 | 43 | 61 |
| range | 56-66 | 54-63 | 58-64 | 47-56 | 37-52 | 57-63 |
| Std dev. | 4 | 5 | 1 | 4 | 5 | 1 |
| FLOWER COLOUR | | | | | | |
| primary | 66B | 66B | 77C-75A | 75A | 57A | 73A |
| EYE ZONE/COLOUR | absent | absent | absent | 57B | (56B) | 66A |
| TIME TO START FLOWERING | | | | | | |
| mean (days) | 30 | 35 | 30 | 30 | 30 | 32 |
| range | 28-31 | 29-37 | 29-31 | 28-32 | 27-31 | 31-36 |
| Std dev. | 1 | 2.0 | 1.0 | 1.3 | 1.4 | 2.0 |

TABLE OF COMPARISON OF IMPATIENS VARIETIES

(* = existing varieties used for comparison)

| Characteristic | 'Flambee' | 'Vulcain' | 'Celerio' | 'Astra' | **'Twilight' | **'Gemini' |
|-------------------------|-----------|------------|-------------|----------|---------------|------------|
| PLANT HEIGHT | | | | | | |
| mean (mm) | 70 | 90 | 157 | 240 | 165 | 222 |
| range | 44-91 | 70-120 | 130-190 | 230-250 | 123-172 | 180-240 |
| Std dev. | 10 | 20 | 18 | 24 | 10 | 26 |
| PLANT WIDTH | | | | | | |
| mean (mm) | 320 | 335 | 334 | 380 | 366 | 350 |
| range | 313-341 | 315-340 | 320-360 | 350-410 | 346-379 | 320-360 |
| Std dev. | 8.5 | 22 | 12 | 21 | 6.6 | 18 |
| LEAF LENGTH | | | | | | |
| mean (mm) | 98 | 126 | 102 | 150 | 105 | 135 |
| range | 90-111 | 115-144 | 93-113 | 121-160 | 95-130 | 112-170 |
| Std dev. | 2.3 | 6.0 | 6 | 11 | 2.5 | 8 |
| LEAF WIDTH | | | | | | |
| mean (mm) | 36 | 36 | 37 | 43 | 33 | 43 |
| range | 36-47 | 31-50 | 32-46 | 37-50 | 29-40 | 33-48 |
| Std dev. | 1.8 | 8.0 | 2.5 | 3.5 | 1.6 | 1.8 |
| LEAF SHAPE | elliptic | lanceolate | oblate-lanc | elliptic | lanc-elliptic | lanceolate |
| LEAF COLOUR | 137A | 137A | 139A | 147A | 137A | 139A |
| BLADE MARKINGS | absent | 9B | 153C | 151B | 153B | 151B |
| FLOWER DIAMETER | | | | | | |
| mean (mm) | 53 | 58 | 62 | 67 | 52 | 63 |
| range | 48-60 | 52-63 | 56-64 | 59-72 | 46-58 | 59-66 |
| Std dev. | 1.0 | 3.5 | 2.0 | 3.8 | 1.1 | 3.0 |
| FLOWER COLOUR | | | | | | |
| primary | 62B-C-63D | 62D | 66A | 73D-65B | 65D-40B | 67D |
| EYE ZONE/COLOUR | na | na | 49D | na | na | na |
| TIME TO START FLOWERING | | | | | | |
| mean (days) | 30 | 30 | 30 | 32 | 30 | 30 |
| range | 28-31 | 28-31 | 29-31 | 31-32 | 27-32 | 29-32 |
| Std dev. | 0.75 | 0.2 | 0.1 | 0.1 | 0.85 | 0.2 |



Variety: **'Selenia'** Application No. 89/044

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A small plant, long and narrow lanceolate to elliptic leaves, dark green upper side, green lower side, and a red simple flower.

Varieties used for comparison

'Solar Red', a Royalty Administration International C.V. variety, the closest known to 'Selenia' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Selenia' was selected from the seedling progeny of 85-17-3 and 85-82-1 in 1985. It has been protected by Plant Variety Rights in West Germany since 1988. Plant Variety Rights have been applied for in Denmark and Holland.

Morphology — See comparison tables.

'Selenia' is a hybrid Impatiens, compact in growth habit. It has dark green leaves with light green midrib upper side and lower side of the lamella. Unlike 'Solar Red', leaf markings are absent, flowers larger and more orange than red.



Variety: **'Thecla'** Application No. 89/046

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium size plant, dark green elliptic leaves, rose red and white simple flower.

Varieties used for comparison

'Gemini', a Royalty Administration International C.V. variety, the closest known to 'Thecla' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Thecla' was selected from the seedling progeny of B2955 and B3610. It has been protected by Plant Variety Rights in West Germany since 1987. Plant Variety Rights have been applied for in Denmark and Holland.

Morphology — See comparison tables.

'Thecla' is a hybrid Impatiens, compact in growth habit and smaller than 'Gemini'. It has dark green leaves upper side, lower side lamella pigmented red with red venation, midrib and stems. Unlike 'Gemini' which has lanceolate leaves, 'Thecla's' smaller elliptic leaves have no central markings. A distinct 'eye zone' is not apparent in the flower but the throat shows the same petal colour with more intensity.



Variety: **'Vulcain'** Application No. 89/047

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A small size plant, dark green lanceolate leaves, under side lamella pigmented red, pale simple flower with pink blush.

Varieties used for comparison

'Astra', a Royalty Administration International C.V. variety, (also known as 'Columbia'), the closest known to 'Vulcain' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Vulcain' was selected from the seedling progeny of B3308 and B3702. It has been protected by plant Variety Rights in West Germany since 1989. Plant Variety Rights have been applied for in Denmark and Holland.

Morphology — See comparison tables.

'Vulcain' is a hybrid Impatiens, compact in growth habit much smaller than 'Astra'. It has dark green lanceolate leaves and red midrib. On the underside the lamella is also pigmented red. 'Vulcain' has a paler flower than 'Astra'.



Impatiens 'Selenia'. (Photo supplied by applicant.)



Impatiens 'Thecla' with comparative variety 'Gemini'. (Photo supplied by applicant.)



Impatiens 'Vulcain' with comparative variety 'Astra'. (Photo supplied by applicant.)

Variety: 'Arctia'

(commercial synonym 'Aglia')
Application No. 89/048

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium plant, dark green elliptic and variegate leaves, simple magenta flower.

Varieties used for comparison

'Gemini', a Royalty Administration International C.V. variety, the closest known to 'Arctia' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Arctia' was selected from the seedling progeny of 85-04-7 and 85-32-1. 'Arctia' has been protected by Plant Variety Rights in West Germany since April 1989.

Morphology — See comparison tables.

'Arctia' is a hybrid *Impatiens*, compact in growth habit shorter than 'Gemini'. It has dark green leaves with yellow green markings about a green midrib upper side. On the underside of the lamella veins are lightly pigmented as are the stems. The flower is more red than purple of 'Gemini'.

Variety: 'Phoebis' Application No. 89/099

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium plant, dark green elliptic leaves with a red lower side lamella, no variegation, and a purple simple flower.

Varieties used for comparison

'Gemini', a Royalty Administration International C.V. variety, the closest known to 'Phoebis' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Phoebis' was selected from the seedling progeny of 85-09-8 and 85-31-1 in 1985. Plant Variety Rights have been granted in West Germany and applied for in Denmark and Holland.

Morphology — See comparison tables.

'Phoebis' is a hybrid *Impatiens*, compact in growth habit smaller than 'Gemini'. It has smaller dark green leaves with a red lamella, lower side venation and stems. A small 'eye zone' is apparent in the roseine flower compared with the purple flower of 'Gemini'.

Variety: 'Sylvine' Application No. 89/100

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

Australian Agent: **R Rother** of Outeniqua Nursery, Emerald, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: A medium plant, dark green elliptic leaves with red lower side lamella, a rose purple simple flower.

Varieties used for comparison

'Corona', a Royalty Administration International C.V. variety, the closest known to 'Sylvine' in flower colour and size, and which is a commonly known variety in Australia.

Origin

'Sylvine' was selected from the seedling progeny of 85-19-2 under controlled pollination with 85-12-1 in 1985. Plant Variety Rights have been granted in West Germany and have been applied for in Denmark and Holland.

Morphology — See comparison tables.

'Sylvine' is a hybrid *Impatiens*, compact in growth habit and much smaller than 'Corona'. It has dark green leaves with a red midrib and no yellow control blade making as has 'Corona'. On the underside the lamella is also pigmented red. An 'eye zone' is not distinct as such. The petals are striped with rose bengal over rose purple.



Impatiens 'Arctia' with comparative variety 'Gemini'. (Photo supplied by applicant.)



Impatiens 'Phoebis' with comparative variety 'Corona'. (Photo supplied by applicant.)



Impatiens 'Sylvine' with comparative variety 'Corona'. (Photo supplied by applicant.)

TABLE OF COMPARISON OF IMPATIENS VARIETIES

(* = existing varieties used for comparison)

| Characteristic | 'Jasius' | *'Milky Way' | 'Eurema' | *'Gemini' |
|--------------------------------|------------|--------------|----------|------------|
| PLANT HEIGHT | | | | |
| mean (mm) | 135 | 190 | 165 | 222 |
| range | 120-150 | 170-220 | 130-190 | 180-240 |
| Std dev. | 10 | 13 | 16 | 26 |
| PLANT WIDTH | | | | |
| mean (mm) | 346 | 360 | 350 | 350 |
| range | 320-360 | 350-370 | 315-370 | 320-360 |
| Std dev. | 18 | 10 | 20 | 18 |
| LEAF LENGTH | | | | |
| mean (mm) | 142 | 110 | 110 | 135 |
| range | 120-165 | 73-128 | 92-144 | 112-170 |
| Std dev. | 16 | 23 | 12 | 8 |
| LEAF WIDTH | | | | |
| mean (mm) | 29 | 27 | 42 | 43 |
| range | 26-31 | 23-30 | 34-51 | 33-48 |
| Std dev. | 1.5 | 1.9 | 3.0 | 1.8 |
| LEAF SHAPE | lanceolate | elliptic | elliptic | lanceolate |
| LEAF COLOUR | 137A | 137B | 139A | 139A |
| BLADE MARKINGS | absent | absent | 151A | 151B |
| FLOWER DIAMETER | | | | |
| mean (mm) | 60 | 48 | 55 | 63 |
| range | 54-63 | 42-54 | 48-57 | 59-66 |
| Std dev. | 2.5 | 2.5 | 3 | 3.0 |
| FLOWER COLOUR | white | white | 41B | 67D |
| primary | | | | |
| EYE ZONE/COLOUR | absent | absent | absent | absent |
| TIME TO START FLOWERING | | | | |
| mean (days) | 29 | 32 | 32 | 30 |
| range | 27-30 | 31-33 | 30-32 | 29-32 |
| Std dev. | 1.0 | 1.0 | 0.2 | 0.2 |

CHENILLE PLANT

(Acalypha chamaedrifolia)



Variety: 'Pink Candles' Application No. 89/081

Applicant: **John Churchus, of Pixie Plants**, Devon Meadows, Victoria.

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: a dwarf prostrate growth habit with occasional adventitious trailing stems; dense foliage with small pubescent leaves; multi-flowered pistillate pink spikes corresponding in colour to RHS 48A and single, double or triple flowers of similar colour in leaf axils.

Varieties used for comparison

'Summer Love' (also known as 'Firetails') being the parent variety.

Comparative Growing Trials

All characteristics and comparisons below are from comparative growing trials conducted at Devon Meadows on the Mornington Peninsula of Victoria in August 1989. Cuttings of each variety were re-propagated in 20 cm pots in potting media and maintained in heated polythene greenhouses maintained above 15°C. Measurements are from 20 plants.

Origin

The variety arises from a naturally pollinated seedling of 'Summer Love' at the applicant's premises in February, 1988. The plant was subsequently propagated asexually to form the variety 'Pink Candles'.

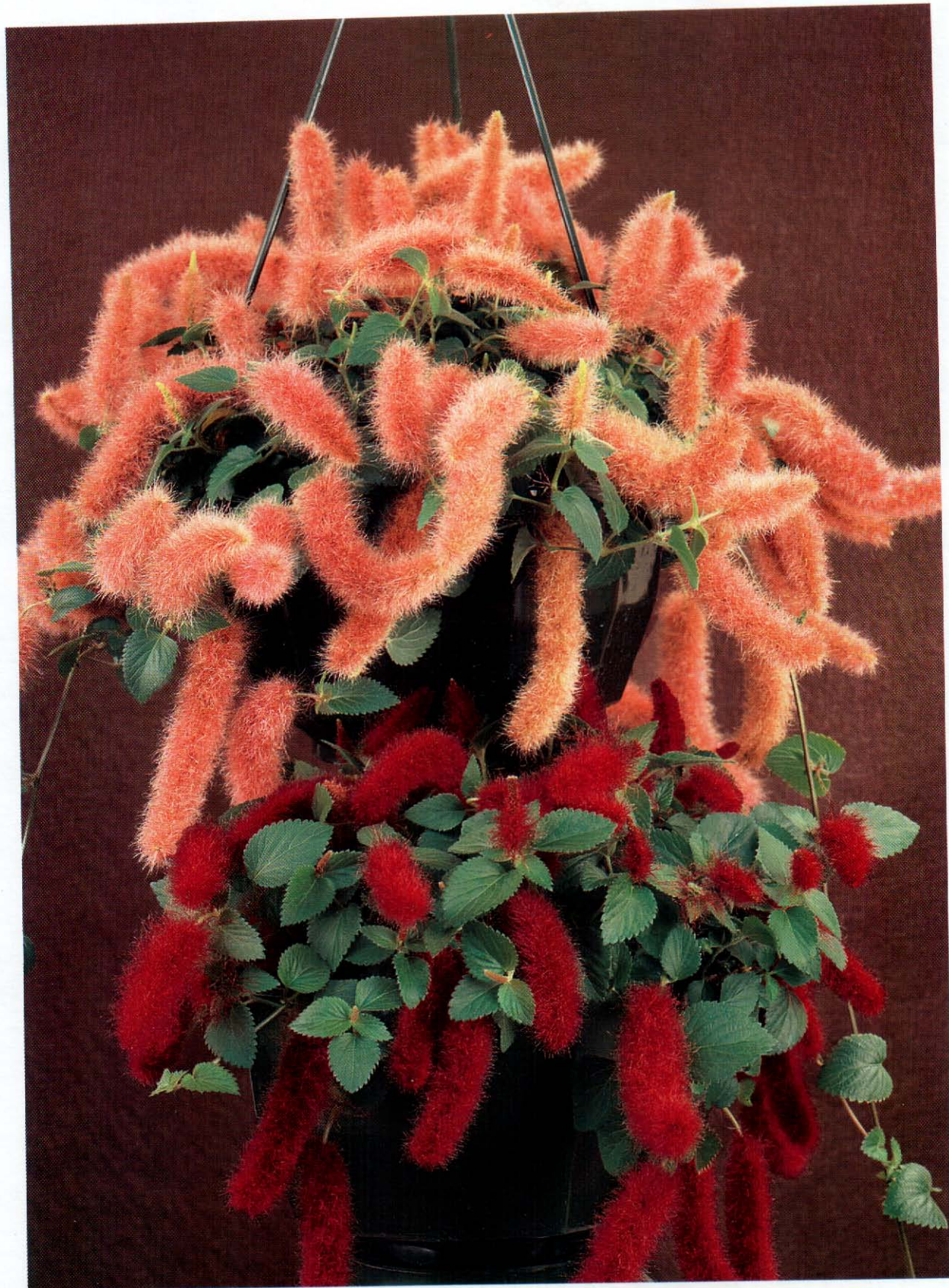
Morphology — See comparison tables.

The plant is a compact prostrate perennial herb with occasional trailing stems. The leaves are ovate, serrated, pubescent on both sides, stipulate, and arranged alternately except immediately beneath the terminal spike where they occur as opposite doubles or triples. The stems are also pubescent. The predominant flower structure is a terminal pistillate spike which is commonly erect and conical when immature but cylindrical and pendulous when mature. Other flowers occur as singles, doubles and triples in the axils of leaves and on trailing stems.

'Pink Candles' is distinct from 'Summer Love' in having pink flower spikes (matching RHS 48A) whereas those of 'Summer Love' are red (matching RHS 53A). 'Pink Candles' is also more compact in growth form than 'Summer Love', having smaller leaves and shorter petioles. The pistillate spikes are of similar length but are wider in 'Pink Candles' when fully mature. 'Pink Candles' also produces fewer trailing stems than 'Summer Love'.

TABLE OF COMPARISON OF ACALYPHA VARIETIES

| Varieties: | | 'PINK CANDLES' | 'SUMMER LOVE' |
|--------------------------|--------------------|-----------------|----------------|
| LEAF LENGTH | mean | 25.4 mm | 34.15 mm |
| | range | 20-32 | 29-40 |
| | standard deviation | 4.08 | 3.01 |
| LEAF WIDTH | mean | 19.65 mm | 26.25 mm |
| | range | 17-29 | 21-30 |
| | standard deviation | 3.1 | 2.2 |
| PETIOLE LENGTH | mean | 9.4 mm | 13.15 mm |
| | range | 5-14 | 8-17 |
| | standard deviation | 2.95 | 2.18 |
| FLOWER SPIKE LENGTH | mean | 95.65 mm | 82.3 mm |
| | range | 80-127 | 65-93 |
| | standard deviation | 4.36 | 4.36 |
| FLOWER SPIKE WIDTH | mean | 26.35 mm | 21.2 mm |
| | range | 21-30 | 18-25 |
| | standard deviation | 2.28 | 1.68 |
| PEDUNCLE LENGTH | mean | 25.3 mm | 26.8 mm |
| | range | 15-35 | 19-32 |
| | standard deviation | 6.32 | 3.87 |
| PLANT WIDTH | mean | 13.4 mm | 15.5 mm |
| | range | 13-14 | 15-17 |
| | standard deviation | 0.55 | 0.89 |
| TRAILING STEMS PER PLANT | | 2.5 | 7.5 |
| FLOWER COLOUR | | pink RHS 48A | red RHS 53A |



Acalypha 'Pink Candles' above 'Summer Love'. (Photo supplied by applicant.)

CHICKPEA (*Cicer arietinum*)



Variety: 'Narayan' Application No. 89/082

Applicant: **CSIRO Division of Tropical Crops and Pastures** of St. Lucia, Queensland.

Diagnosis

This variety is distinct from other known varieties in having: a globose or rounded seed shape, white flowers and no anthocyanin pigmentation in stems or leaves, pubescent stems and leaves, leaflet width greater than the 'Desi' varieties but less than the 'Kabuli' varieties.

Varieties used for comparison

Desi varieties 'Tyson', 'Amethyst', and 'Dooen', and Kabuli varieties 'Opal', 'Garnet', 'Kaniva' and 'Macarena'.

Comparative Growing Trials

All characteristics described and comparisons made are from growing trials planted at CSIRO research site at Dalby Agricultural College, Dalby, Queensland on 31 May 1988. There were four replicates of plots 6 metres long by four rows which were spaced 40 cm apart. Plant density approximated 8 per linear metre for Desi varieties, 3 per metre for 'Macarena' and 6 per metre for other varieties. Plant morphology, pod and seed measurements were made on 5 plants per plot while leaf measurements were from 10 leaves of each variety.

Origin

'Narayan' was derived by selection of an open pollinated line from the accession K223 which was

introduced into Australia from Russia in the late 1940's and kept in cold store until 1974.

Initial selection K223 was made in comparative trials conducted by CSIRO and Queensland Department of Primary Industries during the period 1974 to 1979. Selection within line K223 for 3 generations by D F Beech and B C Imrie of CSIRO produced 'Narayan' with uniformity of plant morphology and seed size, shape and colour.

Morphology — See table of comparison. 'Narayan' differs from the Desi and Kabuli varieties in having rounded cream coloured seeds. The Desi varieties have angular 'ram's head' shaped seeds which are brown in colour. The Kabuli varieties have 'brain' shaped seeds. 'Narayan' has larger seeds than 'Tyson' and 'Amethyst', and smaller seeds than 'Opal', 'Garnet', 'Kaniva' and 'Macarena'.

'Narayan' has 12–15 lanceolate leaflets per leaf whereas 'Macarena' has 1–4 longer and wider ovate to obovate leaflets per leaf.

'Narayan' has pubescent leaves and stems whereas 'Tyson' and 'Amethyst' are almost free of pubescence.

'Narayan' has no anthocyanin pigmentation in leaves or stems, and white flowers. 'Tyson', 'Amethyst' and 'Dooen' are pigmented and have pink flowers.

Agronomy

Line K223 from which 'Narayan' is derived produced seed yields not significantly different from those of 'Tyson' on black cracking clay soils on the Darling Downs. It has a higher flour yield than those cultivars and is considered suitable for flour production.



Cicer 'Narayan' seed (centre) showing typical globose shape between 'Tyson' (left) and 'Opal' (right). (Photo supplied by applicant.)

TABLE OF COMPARISON OF CHICK PEA VARIETIES

(* = existing varieties used for comparison)

| Character | | 'Narayen' | * 'Dooen' | * 'Amethyst' | * 'Tyson' | * 'Opal' | * 'Garnet' | * 'Kaniva' | * 'Macarena' |
|--------------------------|---------------|-----------|-----------|--------------|-----------|-----------|------------|------------|--------------|
| Pubescence | | present | present | slight | slight | present | present | present | present |
| Pigmentation | | absent | week | weak | weak | absent | absent | absent | absent |
| Seed Shape (IBPGR codes) | | 3 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| Flower Colour | | white | pink | pink | pink | white | white | white | white |
| Leaflets per leaf | mean | 13.6 | 13.9 | 13.1 | 14.5 | 14.2 | 13.8 | 14.5 | 2.1 |
| | range | 12-15 | 11-16 | 11-15 | 13-16 | 11-16 | 12-16 | 13-16 | 1-4 |
| | Std deviation | 0.97 | 1.66 | 1.45 | 1.08 | 1.69 | 1.03 | 0.97 | 1.10 |
| | Significance | | | | | | | | P0.01 |
| Leaflet width (mm) | mean | 7.4 | 6.8 | 6.3 | 6.8 | 8.3 | 9.3 | 9.4 | 17.4 |
| | range | 6.7-8.0 | 5.3-8.3 | 4.0-8.3 | 5.0-8.3 | 6.7-11.0 | 7.3-11.3 | 8.0-11.7 | 11.0-24.0 |
| | Std deviation | 0.40 | 1.05 | 1.42 | 1.03 | 1.46 | 1.12 | 1.11 | 4.22 |
| | Significance | | | | | | P0.05 | P0.05 | P0.01 |
| Plant height (cm) | mean | 57 | 58 | 60 | 48 | 57 | 62 | 60 | 46 |
| | range | 53-60 | 57-60 | 58-63 | 43-50 | 55-60 | 58-68 | 58-63 | 42-50 |
| | Std deviation | 2.9 | 1.3 | 2.2 | 3.9 | 2.4 | 5.1 | 2.2 | 4.4 |
| | Significance | | | | P0.01 | | | | P0.01 |
| Basal Branches | mean | 2.5 | 2.1 | 2.0 | 2.0 | 1.8 | 2.0 | 1.9 | 1.6 |
| | range | 1-4 | 1-4 | 0-3 | 1-3 | 1-4 | 0-4 | 0-3 | 1-4 |
| | Std deviation | 0.69 | 0.83 | 0.86 | 0.62 | 0.92 | 0.93 | 0.83 | 0.89 |
| | Significance | | | | | | | P0.01 | |
| Pod length (mm) | mean | 23.9 | 23.6 | 21.2 | 20.4 | 25.0 | 28.7 | 28.2 | 32.5 |
| | range | 22.6-26.0 | 20.0-25.4 | 19.2-22.4 | 16.2-22.1 | 20.0-29.0 | 24.6-31.8 | 23.4-31.4 | 28.8-36.0 |
| | Std deviation | 0.77 | 8.9 | 8.5 | 8.3 | 12.0 | 12.6 | 13.1 | 14.0 |
| | Significance | | | P0.01 | P0.01 | | P0.01 | P0.01 | P0.01 |
| Pod width (mm) | mean | 10.1 | 8.9 | 8.5 | 8.3 | 12.0 | 12.6 | 13.1 | 14.0 |
| | range | 9.4-11.4 | 7.8-9.4 | 7.8-9.4 | 7.4-8.8 | 11.0-12.8 | 10.8-13.6 | 11.4-14.4 | 12.8-15.8 |
| | Std deviation | 0.42 | 0.33 | 0.37 | 0.39 | 0.50 | 0.63 | 0.92 | 0.86 |
| | Significance | | P0.01 | P0.01 | P0.01 | P0.01 | P0.01 | P0.01 | P0.01 |
| Pod L:W ratio | | 2.4 | 2.7 | 2.5 | 2.5 | 2.1 | 2.3 | 2.2 | 2.3 |
| Pods per plant | mean | 121 | 89 | 93 | 142 | 60 | 70 | 48 | 59 |
| | range | 24-324 | 18-178 | 25-201 | 33-281 | 10-187 | 15-192 | 7-97 | 20-157 |
| | Std deviation | 69.1 | 48.5 | 40.5 | 64.8 | 41.2 | 44.8 | 26.1 | 32.3 |
| | Significance | | | | | P0.01 | P0.01 | P0.01 | P0.01 |
| Seeds per pod | mean | 1.3 | 1.1 | 1.6 | 1.5 | 1.0 | 1.0 | 1.1 | 1.1 |
| | range | 1.0-1.8 | 1.0-1.4 | 1.0-2.0 | 1.0-1.8 | 1.0-1.2 | 1.0-1.2 | 1.0-1.4 | 1.0-1.4 |
| | Std deviation | 0.20 | 0.15 | 0.30 | 0.23 | 0.07 | 0.07 | 0.12 | 0.15 |
| | Significance | | P0.01 | | | P0.01 | P0.01 | P0.01 | P0.01 |
| Seed wght. per 1000 | mean | 180g | 186g | 132g | 124g | 379g | 421g | 452g | 571g |



Cicer 'Narayen' white flower (right) beside purple flower of 'Tyson' (left). (Photo supplied by applicant.)

PINTO PEANUT (*Arachis sp.*)

Variety: 'Amarillo' Application No. 89/086

Applicant: Queensland Department of Primary Industries, CSIRO Division of Tropical Crops & Pastures of Brisbane, Queensland and NSW Agriculture & Fisheries of Sydney, NSW

Diagnosis

This variety is distinct from all other known varieties in having the following combination of characters: Leaflets obovate and oblong-obovate, obtuse at the apex and slightly cordate at the base; a stoloniferous growth habit; a small yellow flower and a prolific seed set.

Varieties used for comparison

'Arb' and 'Arblick' being other forage *Arachis*.

Comparative Growing Trials

All characters described are from growing trials at Gympie, Queensland in 1989. Trials have also been carried out at Grafton, New South Wales, (Lat 29°43'S) and Gympie (Lat 26°11'S) and South Johnstone (Lat 17°36'S) Queensland.

Origin

The main contributory breeders are B.G. Cook (Old DPI), R.J. Williams (CSIRO) and G.P.M. Wilson (NSW Agriculture and Fisheries). 'Amarillo' was selected between 1972 and 1987 from forty perennial accessions. The trials were carried out in Queensland and New South Wales with selection on the basis of seed production, dry matter yield, feed quality and shade tolerance. 'Amarillo' arises from material which has been placed in a species *pinto* nom. nud. (see P.M. Ressler in 'A Review of The Nomenclature of the Genus *Arachis L.*', *Euphytica* Vol 29, 1980 pp 813-817.

Morphology — See comparison tables.

'Amarillo' is a prostrate perennial herb. It is distinct from 'Arb' & 'Arblick' in its stoloniferous growth habit, leaflets which are obovate to oblong-obovate, obtuse at the apex and slightly cordate at the base whereas 'Arb' and 'Arblick' have rhizomatous growth habit and leaflets which are oblanceolate acute at the apex and cuneate at the base. Standards on the flowers of 'Amarillo' are about half the width of those of 'Arb' and 'Arblick' and yellow compared with light orange in the latter two varieties.

Agronomy

'Amarillo' has a mat forming habit in a sward. It is intended for grazing in subtropical and tropical environments.



Arachis 'Amarillo' sward. (Photo supplied by applicant.)

Table of comparative varieties of Arachis

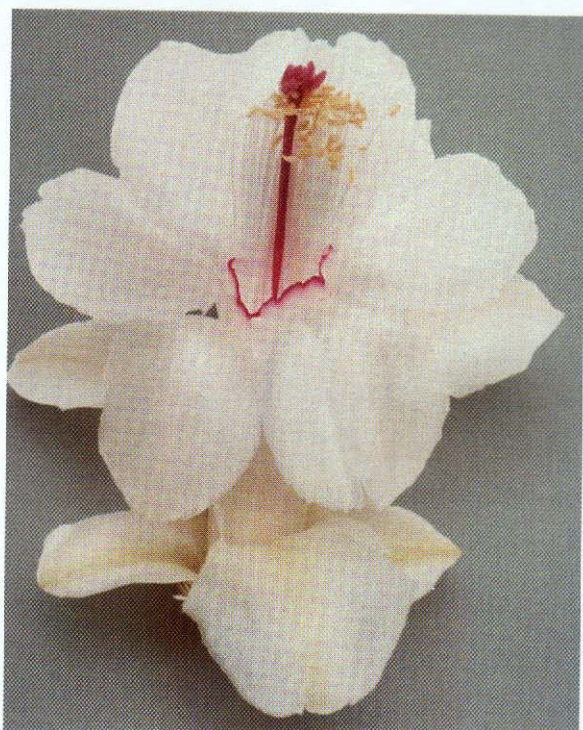
| Varieties: | 'AMARILLO' | 'ARB' | 'ARBCLICK' |
|--------------------|-------------------------------|--------------|--------------|
| ROOTING HABIT | stoloniferous | rhizomatous | rhizomatous |
| LEAFLET SHAPE | obovate to oblong-obovate | oblanceolate | oblanceolate |
| LEAFLET APEX SHAPE | obtuse | acute | acute |
| LEAFLET BASE SHAPE | slightly cordate | cuneate | cuneate |
| FLOWER COLOUR | yellow with orange striations | light orange | light orange |

CHRISTMAS CACTUS (*Schlumbergera truncatus* hybrids)

Comparative Growing Trials

All characteristics and comparisons are from comparative growing trials conducted at Winter Garden, Florida USA (Latitude 30°N) during the years 1987 and 1988, in light-reduced glasshouses with temperatures held within 15–35° C and relative humidity maintained above 65%. Plants of each variety were grown from single phylloclades in 10 cm pots in a peat/polystyrene growing medium with regular liquid fertilizer application. Propagated in late winter (January-February) and pruned in the second tier when 5 months old, plants were evaluated and measured at natural flowering time early the following winter (November-December). Measurements are taken from 20 specimens chosen at random.

Further trials in Australia are currently in progress.



Schlumbergera 'Bridgeport' flower, 9 month old plant and phylloclades with buds. (Photos supplied by applicant.)



Variety: 'Bridgeport' Application No: 89/94

Applicant: B L Cobia Inc. of Winter Garden, Florida, USA.

Diagnosis

This variety is distinct from any other known variety in having the following combination of characters: an erect growth habit; laterally curving phylloclades with medium-large, medium-thick outcurved denticles; a sterile, predominantly white flower with broad and obtusely rounded tepal blades, a medium length perianth tube and a short pistil.

Varieties used for comparison

'White Christmas' being a reference pale variety.

Origin

This variety arises from the self-pollination of a research variety of *S. truncatus* designated as 'ZH4333-T', carried out at Winter Garden, Florida in USA. A single seedling progeny of this cross was selected on the basis of its flowering and growth characteristics and subsequently propagated asexually to form the variety 'Bridgeport'. This variety is the subject of a Plant Patent application in USA.

Morphology

'Bridgeport' can be distinguished from 'White Christmas' by its broad ovate and apically rounded tepal blades compared to the narrow spatulate and apically acute tepal blades of 'White Christmas'. 'Bridgeport' also differs from 'White Christmas' in having a more upright growth habit and phylloclades with larger incurved denticles compared with the small outcurved denticles on 'White Christmas' phylloclades.

Variety: **'Cambridge'** Application No: 89/95

Applicant: **B L Cobia Inc.** of Winter Garden, Florida, USA.

Diagnosis

This variety is distinct from any other known variety in having the following combination of characters: a predominantly pale yellow flower with narrow spatulate and apically rounded tepal blades; phylloclades with undulating margins and medium sized, medium-thick outcurved denticles.

Varieties used for comparison

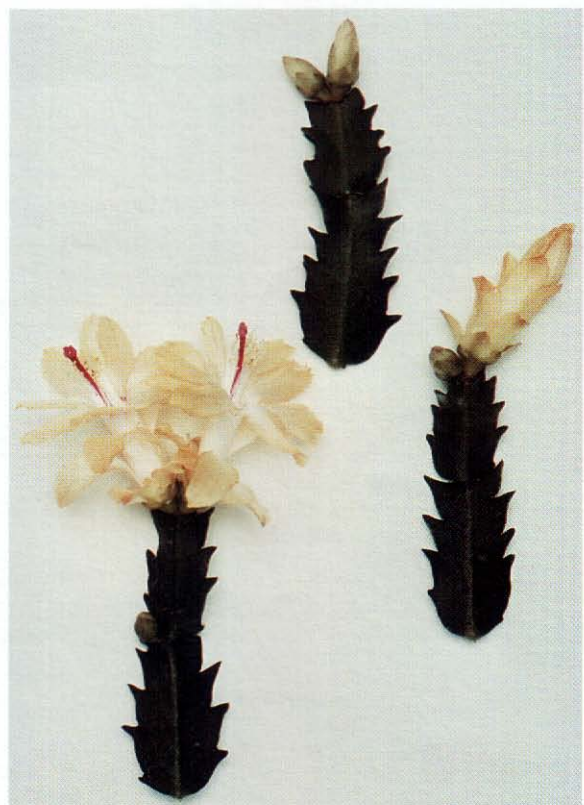
'Gold Charm' being the parent.

Origin

This variety arises from a chemically induced mutation of the variety 'Gold Charm', carried out at Winter Garden, Florida in USA. The mutated plant part was stabilised and subsequently propagated asexually and selected to form the variety 'Cambridge'. Selection was on the basis of its flowering and growth characteristics. This variety is the subject of a Plant Patent application in USA.

Morphology

'Cambridge' can be distinguished from 'Gold Charm' by its predominantly pale yellow tepal blades compared with the medially and marginally gold tepal blades of 'Gold Charm'. 'Cambridge' also differs from 'Gold Charm' in having a more erect growth habit and phylloclades with slightly larger, thicker and more frequent denticles than those of 'Gold Charm'. The perianth tube of 'Cambridge' has a broader throat, there are a larger number of tube laminating (middle series) tepals and the pistil is proportionally shorter than the pistil of 'Gold Charm'.



Schlumbergera 'Cambridge' flower, 9 month old plant and phylloclades with buds. (Photos supplied by applicant.)

TABLES OF COMPARISON OF CHRISTMAS CACTUS

(* = existing varieties used for comparison)

| | 'BRIDGEPORT' | 'GOLD CHARM' | *'WHITE * CHRISTMAS' | 'CAMBRIDGE' | 'CHRISTMAS FLAME' |
|--|------------------------------------|-------------------------------------|-------------------------------------|---------------------------------|-------------------------------------|
| GROWTH HABIT ranking 1-9 | upright 2 | upright 3 | upright 3 | upright 2 | upright 3 |
| PHYLLOCLADE PREDOMINANCE | 2 | 2-3 | 2-3 | 2 | 2-3 |
| PHYLLOCLADE LENGTH | | | | | |
| mean | 45.2 mm | 52.1 mm | 49.2 mm | 47.0 mm | 53.5 mm |
| range | 32-62 | 35-70 | 20-60 | 33-57 | 38-66 |
| standard deviation | 6.92 | 6.12 | 6.13 | 5.39 | 8.91 |
| WIDTH | | | | | |
| mean | 17.6 mm | 14.8 mm | 14.2 mm | 16.7 mm | 20.0 mm |
| range | 12-24 | 5-16 | 7-16 | 10-22 | 15-28 |
| standard deviation | 3.57 | 1.58 | 1.88 | 2.43 | 3.66 |
| COLOUR | dark green | med- green | med- green | dark green | med- green |
| MARGIN UNDULATION | absent | present | absent | absent | present |
| CURVATURE (in cross-section) | med-strong | absent | absent | absent | absent |
| DENTICLES | med-large med-thick incurved | med-large med-thick outcurved | med-large med-thick outcurved | small med-thick outcurved | med-large med-thick outcurved |
| FLOWER REFLEXURE | weak | med- weak | med- weak | med- weak | med- weak |
| PERIANTH TUBE LENGTH | | | | | |
| mean | 35.1 mm | 36.8 mm | 36.0 mm | 34.6 mm | 36.7 mm |
| range | 30-39 | 34-40 | 30-40 | 30-40 | 32-40 |
| standard deviation | 2.90 mm | 1.92 | 2.20 | 3.81 mm | 2.73 |
| TEPAL BLADE (distal tube forming series) | | | | | |
| LENGTH | | | | | |
| mean | 27.5 mm | 29.5 mm | 35.3 mm | 31.8 mm | 32.5 mm |
| range | 21-35 | 21-33 | 25-45 | 29-35 | 22-37 |
| standard deviation | 4.67 | 2.45 | 4.45 | 2.36 | 3.34 |
| WIDTH | | | | | |
| mean | 20.0 mm | 13.7 mm | 11.5 | 16.1 mm | 13.3 mm |
| range | 15-22 | 11-16 | 5-15 | 13-18 | 10-16 |
| standard deviation | 3.23 | 1.46 | 2.26 | 2.36 | 1.44 |
| SHAPE | broad ovate | narrow spathulate | narrow spathulate | narrow spathulate | narrow spathulate |
| TIP | rounded | acute | acute | acute | acute |
| MIDZONE COLOUR MUNSELL CHARTING RHS EQUIVALENT | white | white | white | pale yellow 2.5 Y 9/4 19C | yellow 2.5 Y 8/10 21B |
| MARGIN COLOUR MUNSELL CHARTING RHS EQUIVALENT | white | gold 26B | white | pale yellow 2.5 Y 9/4 19C | orange-yellow 7.5 YR 7/10 — |
| PISTIL LENGTH | | | | | |
| mean | 55.6 mm | 67.8 mm | 66.3 mm | 61.9 mm | 53.5 mm |
| range | 50-62 | 60-75 | 61-72 | 57-65 | 40-62 |
| standard deviation | 4.25 | 3.37 | 2.37 | 3.72 | 7.81 |

TABLES OF COMPARISON OF CHRISTMAS CACTUS

(* = existing varieties used for comparison)

| | 'ORANGE FANTASY' | 'KRIS * KRINGLE' | 'RED * RADIANCE' | 'SANTA CRUZ' | 'TWILIGHT * TANGERINE' |
|--|------------------------------|--------------------------------|-----------------------------|---------------------------------|---------------------------------|
| GROWTH HABIT ranking 1-9 | medium 4 | med-prostrate 5 | med-prostrate 5 | upright 2 | upright 3 |
| PHYLLOCLADE PREDOMINANCE | 2-3 | 3 | 2-3 | 1-2 | 3 |
| PHYLLOCLADE LENGTH | | | | | |
| mean | 34.3 mm | 41.1 mm | 42.7 mm | 43.5 mm | 45.0 mm |
| range | 25-41 | 25-50 | 36-55 | 27-63 | 35-55 |
| standard deviation | 4.42 | 6.16 | 4.14 | 8.68 | 6.4 |
| WIDTH | | | | | |
| mean | 16.5 mm | 13.7 mm | 13.8 mm | 15.9 mm | 14.9 mm |
| range | 11-22 | 12-16 | 7-19.5 | 10-19 | 7-19 |
| standard deviation | 2.52 | 1.54 | 1.98 | 1.92 | 3.15 |
| COLOUR | med- green | med- green | med- green | dark green | med- green |
| MARGIN UNDULATION | absent | absent | absent | absent | absent |
| CURVATURE (in cross-section) | absent | absent | absent | slight | absent |
| DENTICLES | medium thick outcurved | small med-thick incurved | small medium incurved | medium thick outcurved | med-small medium incurved |
| FLOWER REFLEXURE | med-weak | med-strong | medium | med-weak | med-weak |
| PERIANTH TUBE LENGTH | | | | | |
| mean | 27.8 mm | 32.3 mm | 34.2 mm | 31.0 mm | 27.0 mm |
| range | 25-31 | 30-40 | 31-38 | 25-36 | 24-30 |
| standard deviation | 2.05 mm | 2.49 | 1.72 | 3.46 | 1.62 |
| TEPAL BLADE (distal tube forming series) | | | | | |
| LENGTH | | | | | |
| mean | 34.9 mm | 28.4 mm | 37.3 mm | 30.7 mm | 26.5 mm |
| range | 30-39 | 25-35 | 23-37 | 29-36 | 22-36 |
| standard deviation | 2.59 | 3.35 | 2.34 | 6.09 | 2.39 |
| WIDTH | | | | | |
| mean | 17.2 mm | 12.7 mm | 13.9 mm | 16.5 mm | 12.8 mm |
| range | 13-21 | 10-17 | 10-17 | 14-20 | 10-16 |
| standard deviation | 2.25 | 2.31 | 1.56 | 1.37 | 2.39 |
| SHAPE | spathulate | narrow spathulate | narrow elliptic | narrow spathulate | lanceolate |
| TIP | rounded | acute | acute | rounded | acute |
| MIDZONE COLOUR MUNSELL CHARTING RHS EQUIVALENT | red 5 R 5/12 47B | strong pink | purple-pink | red-orange 7.5 R 6/10 42D | strong pink |
| MARGIN COLOUR MUNSELL CHARTING RHS EQUIVALENT | red 5 R 4/14 45A | red | purple-red | red-orange 7.5 R 5/12 41B | red-orange |
| PISTIL LENGTH | | | | | |
| mean | 53.1 mm | 56.4 mm | 61.8 mm | 56.0 mm | 52.7 mm |
| range | 48-57 | 54-63 | 57-65 | 52-60 | 51-55 |
| standard deviation | 2.87 | 2.60 | 2.12 | 2.78 | 1.15 |

Variety: 'Christmas Flame' Application No: 89/96

Applicant: B L Cobia Inc. of Winter Garden, Florida, USA.

Diagnosis

This variety is distinct from any other known variety in having the following combination of characters: an erect-medium growth habit; phylloclades with small, medium- thick and outcurved denticles; a sterile predominantly yellow flower with narrow spatulate and apically acute tepal blades; and red tinged ovary and petals on flower buds.

Varieties used for comparison

'Gold Charm' being the parent variety.

Origin

This variety arises from a naturally occurring mutation on a specimen of the variety 'Gold Charm' found in the applicant's production nursery at Winter Garden, Florida in USA. The mutated material was subsequently removed and propagated asexually to form the variety 'Christmas Flame'. This variety is the subject of a Plant Patent application in USA.

Morphology

'Christmas Flame' can be distinguished from 'Gold Charm' by its stronger and more orange-yellow colour on tepal blade margins than the medially and marginally gold tepal blades of 'Gold Charm'. 'Christmas Flame' also differs from 'Gold Charm' in having red tinged buds compared to the green buds of 'Gold Charm'.



Schlumbergera 'Christmas Flame' flower, and 9 month old plant. (Photos supplied by applicant.)



Schlumbergera 'Christmas Flame' phylloclades with buds (below) showing red flower buds compared with those of 'Gold Charm' (above) with green buds. (Photos supplied by applicant.)



Variety: 'Orange Fantasy' Application No: 89/97

Applicant: B L Cobia Inc. of Winter Garden, Florida, USA.

Diagnosis

This variety is distinct from any other known variety in having the following combination of characters: a sterile predominantly red flower with spatulate and apically pointed tepal blades, a medium length perianth and medium-short pistil; a medium growth habit; and phylloclades with large thick outcurved denticles;

Varieties used for comparison

'Kris Kringle' and 'Red Radiance'.

Origin

This variety arises from the controlled pollination of a research variety of *S. truncatus* designated as 'ZH3990-T' by another research variety designated as 'ZH6658', carried out at Winter Garden, Florida in USA. A single seedling progeny of this cross was selected on the basis of its flowering and growth characteristics and subsequently propagated asexually to form the variety 'Bridgeport'. This variety is also the subject of a Plant Patent application in USA since December 1988, under the name 'Kris Kringle II'.

Morphology

'Orange Fantasy' is distinct from 'Kris Kringle' in having shorter and broader tepal blades than 'Kris Kringle'. The mid and marginal tepal colour of 'Kris Kringle' is more pink-red than the red of 'Orange Fantasy'. The phylloclades of 'Orange Fantasy' have larger and thicker denticles than those of 'Kris Kringle'.

'Orange Fantasy' is distinct from 'Red Radiance' in having shorter perianth tube, shorter pistil, slightly broader spatulate tepal blades and a predominantly translucent white perianth tube compared to elliptic tepal blades and the pale pink tube of 'Red Radiance'. The mid and marginal tepal blade colour of 'Red Radiance' is more purple-red than the red of 'Orange Fantasy'. The phylloclades of 'Orange Fantasy' have larger and thicker denticles than those of 'Red Radiance'.



Schlumbergera 'Orange Fantasy' flower, 9 month old plant and phylloclades with buds. (Photos supplied by applicant.)

Variety: **'Santa Cruz'** Application No: 89/98

Applicant: **B L Cobia Inc.** of Winter Garden, Florida, USA.

Diagnosis

This variety is distinct from any other known variety in having the following combination of characters: a sterile predominantly red flower with spatulate and apically rounded tepal blades, a medium-long perianth tube and medium-long pistil; an erect growth habit; and phylloclades with medium-large, thick outcurved denticles.

Varieties used for comparison

'Twilight Tangerine' and 'Kris Kringle'

Origin

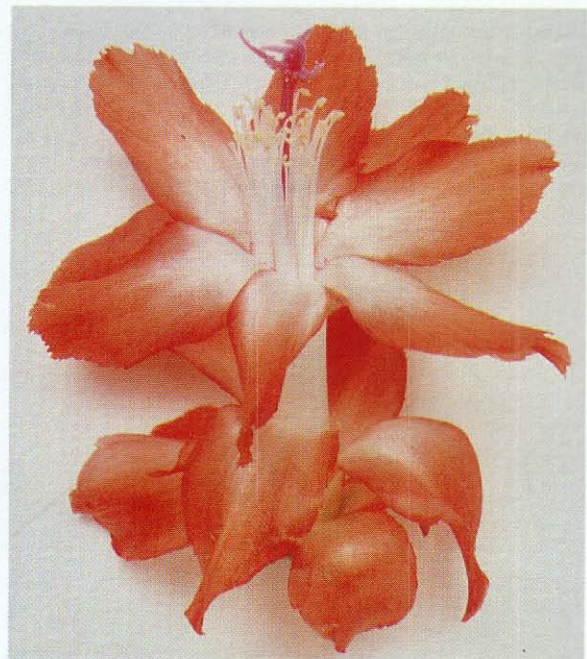
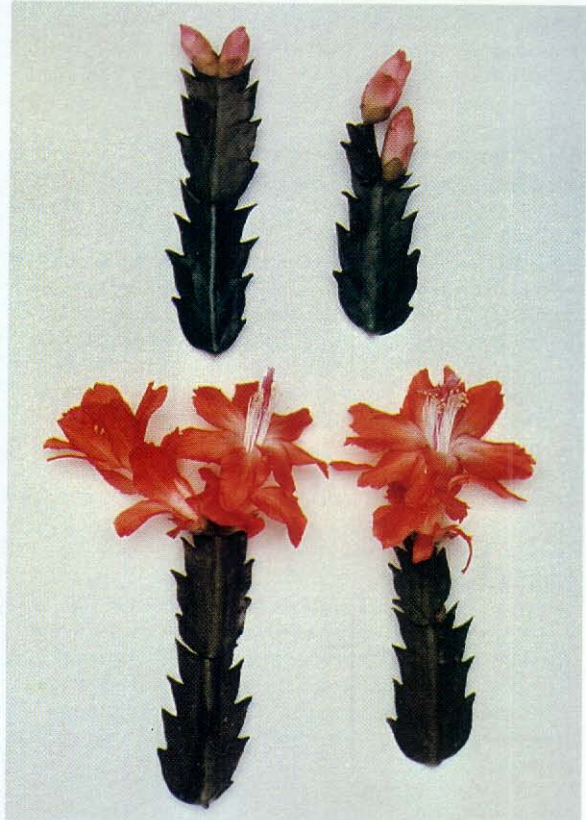
This variety arises from a chemically induced mutation of the proprietary research variety 'ZH18227', carried out at Winter Garden, Florida in USA. The mutated plant part was stabilised and subsequently propagated asexually and selected to form the variety 'Santa Cruz'. Selection was on the basis of its flowering and growth characteristics. This variety is also the subject of a Plant Patent application in USA.

Morphology

'Santa Cruz' is distinct from 'Kris Kringle' in 'Santa Cruz' having broader and more apically rounded tepal blades than 'Kris Kringle'. The perianth tube and pistil of 'Santa Cruz' are shorter than those of 'Kris Kringle' and phylloclades of 'Santa Cruz' have larger and thicker denticles than those of 'Kris Kringle'.



'Santa Cruz' is distinct from 'Twilight Tangerine' in 'Santa Cruz' having a longer perianth tube, a longer pistil, slightly broader spatulate tepal blades and a predominantly translucent white perianth tube compared to lanceolate tepal blades and the pale pink tube of 'Twilight Tangerine'. The mid and marginal tepal colour of 'Twilight Tangerine' is more purple-red and less intense than the red of 'Santa Cruz'. The phylloclades of 'Santa Cruz' have larger and thicker denticles than those of 'Twilight Tangerine'.



Schlumbergera 'Santa Cruz' flower, 9 month old plant and phylloclades with buds. (Photos supplied by applicant.)

OBJECTIONS

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

- a) considers their commercial interests would be affected by a grant of PVR to the applicant; AND
- b) considers that the provisions of S26 (Appendix 3 of this Journal) cannot be met.

A fee of \$180 is payable at the time of lodging a formal objection.

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

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

All formal objections and comments relating to the above applications must be lodged with the Registrar by close of business on **30/06/90**.

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.

STRAWBERRY *(Fragaria sp.)*

- Applicant: **The Regents of the University of California**, of Oakland, California USA.
'Chandler' Application No. 89/066
- Applicant: **The Regents of the University of California**, of Oakland, California USA.
'Fern' Application No. 89/067
- Applicant: **The Regents of the University of California**, of Oakland, California USA.
'Irvine' Application No. 89/068
- Applicant: **The Regents of the University of California**, of Oakland, California USA.
'Mrak' Application No. 89/069
- Applicant: **The Regents of the University of California**, of Oakland, California USA.
'Muir' Application No. 89/070

- Applicant: **The Regents of the University of California**, of Oakland, California USA.

'Oso Grande' Application No. 89/071

- Applicant: **The Regents of the University of California**, of Oakland, California USA.

'Parker' Application No. 89/072

- Applicant: **The Regents of the University of California**, of Oakland, California USA.

'Santana' Application No. 89/073

- Applicant: **The Regents of the University of California**, of Oakland, California USA.

'Selva' Application No. 89/074

- Applicant: **The Regents of the University of California**, of Oakland, California USA.

'Soquel' Application No. 89/075

- Applicant: **The Regents of the University of California**, of Oakland, California USA.

'Yolo' Application No. 89/076

- Applicant: **The Regents of the University of California**, of Oakland, California USA.

'Tustin' Application No. 89/077

PEACH *(Prunus persica)*

- Applicant: **S. C. E. A. Domaine de Castang**, of Bergerac, France.

Agent in Australia: Flemings Nurseries & Associates, of Monbulk, Victoria.

'Symphonie' Application No. 89/078

- Applicant: **S. C. E. A. Domaine de Castang**, of Bergerac, France.

Agent in Australia: Flemings Nurseries & Associates, of Monbulk, Victoria.

'Melodie' Application No. 89/080

NECTARINE *(Prunus persica var nectarina)*

- Applicant: **S. C. E. A. Domaine de Castang**, of Bergerac, France.

Agent in Australia: Flemings Nurseries & Associates Pty Ltd, of Monbulk, Victoria.

'Harmonie' Application No. 89/079

AVOCADO

(Persea americana)

- Applicant: **The Regents of the University of California**, of Oakland, California, USA

'**Esther**' Application No. 89/083

- Applicant: **The Regents of the University of California**, of Oakland, California, USA

'**Gwen**' Application No. 89/084

- Applicant: **The Regents of the University of California**, of Oakland, California, USA

'**Whitsell**' Application No. 89/085

ASIATIC PEAR

(Pyrus hybrid)

- Applicant: **The Regents of the University of California**, of Oakland, California, USA.

'**Daisui Li**' Application No. 89/087

- Applicant: **The Regents of the University of California**, of Oakland, California, USA.

'**Shin Li**' Application No. 89/088

ALSTROEMERIA

(Alstroemeria hybrid)

- Applicant: **Konst Alstroemeria BV**, of Nieuwveen, Holland

Agent in Australia: Maxiflora Pty Ltd. of Monbulk, Victoria

'**La Paz**' Application No. 89/089

- Applicant: **Konst Alstroemeria BV**, of Nieuwveen, Holland

Agent in Australia: Maxiflora Pty Ltd. of Monbulk, Victoria

'**Sangria**' Application No. 89/090

- Applicant: **Konst Alstroemeria BV**, of Nieuwveen, Holland

Agent in Australia: Maxiflora Pty Ltd. of Monbulk, Victoria

'**Paloma**' Application No. 89/091

- Applicant: **Konst Alstroemeria BV**, of Nieuwveen, Holland

Agent in Australia: Maxiflora Pty Ltd. of Monbulk, Victoria

'**Wilhelmina**' Application No. 89/092

- Applicant: **Konst Alstroemeria BV**, of Nieuwveen, Holland

Agent in Australia: Maxiflora Pty Ltd. of Monbulk, Victoria

'**Serena**' Application No. 89/093

APPLICATIONS WITHDRAWN

The following applications have been withdrawn at the request of the applicant.

'**Sesia**' Application No. 89/045

PROVISIONAL PROTECTION

a) *Granted*

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

| | |
|-------------------|------------------------|
| 'Chandler' | Application No. 89/066 |
| 'Fern' | Application No. 89/067 |
| 'Irvine' | Application No. 89/068 |
| 'Mrak' | Application No. 89/069 |
| 'Muir' | Application No. 89/070 |
| 'Oso Grande' | Application No. 89/071 |
| 'Parker' | Application No. 89/072 |
| 'Santana' | Application No. 89/073 |
| 'Selva' | Application No. 89/074 |
| 'Soquel' | Application No. 89/075 |
| 'Yolo' | Application No. 89/076 |
| 'Tustin' | Application No. 89/077 |
| 'Symphonie' | Application No. 89/078 |
| 'Harmonie' | Application No. 89/079 |
| 'Melodie' | Application No. 89/080 |
| 'Pink Candles' | Application No. 89/081 |
| 'Narayan' | Application No. 89/082 |
| 'Esther' | Application No. 89/083 |
| 'Gwen' | Application No. 89/084 |
| 'Whitsell' | Application No. 89/085 |
| 'Amarillo' | Application No. 89/086 |
| 'Daisui Li' | Application No. 89/087 |
| 'Shin Li' | Application No. 89/088 |
| 'La Paz' | Application No. 89/089 |
| 'Sangria' | Application No. 89/090 |
| 'Paloma' | Application No. 89/091 |
| 'Wilhelmina' | Application No. 89/092 |
| 'Serena' | Application No. 89/093 |
| 'Bridgeport' | Application No. 89/094 |
| 'Cambridge' | Application No. 89/095 |
| 'Christmas Flame' | Application No. 89/096 |
| 'Orange Fantasy' | Application No. 89/097 |
| 'Santa Cruz' | Application No. 89/098 |
| 'Phoebis' | Application No. 89/099 |
| 'Sylvine' | Application No. 89/100 |

b) *Withdrawn*

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

'**Kyambro**' (Application No 89/014)
Trifolium resupinatum var *resupinatum*
Applicant: Minister of Agriculture, South Australia, with effect from 30/09/89 until examination of the application is completed and PVR is granted or rejected.

'**Rosedale**' (Application No 89/015)
Trifolium subterraneum ssp *brachycalycinum*
Applicant: Minister of Agriculture, South Australia, with effect from 30/09/89 until examination of the application is completed and PVR is granted or rejected.

CORRIGENDA

1. In Vol 2 No. 3 issue September, 1989 on page 22 in b) Descriptions to be finalised the variety name is incorrectly recorded. The correct information is

IMPATIENS

'**Arctia**' commercial synonym '**Agilia**' Application No 89/048

Applicant: **Keintzler KG**, of Gensingen, West Germany Agent in Australia: **R Rother** of Emerald, Victoria

APPENDIX 1

PROPOSED SCHEDULE FOR INCLUDING GENERA/SPECIES IN THE PLANT VARIETY RIGHTS REGULATIONS

| PLANT GROUP | APRIL 88 | JULY 88 | JAN 89 | JULY 89 | MARCH 90 |
|---------------------------|--|--|---|--|------------------------|
| STONE FRUIT | | Prunus | All Stone Fruit | | |
| CITRUS | | All Citrus | | | |
| OTHER FRUIT | Malus (apple) | Fragaria (strawberry) Vitis (grape) Carica (paw paw) Rubus (raspberry) Persea americana (avocado) | Pyrus (pear) Actinidia (kiwifruit) | All fruit | |
| VEGETABLES | Phaseolus vulgaris (bean) | Solanum tuberosum (potato) Lycopersicon (tomato) Lactuca sativa (lettuce) Pisum (pea) | Allium cepa (onion) Daucus carota (carrot) Brassica oleracea (cabbage, cauliflower etc) | All vegetables | |
| NUTS | Macadamia | Prunus amygdalus (almond) | Juglans (walnut) | All nuts | |
| HERBAGE AND TURF GRASS | Phalaris | Lolium (ryegrass) Agrostis (bent) Festuca (tall fescue) Cynodon (bermuda grass) Zoysia Stenotaphrum | Dactylus (cocksfoot) Bromus Lotus Paspalum Arachis Bothriochloa | All herbage and turf grasses | |
| OILSEEDS | Brassica sp (oilseeds) (rape, mustard etc) | Glycine max (soybean) Helianthus annuus (sunflower) | Sesamum indicum (sesame) Carthamus tinctorius (safflower) Linum usitatissimum (linseed) | All oilseeds | |
| PASTURE AND GRAIN LEGUMES | | Trifolium (clover) Medicago Ornithopus (serradella) Stylosanthes | Lupinus Desmanthus Vigna (mungbean) Cicer arietinum (chickpea) Indigofera | All pasture and grain legumes | |
| GRAINS | | Setaria Avena (oats) Panicum Pisum (pea) Zea mays (corn) | Hordeum (barley) Pennisetum (pearl millet) Sorghum | | All grains |
| AUST. NATIVE ORNAMENTALS | Anigozanthos (Kangaroo paw) | Grevillea Chamelaucium (Geraldton wax) Lechenaultia Melaleuca Decaspermum Artanema | Macropidia (Black Kangaroo Paw) Piper Callistemon Thryptomene Telopea Dryandra | Boronia Banksia Verticordia Darwinia Pimelea | All native ornamentals |
| OTHER ORNAMENTALS | Rosa (Rose) | Orchids (all genera) Dianthus (carnation) Alstroemeria Schlumbergera (Zygocactus) Lilium (Lily) Metrosideros carminea Freesia Rhododendron Gerbera | Rhipsalis Kalanchoe Euphorbia (Poinsettia) Chrysanthemum Zantedeschia Cuphea Limonium Cyphomandra Streptocarpus Impatiens Cyclamen Begonia Achimenes Choysia Agapanthus | Hemerocallis Bougainvillea Ilex | All ornamentals |
| FORESTRY | | Eucalyptus | Pinus Acacia Casuarina | | All forestry |
| OTHER | Gossypium (cotton) | | Duboisia | Humulus lupulus | All species |
| PROPOSED ADDITIONS | | | Carpobrotus | | |

SECTIONS 16 AND 17 OF THE PVR ACT**Form of application**

16. An application for plant variety rights in respect of a plant variety shall be in writing in a form approved by the Secretary, shall be lodged with the Secretary in the prescribed manner and shall contain —

- (a) the name of the person making the application;
- (b) where the applicant is the breeder of the variety, a statement that the applicant is the breeder of the variety;
- (c) where the applicant is not the breeder of the variety, the name and address of the breeder from whom the applicant derived the right to make an application and particulars of all relevant assignments and transmissions of the right to make the relevant applications;
- (d) a description, or a description and photograph, of a plant of the variety sufficient to identify plants of that variety;
- (e) particulars of the characteristics that distinguish the variety from other varieties;
- (f) particulars of the manner in which the variety was originated;
- (g) the name of the variety;
- (h) particulars of any application for, or approval of a grant of, rights of any kind in respect of the variety in any other country;
- (j) particulars of any tests carried out to establish that the variety is homogeneous and stable (including particulars of any cycle of reproduction or multiplication for the purposes of paragraph 3(2)(b));
- (k) in the case of a plant variety originated outside Australia, particulars of any test growing of that variety carried out for the purpose of determining whether the variety will, if grown in Australia, have a particular characteristic;
- (m) an address in Australia for the service of documents on the applicant for the purposes of this Act; and
- (n) such other particulars (if any) as are prescribed.

Names of new plant varieties

17.(1) The name of a new plant variety shall consist of a word or words (which may be an invented word or words) with or without the addition of —

- (a) a letter or letters not constituting a word;
- (b) a figure or figures; or
- (c) both a letter or letters not constituting a word and a figure or figures.

2. A new plant variety shall not have —

- (a) a name the use of which would be likely to deceive or cause confusion, including a name that is the same as, or is likely to be mistaken for, the name of another plant variety;

- (b) a name the use of which would be contrary to law;
- (c) a name that comprises or contains scandalous or offensive matter; or
- (d) a name, or name of a kind, that is, at the time when the application is made, prohibited by the regulations.

(3) The name of a new plant variety in respect of which an application is made shall comply with any recommendations of the International Code of Nomenclature for Cultivated Plants, as in force when the application is made, formulated and adopted by the International Commission for Nomenclature of Cultivated Plants of the International Union of Biological Sciences that are accepted by Australia.

(4) The name of a new plant variety in respect of which an application is made shall not consist of, or include —

- (a) the name of a natural person living at the time of the application, other than a person who has given written consent to the name of the plant variety;
- (b) the name of a natural person who died within the period of 10 years immediately preceding the application, other than a person who has given, or whose legal personal representative has given, written consent to the name of the plant variety; or
- (c) the name of a corporation, organisation or institution, other than a corporation, organisation or institution that has given its written consent to the name of the plant variety.

SECTION 26 OF THE PVR ACT**Grant of plant variety rights**

26.(1) Subject to this section, where an application for plant variety rights in respect of a plant variety is accepted —

- (a) if the Secretary is satisfied that —
 - (i) there is such a plant variety;
 - (ii) the plant variety is a new plant variety;
 - (iii) the applicant is entitled to make the application;
 - (iv) the grant of those rights to the applicant is not prohibited by this Act;
 - (v) those rights have not been granted to another person;
 - (vi) there has been no earlier application for those rights that has not been withdrawn or otherwise disposed of;
 - (vii) the name of the variety would comply with section 17; and
 - (viii) all fees payable under this Act in relation to the application and the grant have been paid,

the Secretary shall grant those rights to the applicant; or

- (b) if the Secretary is not so satisfied — the Secretary shall refuse to grant those rights to the applicant.

(2) The Secretary shall not grant, or refuse to grant, plant variety rights in respect of a plant variety unless a period of at least 6 months has elapsed since the giving of public notice of the application, or, if the application has been varied in pursuance of a request under sub-section 19(1) in a manner that the Secretary considers to be significant, a period of 6 months has elapsed since the giving of public notice of particulars of the variation, or of the last such variation, as the case requires.

(3) The Secretary shall not refuse to grant plant variety rights unless the Secretary has given the applicant for the rights a reasonable opportunity to make a written submission to the Secretary in relation to the application.

(4) Where an objection to the grant of plant variety rights has been lodged under section 20, the Secretary shall not grant the rights unless the Secretary has given the person who lodged the objection a reasonable opportunity to make a written submission to the Secretary in relation to the objection.

(5) Plant variety rights shall be granted to a person by the issue to that person by the Secretary of a certificate, signed by the Secretary or by the Registrar, in a form approved by the Secretary and containing such particulars of the plant variety to which the rights relate as the Secretary considers appropriate.

(6) Where plant variety rights are granted to persons who made a joint application for those rights, those rights shall be granted to those persons jointly.

(7) Where the Secretary refuses to grant plant variety rights in respect of a plant variety, the Secretary shall, within 30 days after refusing, give written notice of the refusal to the applicant for the rights setting out the grounds for the refusal.

APPENDIX 4

FEES

As from 1 July 1989 the following fee schedule will apply.

| FUNCTION | \$ |
|---|-----------------------------------|
| APPLICATION | 350 |
| EXAMINATION OF APPLICATION | 1200 |
| COPY OF APPLICATION | 60 |
| VARIATION TO APPLICATION | 65 |
| LODGING AN OBJECTION | 180 |
| COPY OF OBJECTION | 60 |
| CERTIFICATE OF PVR | 235 |
| ANNUAL RENEWAL FEE | 235 |
| REQUEST FOR RE-EXAMINATION (if required) | 700 |
| COMPULSORY LICENCE | 120 |
| TRANSFER OF RIGHTS | 120 |
| ISSUE OF PUBLICATIONS | 7 |
| | (first 10 page, then 50c/page) |
| (other than the PV Journal) OTHER WORK RELEVANT TO PVR | \$60 (per hour) |

APPENDIX 5

PLANT VARIETY RIGHTS ADVISORY COMMITTEE (PVRAC)

(Members of the PVRAC were appointed in accordance with S45 of the *Plant Variety Rights Act 1987*).

Mrs Kathryn Adams (Chair)
Registrar Plant Variety Rights
Bureau of Rural Resources
GPO Box 858
CANBERRA ACT 2601

Professor Donald Marshall
Professor of Agronomy
Waite Agricultural Research Institute
University of Adelaide
GLEN OSMOND SA 5064.
Representative of breeders.

Mr Peter Wilson
Manager of Wheat Research
Cargill Seeds
PO Box W252
WEST TAMWORTH NSW 2340
Representative of breeders.

Mr Rodney Field
WMR Box 758
ESPERANCE WA 6450
Representative of producers.

Mr Richard Arthur
GPO Box 388
CANBERRA ACT 2601
Representative of consumers.

Mr Edgar (Ben) Swane
Director Swane Bros P/L
Galston Road
DURAL NSW 2158
Representative with appropriate qualifications and experience.

Dr John Leslie
Director Division of Plant Industry
Queensland Dept Primary Industries
GPO Box 46
BRISBANE QLD 4001
Representative with appropriate qualifications and experience.

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.

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

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

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

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

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

TURF RESEARCH AND ADVISORY INSTITUTE, PO
BOX 381 FRANKSTON VIC 3199; 03 7863311;
TERRY WOODCOCK

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

OVERSEAS

M. RENE ROYON, CONSEIL EN LICENCES, 128, Les
Bois De Font Merle 06250 Mougins, FRANCE

SUMMARY OF PVR APPLICATIONS RECEIVED TO 9/11/89

| GENUS | VARIETY | APPLICANT | DESCRIPTION PUBLISHED (Future dates are estimates) | DATE PVR GRANTED |
|--------------|------------------------|---------------------------|---|---------------------|
| ACACIA | KURANGA GOLD LACE | KURANGA NATIVE NURSERY | 30/06/89 | |
| ACALYPHA | PINK CANDLES | JOHN CHURCHUS | 31/12/89 | |
| AGAPANTHUS | SNOW STORM | STEVE WILKEN | 30/03/90 | |
| ALSTROEMERIA | LA PAZ | KONST ALSTROEMERIA BV | 31/03/90 | |
| ALSTROEMERIA | SANGRIA | KONST ALSTROEMERIA BV | 31/03/90 | |
| ALSTROEMERIA | PALOMA | KONST ALSTROEMERIA BV | 31/03/90 | |
| ALSTROEMERIA | WILHELMINA | KONST ALSTROEMERIA BV | 31/03/90 | |
| ALSTROEMERIA | SERENA | KONST ALSTROEMERIA BV | 31/03/90 | |
| ANIGOZANTHOS | FIREFLY | ONAP RESEARCH PTY LTD | 20/12/88 | 18/09/89 |
| ARACHIS | AMARILLO | QLD DPI CSIRO & NSW AG DT | 31/12/89 | |
| BRASSICA | HOBSON | VALLEY SEEDS PTY LTD | 30/06/89 | |
| CHOISYA | LICH SYN SUNDANCE | P CATT, LISS FOREST NSERY | 31/03/90 | |
| CICER | NARAYEN | CSIRO | 31/12/89 | |
| CITRUS | BARNFIELD LATE NAVEL | W M & D BARNFIELD | 31/03/93 | |
| CITRUS | TOOMEY SUMMER NAVEL | YANDILLA PARK LIMITED | 31/03/93 | |
| CITRUS | EDWARDS SUMMER NAVEL | YANDILLA PARK LIMITED | 31/03/93 | |
| CITRUS | AUTUMN GOLD LATE NAVEL | JOHN R POLLOCK | 31/03/93 | |
| CITRUS | ROHDE SUMMER NAVEL | PW MCLAREN MANAGEMENT CON | 31/03/93 | |
| CITRUS | POWELL LATE NAVEL | CN & J POWELL | 31/03/93 | |
| CITRUS | SUMMER GOLD LATE NAVEL | DUDLEY MARROWS | 31/03/93 | |
| CITRUS | CHISLETT SUMMER NAVEL | G CHISLETT, | 31/03/93 | |
| CUCUMIS | RAINBOW | ARTHUR YATES & CO.PTY.LTD | 31/03/90 | |
| DACTYLIS | GRASSLANDS KARA | GRASSLANDS DIV. DSIR | 09/10/89 | |
| DIANTHUS | ZORNITZA | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | GROZDANA | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | ODILE | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | FANTASTIC | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | VALYA | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | CHARODEYKA | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | NESHKA | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | MECHTA | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | ZLATKA | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | RUBINEN | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | PIRIN | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | ZORA | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | CHANDENN | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| DIANTHUS | PROLET | ROYENA NURSERIES AUST P/L | 31/03/89 | |
| FRAGARIA | CHANDLER | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | FERN | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | IRVINE | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | MRAK | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | MUIR | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | OSO GRANDE | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | PARKER | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | SANTANA | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | SELVA | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | SOQUEL | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | YOLO | REGENTS OF UNIVERSITY OF | 30/06/90 | |
| FRAGARIA | TUSTIN | REGENTS OF UNIVERSITY OF | 30/06/90 | |

APPENDIX 7 continued

| GENUS | VARIETY | APPLICANT | DESCRIPTION PUBLISHED (Future dates are estimates) | DATE PVR GRANTED |
|--------------|-------------------|-------------------------------------|---|------------------|
| GLYCINE | A5939 | ANNAND ROBINSON CO. | 30/06/89 | |
| GLYCINE | A5474 | ANNAND ROBINSON CO. | 30/06/89 | |
| GLYCINE | MANARK | PRIMARY INDUSTRIES DEPT. | 30/06/89 | |
| GLYCINE | A6520 | ASGROW SEED CO | 30/06/89 | |
| HORDEUM | FRANKLIN | TAS DEPT OF AGRICULTURE | 30/06/89 | |
| IMPATIENS | ARCTIA SYN AGLIA | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | APPOLLON | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | ARGUS | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | AUORE | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | CELERIO | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | DELIAS | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | EPIA | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | EUREMA | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | FLAMBEE | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | JASIOUS | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | MARUMBA | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | MIMAS | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | PHOEBIS | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | SATURNIA | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | SELENIA | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | SESIA | KIENTZLER KG WEST GERMANY WITHDRAWN | | |
| IMPATIENS | SYLVINE | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | THECLA | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| IMPATIENS | VULCAIN | KIENTZLER KG WEST GERMANY | 31/12/89 | |
| LACTUCA | BULLS EYE | ARTHUR YATES & CO PTY LTD | 20/12/88 | 24/07/89 |
| LACTUCA | TARGET | ARTHUR YATES & CO PTY LTD | 20/12/88 | 24/07/89 |
| LECHENAULTIA | STARBURST | ONAP RESEARCH PTY LTD | 20/12/88 | 24/07/89 |
| LECHENAULTIA | ULTRAVIOLET | ONAP RESEARCH PTY LTD | 20/12/88 | 24/07/89 |
| LECHENAULTIA | FLAMINGO | ONAP RESEARCH PTY LTD | 20/12/88 | 24/07/89 |
| LECHENAULTIA | AUTUMN BLUE | GEORGE LULLFITZ | 31/12/89 | |
| LILIUM | GENEVE | GEBR. VLETTER EN DEN HAAN | 30/06/90 | |
| LILIUM | GRAND CRU | GEBR. VLETTER EN DEN HAAN | 30/06/90 | |
| LILIUM | LUCCA | GEBR. VLETTER EN DEN HAAN | 30/06/90 | |
| LILIUM | MENTON | GEBR. VLETTER EN DEN HAAN | 30/06/90 | |
| LILIUM | MONA LISA | GEBR. VLETTER EN DEN HAAN | 30/06/90 | |
| LILIUM | MONTE ROSA | GEBR. VLETTER EN DEN HAAN | 30/06/90 | |
| LILIUM | SANCERRE | GEBR. VLETTER EN DEN HAAN | 30/06/90 | |
| LILIUM | TOSCANE | GEBR. VLETTER EN DEN HAAN | 30/06/90 | |
| LILIUM | VENEZIA | GEBR. VLETTER EN DEN HAAN | 30/06/90 | |
| LOLIUM | YATSYN 1 | NZ AGRISEEDS LTD | 20/09/88 | 07/04/89 |
| LOLIUM | PROGROW | VALLEY SEEDS PTY LTD | 20/12/88 | 21/08/89 |
| MACADAMIA | HIDDEN VALLEY A4 | HFD, MA & DJD BELL | 20/06/88 | 24/02/89 |
| MACADAMIA | HIDDEN VALLEY A16 | HFD, MA & DJD BELL | 20/06/88 | 24/02/89 |
| MALUS | RAFZUBIN | HAUENSTEIN LTD | 31/12/90 | |
| MALUS | RED ELSTAR | INST. VOOR DE VEREDLING | | |
| MALUS | JONAGORED | N.V. JOMOBEL | 30/09/92 | |
| MALUS | LANCEP | CENTRE D'EXPERIMENTATION | 18/06/92 | |
| MALUS | CEPILAND | CENTRE D'EXPERIMENTATION | 18/06/92 | |
| ORNITHOPUS | GRASSLANDS KOHA | GRASSLANDS DIV. DSIR NZ | 20/12/88 | 14/11/89 |
| PANICUM | NATSUKAZE | KYUSHU NATIONAL AGRICULT. | 30/06/89 | |
| PERSEA | ESTHER | REGENTS OF UNI OF CALIFORNIA | 29/09/90 | |
| PERSEA | GWEN | REGENTS OF UNI OF CALIFORNIA | 29/09/90 | |
| PERSEA | WHITSELL | REGENTS OF UNI OF CALIFORNIA | 29/09/90 | |
| PHASEOLUS | BRONCO | NEW WORLD SEEDS PTY LTD | 30/06/89 | |
| PHASEOLUS | GRESHAM | BOOKER SEEDS LTD | 30/06/89 | |

APPENDIX 7 continued

| GENUS | VARIETY | APPLICANT | DESCRIPTION PUBLISHED (Future dates are estimates) | DATE PVR GRANTED |
|---------------|-------------------|---------------------------------------|---|------------------|
| PISUM | DINKUM | DARATECH PTY LTD | 20/12/88 | 24/07/89 |
| PISUM | SOLARA | CEBECO-HANDELSRAAD | 30/03/90 | |
| PISUM | FROLIC | ROGERS BROTHERS SEED COMP | 19/06/90 | |
| PRUNUS | TASTY ZEE | FLEMINGS NURSERIES & ASSO | 31/03/90 | |
| PRUNUS | JUNE CREST | FLEMINGS NURSERIES & ASSO | 31/03/90 | |
| PRUNUS | ZEE LADY | FLEMINGS NURSERIES & ASSO | 31/03/90 | |
| PRUNUS | GAUDION | KEN GAUDION | 30/09/92 | |
| PRUNUS | SYMPHONIE | SCEA DOMAINE DE CASTANG | 31/03/90 | |
| PRUNUS | HARMONIE | SCEA DOMAINE DE CASTANG | 30/06/90 | |
| PRUNUS | MELODIE | SCEA DOMAINE DE CASTANG | 31/03/90 | |
| PYRUS | DAISUI LI | REGENTS UNI OF CALIFORNIA | 30/06/90 | |
| PYRUS | SHIN LI | REGENTS UNI OF CALIFORNIA | 30/06/90 | |
| ROSA | YOUNG AT HEART | SWANE BROS PTY LTD | 20/06/88 | 19/05/89 |
| ROSA | MEIZAIPUR | SNC MEILLAND & CIE | 09/10/89 | |
| ROSA | KEIJOURNA | UNIVERSAL PLANTS S A R L | 09/10/89 | |
| ROSA | MEIPINJID | S.N.C. MEILLAND ET CIE | 30/06/89 | |
| ROSA | MEIKRUSA | SNC MEILLAND ET CIE | 09/10/89 | |
| ROSA | MEIROLOUR | SNC MEILLAND ET CIE | 09/10/89 | |
| ROSA | MEIVOUPLIX | SNC MEILLAND ET CIE | 09/10/89 | |
| ROSA | MEIVROFIX | SNC MEILLAND ET CIE | 09/10/89 | |
| SCHLUMBERGERA | MADAME BUTTERFLY | MR ANDREW SAVIO | 20/09/88 | 06/04/89 |
| SCHLUMBERGERA | BRIDGEPORT | BL COBIA INC, | 31/12/89 | |
| SCHLUMBERGERA | CAMBRIDGE | BL COBIA INC, | 31/12/89 | |
| SCHLUMBERGERA | CHRISTMAS FLAME | BL COBIA INC, | 31/12/89 | |
| SCHLUMBERGERA | ORANGE FANTASY | BL COBIA INC, | 31/12/89 | |
| SCHLUMBERGERA | SANTA CRUZ | BL COBIA INC, | 31/12/89 | |
| SETARIA | SPLENDA | CSIRO DIV TROPICAL CROPS AND PASTURES | 20/09/88 | 06/04/89 |
| SOLANUM | MORENE | EUROGROW POTATOES LTD | 18/12/90 | |
| TRIFOLIUM | KYAMBRO | DEPT AGRICULTURE, S.A. | 30/06/89 | |
| TRIFOLIUM | ROSEDALE | DEPT AGRICULTURE, S.A. | 30/06/89 | |
| TRIFOLIUM | GRASSLANDS TAHORA | GRASSLANDS DIVISION, DSIR | 30/06/89 | |
| TRIFOLIUM | GRASSLANDS KOPU | GRASSLANDS DIVISION, DSIR | 30/06/89 | |
| VITIS | MOSS EARLY | DARATECH PTY LTD | 18/12/90 | |





9 780644 112619

B89/21930
Cat. No. 89 2228 1