

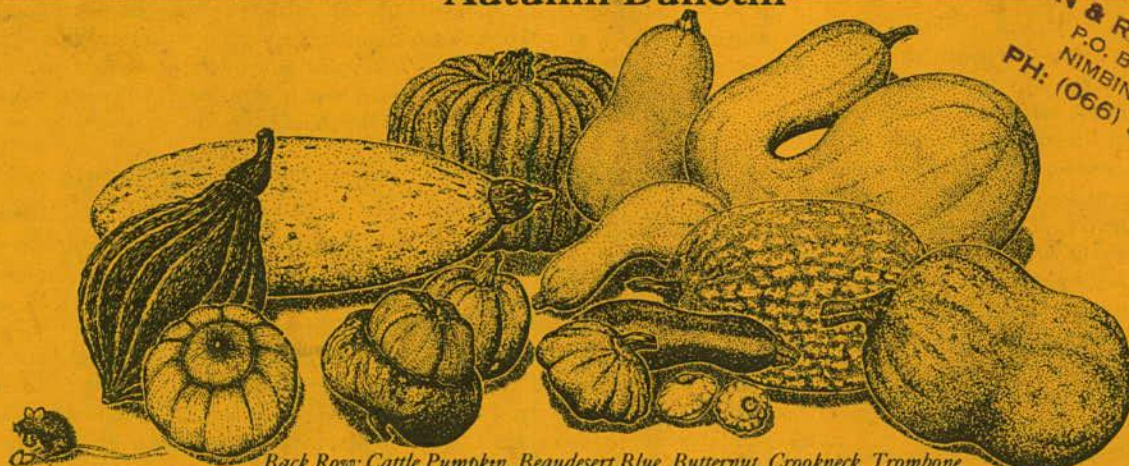
The Seed Savers' Network

No 14 • 1993 • Box 975 Byron Bay 2481



Autumn Bulletin

NIMBIN & RAINBOW NEWS
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Back Row: Cattle Pumpkin, Beadesert Blue, Butternut, Crookneck, Trombone.

Front Row: Hubbard Squash, 2 Turk's Caps, Golden Nugget Squash, Scallop Squash, Zucchini, 2 Patty Pans, Chilacayote, Gramma.

Illustration by Alfredo Bonanno from *The Seed Savers' Handbook*

Thank you to all of those who have been involved with the Seed Savers, whether it is just sending your subscription, or caretaking seeds and a big welcome to new subscribers. It is a privilege to be able to

work full time with seeds and to be in contact with seed conscious gardeners. A dream made true. A sincere thank you to all who have understood our message and joined us at Seed Savers. We are a network only because of you.

The Handbook is Complete!

This year Seed Savers has been experiencing some growth. The release of the Handbook in early February had a lot to do with that. Some photos in this issue show you the product in the making.

It was quite an experience to publish a book. What we now know is that it takes much longer than expected and is a lot more costly. At the last moment, we made an informed decision to use the best quality sewn and drawn-on section binding (instead of having the pages glued as they are in "perfect binding"). Therefore the Handbook can be opened flat without losing pages. It was certainly more expensive to produce, but as it is a

reference book it needs to stand up to being used often.

Many decisions like this one had to be made and more often than not, we did not know the pros and cons. So we had to draw on many friends of Seed Savers who have had experience in publishing. We are grateful to those friends; you will see how many there are on the acknowledgements page of the Handbook.

Since its release early February, nearly 5000 copies have been sold. All the proceeds go to the Trust which is now able to start paying us a small wage. The more books we sell directly without

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going through the normal distribution channels, which take 60% of the retail price, the more funds we will have to run Seed Savers, and eventually to acquire some land to develop into demonstration gardens.

We had the offer and option to give the book to a worldwide publisher, but we did not accept. It was much more work to go it alone, but was well worth it. We have kept our options open. Lots of excellent books nowadays end up being remaindered, or worse, pulped, because of the way the corporate publishers operate. A book sells well for a few months with the help of a publicist at the rate of \$3,000 a month and then, because there are more new books being launched, the book finally is not reprinted and not distributed to bookshops any longer.

Lately we have been spending all our time doing office work, promoting seed saving and writing and talking about seeds many of which we have not even seen growing. In our little garden we always have something growing but nowhere near what we want.

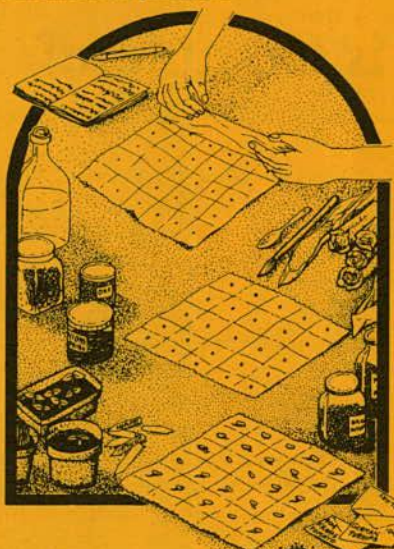
To cope with the mail and sending the books, Seed Savers have employed Karin and Jenny for a total of three days a week. Jude has trained them so they can take over whenever we need to go and teach elsewhere, travel to conferences (which we have rarely been able to attend in the past), put together the newsletter, research and write our next book.

Seed Savers is able to function because of regular volunteers like Bob and Pat Hayes, Jeanette Gow, Jenny Lown, Ken Hanna and Isabel Reid to help with the seeds. We are also very grateful to members of the Mount Tamborine Garden Club in Queensland who have been travelling no less than two and a half hours (each way) down here every fortnight to have a social seed packaging day in Byron Bay. They are Barry and Shirley Waters, Jack and Enid Harris, Pat and Margaret Brennan, Stewart and Judy

Geissmann, Joy and Harold Pouncy, Ron and Marianne Wilson, Shirley and Don Coulter and Mary O'Lochlan. This Seed Savers section of their garden club is doing very well indeed. The folk there are very steady which is ideal for the continuous attention fragile little seeds need. Mount Tamborine Garden Club is a good example that we will be able to draw on to show other clubs.

Operation of a Seed Bank

Maintaining a huge centralized collection of seed is at the best of times an expensive and bureaucratic task. Seed banks around the world in charge of collections of all sorts of food crops have huge budgets and all the facilities to store and the land to regrow their samples. We are operating without government grants on a shoe string budget. Basically, all of us are supporting the project financially and doing the work in our gardens. Because 'The Seed Savers' Network has virtually no land at the moment, nearly all the seeds that come in have to be sent away to caretakers for trial and multiplication.



When Burke's Backyard came to interview us for 'The Seed Savers' segment, Don Burke questioned us closely about the running of the Network before the interview and on air. One question was: how do you make sure that the gardeners that you are sending the seeds to actually save the seeds? We showed him our recording systems. We had to say that some of the seeds that we have sent out may not be as safe as we would like them to be.

Receiving Seeds

Jeanette, Jude, Jenny, Isabel, Sally and Margaret work on recording, storing and sending out seeds. There are consistent records of all the seed that has come in since 1988. There are two record books: an accessions book and a seed-by-type book. When a sample comes in we give it an accession number in the order in which it comes in e.g. as we are presently up to number 1638, the next seed to come in will be number 1639. Then we designate the seed a type and cross reference it to the second book e.g. if 1639 is a tomato, it will be recorded in the seed-by-type book as the 278th tomato.

We are devoting the next few months to getting the seed recording systems into better shape. Our next step is to catalogue the seeds on the computer, each with their own file.

The main gap in the whole system is that we are not often given enough information on the seeds when they come in (see "Seed Passports" back cover).

We do not give an accession number to seed that does not have sufficient background information or has been kept from presently existing commercial sources. However there is little use in passing on seeds that have been grown only once since being bought, or worse still, that have come from a bought vegetable, such as a pumpkin, tomato or watermelon. (The exception to this would be if it was bought directly from

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Michel, Ken, Jude, Isabel and Jeanette sorting and packaging seeds.

someone who had kept his or her seeds for a long time.)

Another hiccup occurs when people send in seed that has the same name as something that we already have. It is surprising how many types of bean are called Poorman's Bean; but perhaps not so surprising how many gardeners have kept Grosse Lisse Tomatoes going in their gardens. Our problem comes in trying to distinguish all the Poorman's Beans, and Grosse Lisse, from one another. Consequently, we have adopted a system of naming them after the person that sends them in.

Sending Out Seeds

To be safe seeds must be looked after by as many means as possible:

- They should be in as many gardens as possible, growing and evolving, which is why we doggedly persist in sending a packet of seed to all who enquire.

- The rare samples, that arrive in small quantities, are sent out to Seed Savers' caretakers who multiply them using our guidelines (isolation distances, selecting optimum number of plants to keep for maintaining a wide gene pool, proper drying and storage, correct labelling).

- Those in larger quantities, such as those that have been returned by caretakers in bulk, can be sent to Seed Sav-

ers subscribers, garden clubs, permaculture clubs, schools and agricultural colleges.

- Some seed should be in a long term cold storage at Seed Savers and in the fridges and cellars of some garden club members, with silica gel or milk powder in a tight jar with tape around the lid or in a foil vacuum pack.

- Trials to be done in gardens near the office at Seed Savers where we can demonstrate the diversity of plants in the network and techniques of seed saving.

Local Networks

Seed Savers as a central clearing house in Byron Bay has been useful to attract the attention of the public but really in the long term the answers lie locally.

The bottom line is to maintain as much as possible of the diversity of varieties that have been kept by farmers and backyard gardeners.

The best back up is to work with garden clubs which are both longstanding and large in number. We can help any club by sending information on how to

Michel
and Jude




Letters

Thank you for sending me the samples of seed for Mozambique, which I have sent on to them, and am waiting to see how they grow. This is just a thank you note. I'm very grateful for your helping me in this project.

Melanie O'Halloran, Balmoral, Vic.

Is there anyone who would like *Digitaria brownii* (Cotton Panic Grass) - summer growing perennial grass, regarded as one of the more desirable summer grasses that is favoured by stock.

Its habitat is variable on many soil types, common on sandy to clay loam red earths and in some hilly areas with shallow, sandy or loamy soils; associated with Bimble Box, White Cypress Pine and Mulga communities, but also found in other vegetation types, (from Cunningham et. al. 1981)

David George, Dubbo, NSW

Just a note to say thankyou from the Friends of the Royal Botanic Gardens for coming to talk at our Summer School. It was interesting to hear of the work of The Seed Savers' Network and to be introduced to the principles of Permaculture.

I am sure that you have encouraged many of us to be more adventurous in our planting methods and to look for a wider variety of the older species to grow in our vegetable gardens.

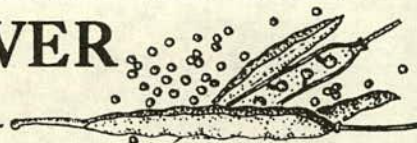
Sarah Cains, Convenor, Summer School, Royal Botanic Gardens, Sydney, NSW

Thank you so much for 'The Seed Savers' Handbook, which is just brilliant. I was pleased when it arrived, but delighted as I read it. The information is excellent; there is a lot more in it than I had thought there would be, and so much that I either didn't know at all, or was wondering about, and so many things I

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BIRTH OF A SEED SAVER

A Letter From Annie Bolitho



In South Africa we grew up on a vegetable called gem squash. They were perfect round orbs, large, dark green and delicious. We had gem squash for supper almost every night, one each, sliced in half, with butter melted in the middle. Uncooked they were as heavy as potatoes, a heavy load to carry home from the shops. No one that I knew ever grew them. In fact, not many white South Africans had their own vegetable gardens.

The first time I grew gem squash in Australia, it sprang forth, a freak from a packet of mixed zucchini seeds. The plant grew differently from zucchini, sending out new runners in every direction and creating a new, round, rapidly-growing squash almost every day. I didn't realise the little balls I picked off to steam were gem squash until I found one that had got away. A gem squash! I was so moved to be unexpectedly reunited with this familiar but forgotten food.

Gem squash made me realise that if a seed was precious to you, you had to save it. Gem squash wasn't going to be available through Yates again. I dried the seed and packed it away and took it with me to my new home on the North Coast.

I subsequently lost the plants I grew from this seed in the wet season. Around the same time, I discovered The Seed Savers' Network at a day's workshop with Jude and Michel Fanton. One of the things I learned was that seed raised over and over in the same area acquires characteristics which suit it to the soil and climate. It stands out in its robustness and suitability for that particular area from seedpacket seed which might have been grown for the Australian market on another continent—as far away as Kenya. My gem squash had got as much of a shock moving from the dry south east to the wet north as I had!

Seed saving excited me so much I couldn't believe I'd never considered it

before. Plant varieties legislation had infuriated me and raised my awareness of corporate control of plant varieties. This full day's exposure to the process of seed saving suggested to me that gardeners actively saving their own seed make an on-the-ground contribution to sustaining the myriad varieties of plants, and that saving seed induces a quite different attitude to gardening and plants.

I became a seed saver immediately. I learnt to be ingenious in unfavourable conditions, drying seed on the dashboard of my car when the weather was damp for long periods. I shared seed with friends and got seed off them. I let plants in my garden go to seed and watched with pleasure how a random succession of plants came up without my agency. I learned what a sustained matter seed saving is. It requires long term care to keep varieties going from season to season.

Back in Canberra a few years later, I raised the subject of saving seed with a class of migrants I was teaching writing. Most of them had come out to Australia in the 50's secretly bringing seeds with them. We spent the afternoon on stories of seed saving. They shared stories of relatives bringing little bags of seed for

*... I learned to be ingenious
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them to take on the journey as they left their familiar worlds behind them, stories of fear of being apprehended on arrival in Australia, stories of waiting to have a place where they could plant a garden, and stories of restraint, when they raised plants for seed in the first year—at a time when a very limited selection of familiar food was available.

The next week Francis, a woman from Slovenia, brought in a great big bag of three varieties of bean seed which she proudly insisted needed three metre supports. She gave bags of the same size to all those who wanted them. This offering came as soon as she realised I was interested in growing unusual seed, and that others needed what she had.

"Here it is—the seed I brought from Yugoslavia thirty five years ago."

To her it was a simple gift, what is natural to do with seed. To me it was extraordinary—in the same magical way my first exposure to seed saving had been when Jude and Michel offered us seeds, bulbs and cuttings in their beautiful garden at Tuntable, Francis was giving me seed that had been kept by her family for generations. This approach to new habits completely changes my understanding of gardening. I always loved gardening, but I can't remember the way I loved it when I was only a seedpacket, seedling punnet person. Now I garden with a great sense of connection to where my plants have come from and of gratitude to forebear seeds and forebear gardeners.

A couple of years ago I was able to get gem squash seed again from Mrs. Dunning (SSN 1988). In my letter I told her about my earlier lucky strike with Yates. I mentioned that I was a South African migrant as well. In the note that accompanied the seeds she said that a number of South Africans had written requesting seed. This aroused my curiosity—where are they dotted around Australia and what are their gem squash stories?

It also raised the question of whether we will all keep this humble part of our heritage going in Australia. Seed saving requires stability I've realised. Since I saved my first seed I've lived in several different places and the time and the garden have never been right or ready for

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gem squash till now. It hasn't been possible for me to maintain seed of an extremely hardy plant for five years! Seed saving must also depend on the extent which we rely on seed we've grown ourselves. As a migrant to Australia it wouldn't have occurred to me to bring seed into Australia. I had no reason to believe that Australia wouldn't have everything I needed in the way of food. Not so Francis whose family had kept seed for generations, and who regarded her traditional diet as essential.

This brings to mind my first impression of seed saving, which was in South Africa. Many years ago I was taken by a friend to visit an artist's home on a hillside by the beach in Cape Town. Passing through from the lounge, with its incredible views of the Strand, to her studio, I noticed the piles of plump, clean pumpkin pips on the windowsill. I paused and asked the maid if she was

going to roast them. I'd just learnt about roast pumpkin seeds. No, she said. I asked why anyone would keep such a lot of pumpkin seeds then. I remember her talking very directly and gently to me, saying that there was nothing, not one growing thing, in the removals area that her sister had been moved to in the Transkei. The one thing she could do for her was to save pumpkin seed from the meals she cooked in this household so that they may have something to grow. It was at that moment I realised that it was impossible for me to understand the extent of people's loss under apartheid. I marvelled at this woman's magnanimous attitude to my ignorance, which allowed her to talk to me without anger. I was bowled over at the promise and potential of pumpkin seeds on a window sill. Pips rich in their powers. Pips which would burst open and grow, where politics created deserts.



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wasn't doing properly that I've already started doing better since reading it. And of course, even though I read it as

if it were a novel when it arrived, really it's a reference work which I need to keep looking up as I plan and work in the garden, the kitchen and with the seeds. I'm very glad you included uses and cooking methods as I'm often at a loss for what to do with something new I've decided to grow.

I will take this opportunity also to thank you for the seeds you've sent me over the last couple of years - my garden has never had so much variety before. I really enjoyed the mizuna - and so did most of the my friends and relatives as, knowing nothing of it I greatly overplanted and had bucketsful of it to give away!

Valerie Garth, Preston, Vic.

Greetings! Many thanks for my copy of the "The Seed Savers Handbook", just received through the mail.

I have had an interest in unusual plant varieties for many years now. Your book is of special interest to me as I have had and lost some interesting old plant types. Some of this due to them losing vigour or 'growing out' or simply by seed getting old. So, your suggestions on preserving seeds are most helpful.

Max Watkins, Leeton, NSW

Congratulations indeed to you both and all the crew at the Seed Savers on a wonderful production.

The book will of course feature in our new titles shelf in the Botanic Gardens Library and should create a great deal of comment.

Ross McKinnon, Curator, Mt Coot-tha Botanic Gardens, Brisbane, Qld

Thank you for your inspirational and hard work in producing The Seed Savers' Handbook. We are thoroughly enjoying

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Annual Seed Savers' Gathering

Each October Seed Savers gather to swap seeds and stories about seeds.

Every second year the gathering is held away from the central Seed Savers' office. Last year Tamborine Mountain Garden Club, just south west of Brisbane hosted the gathering.

There's no doubt about the power of organization of retired people. Barry Waters arranged for exceptional speakers and his several helpers like Jack and Enid Harris (who made 350 biscuits) ensured the two days went smoothly.

There was a wide range of topics from worms to herbs; the rainforest was well represented with a talk on seed collecting, another on edible plants, and an insight on how some 400 native fruit flies are an important vector for forest seeds because they break down fruit flesh and how they are food for many birds and animals.

Other speakers outlined Permaculture and organic principles, and a project



Michel and Richard Drew focusing on a fruit fly that colonizes orange segments found in rubbish bins after footy matches.

to create an inventory, updated annually, of commercially available Australian seed to keep track of genetic erosion.

Michel and I spoke on seed issues and seed saving techniques.

The gathering this year will be in Byron Bay on the weekend of Oct. 30th & 31st. If you would like to speak or could recommend a speaker, particularly on seed-related topics, please let us know.

Likewise we would like to hear from anyone who has the time and the inclination to host next year's gathering.

THE BEAUDESERT BLUE - A HISTORY

Barry Waters of Mount Tamborine sent background information on the Beaudesert Blue Pumpkin, the forerunner of what is now known as the "Queensland Blue".

"Today I had quite a long conversation with 80 year old George Teese, a very interesting person. Mr Teese gave me small quantity of seed and a genuine Beaudesert Blue Pumpkin, which he says is a typical specimen of the variety. It is somewhat different from what is being sold as "Queensland Blue Pumpkin" in shops today. My father used to grow Beaudesert Blue when I was a child, and it was not until around 1960 that I heard them referred to as Qld Blue Pumpkins."

The following article was written by George Teese in the Logan & Albert Times, 13th June 1984.

To trace the history of the Beaudesert Blue Pumpkin that to my knowledge originated in this district between 1910 and 1915, I have been assisted by a number of very senior people living in our area.

These people were descendants and relatives from the families of Brook, Balmer, Flood and Dennis, all neighbours in the Josephville Sandy Creek area. Regarding the origin of the pumpkin I have been given one theory that sounds feasible to me.

I am being cautious re naming any particular person for producing the first Beaudesert Blue pumpkin. I have definite proof that a senior member of one of the families mentioned did plant seed from four different packets bought by a person still living in our district.

The varieties were Crown, Ironbark and two Button species, these planted together and seed saved from the crop would, I consider, produce a fairly wide range of pumpkins.

From my experience it would take



Barry Waters of Mount Tamborine and his prize turnip going to seed.

some years before any uniformity could be obtained. Regarding the marketing of the pumpkin, Mr Seth Brock recalls coming to Beaudesert with his father in a horse-drawn buckboard buggy in 1915 and delivering pumpkins to hotels, stores etc and also forwarding some to his uncle Fred Wiltshire, who had a produce agency in Turbot Street, Brisbane.

The marketing of these pumpkins probably started in earnest before 1920 and the quality of the pumpkin forwarded by the farmers previously mentioned attracted a ready market.

My first experience with the Beaudesert Blue pumpkin was in 1925 when Russell Todd who was share farming for my father had them growing at Knapps Creek. Russell got the seed from his father-in-law Mr Stan Balmer.

My family grew many tons from then through the twenties and thirties.

We would take them to Laravale in the German wagon and then they would go by truck to Brisbane.

That the pumpkin originated from the crossing of varieties was borne out by

odd vines producing pumpkins very different in shape and colour, some with very rough skin.

There was some rivalry between farmers who would get the top price at the markets for their pumpkins, also there was competition at the local show which was held in early May in those times.

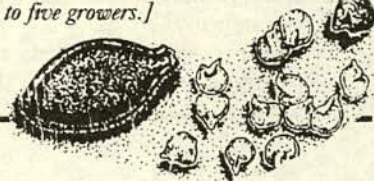
I can recall when there were thirty entries in the section for the three Beaudesert Blue pumpkins. The judges those days would have one pumpkin cut in half and if the competition was close they would use a prodder to test the depth of flesh and texture of the remaining two.

Together with the names previously mentioned, other keen competitors were Arthur Ludwig, Henry Badke, Sam and Alex Todd, just to mention a few. Some of us may have slightly different views re the shape and size of the ideal pumpkin but I favour a pumpkin about 4 1/2 kg or 10 lbs with deep ribs and a small flat crown and featuring the blue green colour. The pumpkins I have been growing for the last fifty years originated from those grown at Knapps Creek in 1925 and I doubt if there are any farmers with seed that goes back to that date.

In recent years I have judged the produce section in most of the shows in South East Queensland. I feel that many farmers in South East Queensland are not growing good quality pumpkins and some of the adverse criticism of Queensland Blue pumpkin could be warranted.

I consider we owe a debt to those farmers who produced such a good quality pumpkin and that is my reason for seeking the assistance of the DPI to perpetuate the true Beaudesert Blue pumpkin.

[We have sent the seeds that Barry gave us to free growers.]



Regional Cooking

The secrets of good cooking lie with the use of the best possible ingredients. Substituting Navy Beans for Green Flageolets in a French cassoulet will not do the trick.

Most good cooking has peasant roots. Take pizza for example. Pizza is not traditionally made from a base bought in the supermarket and topped with prepared tomato sauce with a grated pre-packed cheddar, and canned pineapple. To make a traditional pizza, take left overs from a wheat flour sourdough mixture, tomato paste made with the Roma style tomatoes that are in grand supply during summer, a melting cheese that is made with all the excess milk of summer days, salami made with the farm pig preserved for winter, oregano that is collected from chalky hillsides, garlic braided and left to dry indoors, and olive oil pressed out of the centuries-old family olive trees. The flavour is out of this world. Many pizzeria patrons would not even recognize it as pizza!

However there are further refinements. Pizza dough should be made from a mixture of particular hard and soft wheat harvested locally. In the past, villages at different altitudes would have had their own wheats. The ferment used to get the sourdough to rise (the starter) would have been kept alive in the family for generations. The tomatoes were different in each area, but they all were the meaty types, large and with a natural smokey flavour when cooked. The cheese was made in a special way to produce Mozzarella. Without the real ingredients it is difficult to simulate the authentic dish.

This is why families living in a region are proud of their product and the varieties that are used to prepare regional dishes are part of their heritage. This is maybe something to ponder about in a world where the major food providers are overseas corporations.

To preserve the good food in our homes and restaurants we must stop using hybrids that give a uniform poor taste and the sameness of appearance that fast food outlets are striving to obtain. The kind of vegetable bred is often dictated by the ways in which consumers buy their food, which is increasingly by appearance. For example, hybrid sweetcorn is bred to have a light yellow colour when it is mature so that even when it is old it does not look it.

Regional products are disappearing from shelves because there are fewer market gardeners who can guarantee a supply of the large quantities required by supermarket chains.

Most likely their lettuces come from a great distance and have been handled by several middle men before they reach you. They are not a tasty local variety but a so-called improved strain which can stand prolonged cold storage and transport.

It is heartening to see the notable exceptions amongst inner city and ethnic fruit shops where an interesting array of vegetables produced near the city is available. Sometimes they have their own growers. That is where you will find authentic cooking ingredients, and planting material for your garden.

The kinds of vegetables and fruits that are to be grown without chemicals are the traditional varieties which have been bred and grown by gardeners before synthetic pesticides were invented. They are suitable for the family in need of vegetables without chemical residues.

— M.F.



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reading it and finding it informative and full of ideas.

We have planted 8 unusual varieties of apple from the Badger's Keep people who have over 500 cultivars in their collection. David was a 'soft rock' geologist Yvonne was a publisher's editor.

For five years we were at the centre of a community garden in the grounds of Rozelle Hospital (inner Sydney). This was established on building rubble by constant production of compost. It became self sustaining and is still operating. These involvements led Reed Books to invite us to produce a small book on compost making. This has become a reality and thanks to Reed an attractive little publication entitled "The Compost Book" is in the bookshops. Here is one for you. [*Beautifully illustrated, clear instructions Ed.*]

David and Yvonne Taylor, Corowa near Albury NSW

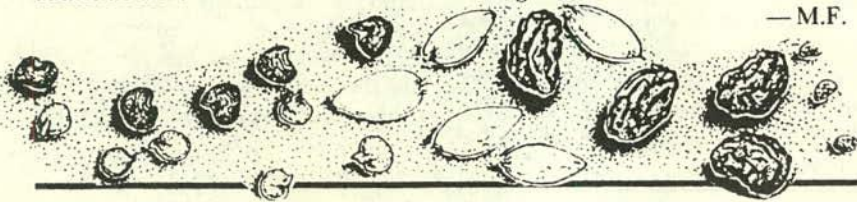
How does a poor country village obtains seeds from you? I am inquiring on behalf of the 45 families resettled in a village on land purchased by a group of my friends. They are Mari Vare serfs in Pakistan, poverty stricken after losing everything in the floods; they now have a mud brick village. I am making more inquiries as to the location of the land, climate, food favored by these people so I will know what seeds to send to them. I do hope you can help. I also want to send them some Permaculture information about the seeds.

Iris Underhill, Melrose Park, S.A.

[*For this, as for all similar projects, we sent Iris seeds and a Handbook at half price.*]
— Ed.

Congratulations!! I just have received a copy of The Seed Savers' Handbook, it's marvellous. I can see why it took so long to come to fruition. It has a great lot

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BIODIVERSITY

Germplasm is universal and in the interest of all people. It should flow freely between parties to benefit all. The real threat is not patenting as such, but the concentration of the genetic resources in the hands of a few corporations. The problem is not a West Australian nursery patenting a rare form of a Kangaroo Paw for 18 years, but the billion-dollar-budget corporation that patent life forms including human genes. Genetic resources are now more vital than mineral resources with the advent of bio-engineering. The five following articles illustrate these thoughts. M.F.

PVR Changes

David Godden *Senior Lecturer
Dept. of Ag. Eco. Univ. of Sydney
May 7, 1993*

Dear Michel and Jude,

At a public meeting in Adelaide on 5 May concerning the proposed changes to the Plant Variety Rights Act 1987, the Registrar of the Plant Variety Rights Office indicated that one of the important proposals addressed in my *Ecopolitics VI* paper (section 4.1) has now been abandoned. This proposal was to change the name of the Act to the "Breeder's Rights" Act, and to drop the word "botanical" from the definition of the kinds of organisms eligible for grants of breeder's rights. The effect of this change would have been to extend the potential coverage of breeder's rights to all living organisms, including animals (and humans). It appears that the force of argument and/or lobbying has compelled the Plant Variety Rights Office to abandon what it saw as a minor change to the Act.

The Registrar also announced that, once the new draft Plant Breeder's Rights Bill has been drawn up, there will be an opportunity for extensive public discussion of this Bill. Might I suggest that, if you are interested in participating in this review process, you write to the Registrar of the Plant Variety Rights Office (GPO Box 858, Canberra ACT 2601) and ask to be placed on a mailing list for the draft Bill when it becomes available. Might I also suggest you order from the Registrar a copy of Alistair Watson's recent report of the PVR Scheme, as some of the issues discussed here may be relevant to the proposed amended Act.

Plant Dollars

**From Rural Advancement Foundation
International (RAFI)**

4 Ocean Parade, Cooebe Beach, 4703 Qld

The sometimes random, sometimes systematic collection of the South's genetic diversity has yielded enormous economic benefit to the North. Genes from Third World fields for only 15 major crops contribute to more than \$50 billion in annual sales in the United States alone. RAFI estimates that the direct contribution of germplasm held by International Agricultural Research Centres (IARCs) to northern crop production is not less than \$5 billion per annum. In 12 of 14 commodity groups studied in 1992, plant-derived materials had dropped in cost by as much as 30% since the mid-eighties. In the two other fields - detergents and plastics - plant materials were expected to drop by about 50% by the mid-nineties. Plant materials are not only abundant and more environmentally-friendly than most industrial chemicals, they are also becoming cheaper by the day. If the catchword on Wall Street in the sixties was "plastics" and "synthetics", the rallying cry today is "plants" and "natural". Individual plants collected from Peru to Ethiopia give Northern manufacturers and food processors enormous value at almost no cost. The not-so "raw" materials, remember, have been part of our "common heritage". A few examples.....

*An almost extinct form of perennial teosinte (an ancestor of maize) protected by a Mexican farm family may save farmers \$4.4 billion per year. The U.S. Crop is valued at more than 410 billion per annum.

*Australian authorities have valued the contribution of wheat seed from one gene bank in Mexico (CIMMYT) at \$75 million per year.

*Australia's multi-billion dollar livestock industry has benefitted from 16,000 forage seed samples collected through the green revolution centres in Third World countries.

*The only genetic resistance to Southern Corn Leaf Blight - a disease that caused \$1 billion in damages in the United States in 1970, was found in a farm field in West Africa.

*CIAT, in Colombia, (working with beans) claims that its contribution to U.S. agriculture is at least \$60 million per annum.

*Two wild tomatoes gathered in the Peruvian Andes contribute \$5 million per annum to U.S. processors. (The global market for tomatoes is \$3.5 billion of which more than \$1 billion is in the United States.)

*U.S. researchers are working with an ornamental plant from India, the guayule plant from Mexico and the U.S. southwest and traditional Brazilian rubber to bio-synthesize a new natural rubber that can grow commercially in the United States. (If successful, the market value will be in the hundreds of millions per annum.)

*Farmer-bred cotton varieties from Peru and Colombia containing natural colours of browns and violets have been further developed, and patented, in the United States. U.S. breeders concede their invention is not "new" but argue that they have done considerable work to commercialize the varieties now be-

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ing produced under contract to jean-maker Levi Strauss. It is illegal to grow these traditional varieties in Peru and many varieties have disappeared locally.

*Amaranth varieties based on material originating in Latin America, have been patented in the United States and are now being marketed in Mexico and Peru where farmers pay royalties on their own inventions.

State to Patent Nature's Secrets

by Madonna King *The Courier Mail*

The Queensland Government in an Australian-first will "patent" genetic codes in the State's native fauna and flora in a bid to stop foreign companies profiting from medical research breakthroughs.

State Cabinet yesterday endorsed changes to legislation to ensure the Government holds the intellectual property rights to the genetic resources and chemistries of the State's wild plants and animals.

The Minister for Environment and Heritage, Ms Robson, said the law's primary purpose was to ensure the ownership of the intellectual property - the genetic codes and information held in the cells of the State's plants and animals - did not pass to individuals, corporations and other countries.

The decision comes as foreign scientific and pharmaceutical companies investigate the state's rainforests and the Great Barrier Reef in a bid to discover genetic secrets that could provide cures to diseases.

Ms Robson said scientists were investigating the chemistry that allowed some frogs to brood their young in their stomach and whether it might be used to treat stomach ulcers.

Some of the State's marine and terrestrial animals which control the effects of the sun on themselves, were also be-

ing monitored in a bid to help the fight against skin cancer.

The amendments would permit the State to impose royalties on the sale of commercial products using these materials.

A Department of Environment and Heritage spokesman last night said the laws would also prevent a repeat of a situation in which the Japanese patented a compound derived from Queensland's Moreton Bay Chestnut. During screening it was found to have an impact on the AIDS virus.

Europe Nicks Our Flora Wattle we do about it?

by Julian Cribb *science and technology writer. The Australian 1992*

Australian native flowers are being bred using high technology in Europe, patented, and then exported to this country in what may well constitute the ultimate trade insult.

European plant breeders had uncovered a goldmine amongst Australia's native flower species and were mounting regular expeditions to prospect the bush for rare and unusual stock, local plant biologists claimed yesterday.

Native plants and seeds are taken out of the country free of charge, then bred and hybridized in Europe. The plants are then patented and sold into a booming global flower trade estimated at \$20 billion a year - larger than the world trade in wool.

"The Israelis and the Germans are actively developing our flora for exploitation in Western Europe," Sydney University of Technology researcher Ms Kristina Johnson said. "Incredibly, these horticulturalists, although far removed from the source of the plants and often working in difficult climates, have perhaps 10 years' or more start in the quest to commercialise our plants."

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of interesting reading, anecdotes and information.

Will Ashburner,
Diggers Seed
Dromana, Vic

Well I'm so impressed with your Seed Savers' Handbook, I'm ordering 10 copies of it. I have to get the Dryland Institute set up. We are inventing a system to grow rice without any evaporation and desperately need a source of non-hybrid rice seed. I am also keen on upland rice. Also, any good strain of wheat?

Julie Firth, Waggrakine, via Geraldton,
WA Ph 099 381628

Your book is wonderful. I wish I had it when I started out six years ago to grow food and flowers. And the seeds you enclosed couldn't have been more perfect. Patrice Newell, NSW

I am working with the Rainforest Information Centre (Incorporated as CIBT over here in Ecuador) on a project on the north west coast of Ecuador at San Lorenzo. We've purchased 3 ha. of land and are in the early stages of setting up a Permaculture Learning Centre.

We face many problems in this area trying to create a culture of sustainable land use and harmony with the natural environment. Western Ecuador as a whole has been 93% deforested in the last 30 years and most of what remains is in the Nor Occidente region where San Lorenzo is located. The people are mainly Afro-Americans, descended from slaves bought over by the Spanish. They are a marginalised group in Ecuadorian society and face many problems including rampant population growth.

Unemployment is endemic in this poor and neglected area and logging provides the only real income and its rapidly eating away what little primary forest remains. The area is characterized by an

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Biodiversity continued
Europe Nicks Our Flora

Using the latest biotechnology, European plant breeders were developing new strains of Australian plants that could cope with low light or cold northern conditions. They carried heavier yields of flowers, had more attractive shapes and included special varieties for hanging baskets of balconies, she said.

Recently Dutch flower breeders had produced a hybrid of an Australian native, *Helichrysum* or paper daisy used in dried flower arrangements, which they were now marketing back into Australia.

German breeders were making great progress in developing a range of Australian plants into versions more attractive than the originals produced in this country, providing an unfavourable market contrast for our stock.

Israel was the chief supplier of Geraldton wax plants into Europe, while New Zealand plant breeders had patented the waratah as the "Kiwi Rose" a couple of years ago.

"The world flower trade is prospecting Australia for its plant resources now, while we are only scratching the surface," Ms Johnson said.

Seed could be gathered in the bush freely by overseas plant breeders, then hybridised or genetically altered - and patented under world plant rights laws.

"Once that is done, it's your plant. It doesn't matter where it originally came from," she said.

The managing director of Phytotech Australia Ltd, Dr Martin Barlass, agreed there was nothing to stop overseas breeders helping themselves to the national genetic resources.

"But I think we've finally woken up. There are quite a lot of companies busy exporting plants and clones of native plants to Europe now," he said.

"It is really up to the local industry to recognise the potential of our native plants, to breed and patent them and tie up the royalties if they are then produced overseas.

Patenting People

Source: Rural Advancement Foundation International

In the United States, the Human Genome Project, the massive multi-billion dollar effort to map the human genetic structure, will mark the occasion, (The Year of Indigenous People) with a drive to collect the blood samples, hair roots and cheek scrapings of at least 15,000 "endangered" indigenous peoples in more than 700 ethnic communities around the world. The blood will then be rushed to Virginia and "immortalized" as cell lines in the American Type Culture library. Collection work is already proceeding along the Nile River in Africa and in northern Chile.

Human Genetic Erosion

Molecular anthropologists and population geneticists have long been aware that the genetic diversity of homo sapiens is fast eroding. Ninety of Brazil's 270 indigenous communities, for example, have met extinction since 1900. More than two-thirds of the remaining 180 communities have less than 1,000 surviving members. The economic opportunity to collect—and the push to preserve—human diversity has recently been fired by the Human Genome Organization (HUGO). The initial 5 year sweep will cost between \$US 23 million and \$35 million and allows sampling from 15,000 human specimens. White blood cells from each person will be "immortalized" in Virginia at a cost of as much as \$500 each.

Ultimately, the research team, with funding expected from the U.S. National Institute of Health and other industrialized country governments participating in HUGO, hopes to draw blood from all seven to nine thousand distinct human populations believed to exist today.

Historic Interest

In the context of international efforts to collect and conserve plant genetic resources, the working assumption is that

local communities have the right to maintain their own plant material and the world community has an obligation to help them conserve and develop these invaluable resources. There is no assumption that the material is destined for extinction. Conservation and use of genetic resources must be carried out as a process for "development" rather than a last ditch drive for "preservation."

In the draft report of the Human Genome Diversity Project, "preservation" is the dominant theme, and there is an assumption that many or most of the human populations are inevitably going to disappear. The project's emphasis on preservation and its insensitivity to indigenous peoples is best exhibited by the term they use to describe indigenous communities that have been targeted for human DNA sampling: "Isolates of Historic Interest" (IHIs).

Nevertheless, the project organizers are clearly sensitive to criticism and aware that their planned activities could cause some dismay among indigenous peoples. The draft report notes:

"... the establishment of permanent cell lines needs to be explained in terms that are understandable, but that do not mislead subjects in any population. English terms such as "immortalization" of cell lines can be badly misunderstood ... Similarly, there is no fully acceptable way to refer to populations that are in danger of physical extinction or of disruption as integral genetic units (gene pools) ... In this Report, we refer to such groups as "Isolates of Historic Interest (IHI's)", because they represent groups that should be sampled before they disappear as integral units so that their role in human history can be preserved.

— End of Biodiversity Segment



Preserving Heritage Fruit Tree Varieties

by Neil Barraclough

About four years ago a number of the members of the East Gippsland Organic Agricultural Assoc Inc (EGOAA) became interested in finding out more about the older "heritage" varieties of fruit and nut trees that were once grown in our area, and ensuring as many as possible were preserved. Our initial interest stemmed from a belief that the varieties from the "pre-chemical" era might be best suited to our more natural attempts at organic growing. Though a few "old-timers" spoke nostalgically of better flavoured fruit varieties no long to be found, we thought it was probably a case of the lesser varieties not standing the test of time. What a pleasant surprise we were to get!

We came by a photostat of the apples and pears section of the 1906 catalogue from Goodmans Nurseries, Bairnsdale. What a surprise, they had about 135 varieties of apple listed, and about 75 pear varieties! Jude & Michel had sent us (through SSN membership) a list of the approx 400 varieties of apple kept in the Dept of Agriculture "Apple Museum" in Tasmania, but it had only about 40 of the 135 varieties. Further chasing about located a few more, but it was becoming apparent that many varieties had become lost or were perhaps only represented by one or two trees scattered about the district in someone's old orchard.

We located as many varieties as we could locally, and made contact with some others involved in preserving heritage fruit trees. In the winter of 1990 we ordered some rootstocks and heritage varieties from the Dept of Agriculture in Tasmania and held a "grafting day". People were invited to come along and

have a variety of their choice grafted onto a rootstock for \$3.50. As a group exercise it was multi-functional:-

(1) It was a great way to teach people grafting. Not long after the day, many members who had previously never grafted anything were sticking bits on their neighbors and friend's trees.

(2) It was a great way to spread the word about heritage varieties. A number of varieties have been located as a result of the grafting days.

(3) To our surprise, many of the heritage varieties we have located have a number of characteristics suited to the home gardener, such as ripening over an extended period, early ripening (apples ripe for Christmas), delectable flavour, late ripening and exceptional keeping qualities without cool storage, hardiness and a lot more. The heritage preservation project has added another dimension to our growing.

The following year we had more grafting days. Charging \$4.00 per grafted rootstock, showing a modest profit for the group and multiplying some more endangered varieties, ensuring their survival. In the winter of 1992 we had pear, apple and plum rootstocks at our grafting days, and successfully propagated more endangered varieties and distributed them to home gardeners.

So what's all this about? EGOAA would like to share the enjoyment of participation (in the spirit of Jude and Michel & SSN) with as many other groups as possible, thereby increasing the amount that can be done to ensure the preservation of our genetic heritage. We feel that there would be many benefits if all the people and groups involved communicated, shared information and propagation material. Simply put, an extension of the work of SSN into heritage fruit varieties.

What's been done? Working from old catalogues and other sources EGOAA and a few others involved with the preservation of the heritage fruit varieties

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extreme lack of agriculture with most food imported from the Andes at high cost. Diets are poor as a result.

We're trying to get things growing as quickly as possible so people can come and visit the centre for courses etc and learn from the practical reality around them. Change is very slow in San Lorenzo, and you could talk to people for years about abstract ideas but until they see it in reality and how easy it is they're never going to implement any of the theory.

Is it possible for SSN to send over any useful seeds that you think could go well in the hot, humid environment of San Lorenzo. We had a few of the Romaine heat resistant lettuces going that I brought over and they were going extremely well but unfortunately the chickens got out where they were growing and cause havoc and it doesn't look like they are going to make it to give seed.

The more diversity we can get in food species over here the better.

Tony Jansen, CIBT, Casilla 17-3-344A, Quito, Ecuador

The book and separate seed packets arrived safely yesterday. It was like Christmas all over again. We found the handbook marvellous, elegant and clear, beautiful illustrations. We were waiting for it to come in order to set the ball rolling for our Brazilian version of a seed savers' network. We were not sure what was involved in storing seeds, etc. As of yesterday we began to make a proposal for small-scale financing an to prepare the first letters. With or without financing, we'll go ahead, as my husband has put the equipment of his little firm at our disposal (fax, PC, printer).

We intend to work like you there, to be basically a clearing house for information, find out what's really out there, and put people in contact through a biannual newsletter, etc. The first step is to make them realize how important it is that

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have compiled an extensive list of several hundred apple varieties that have heritage status. We are in the process of putting together a list of heritage varieties of other fruits such as cherries, pears, plums, apricots, grapes, peaches and nut trees. We have close to 200 apple varieties in our group and 40 plum varieties, many of these heritage varieties are no longer commonly grown.

We have prepared these lists to let people know where certain varieties can be bought or the availability of propagation material for a particular variety. The lists of heritage varieties of each fruit type are on computer and regularly being updated. It is intended to copy this information onto floppy disks, along with information on how home gardeners can propagate each of the fruit types and information as to where rootstocks suitable for grafting can be purchased.

The information will be provided free of any copyright restriction for non-profit groups, such as garden groups to use if they wish to become involved in the preservation of heritage fruit trees. However, it is asked that there isn't any commercial publication of any substantial portion of the material without the agreement of the author.

If you would like more information please write to me at:-

Neil Barraclough, "Garden of Eaten"
Landy St., Briaralong 3860. Tel 051 455457

Expanding The Seed Savers' Network

So far we have sent 150 copies of the Seed Savers' Handbook to media people for review. As a network of people, I am sure that we will be able to make our book and the information in it, available to people living in towns where there are no bookshops by spreading the word through radio and in country papers and magazines. We are not able to visit all the possible venues where the book could be distributed and you are the essential link.

A lot of people who have seen it at a friend's place or have heard of it, will not be able to find it. Not all shops will stock it, but friends of Seed Savers may be able to help the book find the right homes. Please, spread the news. You may be able to visit your bookshop, your garden centre, the health food shop you patronize or a nursery in your area and present the book. Other possible places where you can make a connection are naturopaths and chiropractors. You might know them well enough to stick a jacket of the book up on their notice board.

(just ask and we will send you a coloured jacket)

Book Reviews

If you know of a journalist who would review the book, we can send them part of a book, with a news release and seeds. To save expense, we fax or post sections and spare covers of the book which were left over from the printing.

Seeding Plants To Show

If you have some plants going to seed in your garden (even if your garden is not flash or large), your local paper may want to do a story. It is up to you of course to choose to open your garden gate to the local paper or TV (showing the seeds, the plant, the cleaning of the seeds, winnowing, seeds in jar, etc.)

Talkback Radio Programmes

Another good way to promote Seeds Savers and the book is to contact a talkback gardening programme. You can refer to some anecdotes or history of plants contained in the *Origins* and *On the lookout* parts of the book or to some of this newsletter's material, which can be photocopied to pass on to interviewers.

Here are the telephone number of all the ABC studios we could find.

NEW SOUTH WALES Albury Wodonga: 060 213444, Bega: 064 921900, Broken Hill 080 883999, Dubbo: 068 841518, Grafton: 066 422977, Kempsey: 065 628413, Lismore: 066 251188, Newcastle: 049 221200, Nowra: 044 23777, Orange: 063 621033, Tamworth: 067 665611, Wagga Wagga: 069 213734, Wollongong: 042 280033. **ACT** Canberra: 06 2754555. **VICTORIA** Melbourne: 03 6000721, Bendigo: 054 418233, Horsham: 053 820152, Mildura: 050 211620, Sale: 051 443980, Shepparton: 058 312144, Traralgon: 051 740433, Warrnambool: 055 611141. **QUEENS-**

LAND Bundaberg: 071 532855, Cairns: 070 313677, Gladstone: 079 723812, Gold Coast: 075 729917, Longreach: 076 581477, Mackay 079 513366, Maroochydore: 074 437878, Maryborough: 071 213952, Mount Isa: 077 439000, Rockhampton: 079 273666, Toowoomba: 076 392878, Townsville: 077 715052. **SOUTH AUSTRALIA** Adelaide 08 3434402, Mount Gambier: 087 251101, Port Augusta: 086 422848, Port Lincoln: 086 826511, Port Pirie: 086 330500, Renmark: 085 866500. **WESTERN AUSTRALIA** Perth: 09 2202700, Albany: 098 412111, Broome: 091 935797, Bunbury: 097 214622, Geraldton: 099 211056, Kalgoorlie: 090 212433, Karatha: 091 441911, Kununurra: 091 682773. **TASMANIA** Hobart: 002 353333, Launceston: 003 324222, Burnie: 004 315466. **NORTHERN TERRITORY** Darwin: 089 433222, Alice Springs: 089 523433 and 526639.

Stories For Radio

In our experience, radio stations often want someone to talk to in their region to make the story more relevant to their listeners. Occasionally they ask us to supply names and addresses of Seed Savers in their area. You can either call them yourselves (usually the morning programme) or we can put them in touch with you, if you indicate that you don't mind (please tell us). If you have saved a variety that you are happy with,

then offer some of the seeds you talk about e.g. to the first ten people calling the station. It gives the radio station a chance to see how far they are reaching and how much interest there is in the topic.

Local Newspapers

Annie Bolitho's story on page four is the sort that appeals to newspaper editors. The spark to ignite a reader's interest might be that seed you have kept for a long time or one you have uncovered in your region. It might be trivial to you, but to a reader who up to date has never saved any seeds, it might be the turning point.

The circulation of a paper is anything between a couple of thousand for a small country weekly paper and 600 000 for a Sunday paper. The good thing about small papers, is that they are read to the last word. They also put us in touch with people who would not necessarily buy big papers like *The Australian*, and who are often older country people who are good guardians of heirloom seed. So the

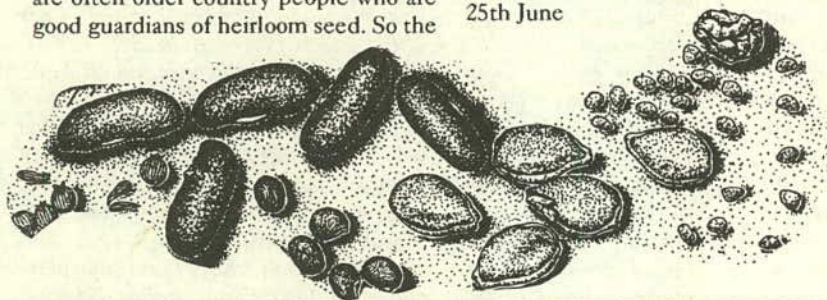
local rag could be a gold mine. A little article about a local gardener and his/her beans would certainly get the locals thinking about something they may take for granted.

Magazines

Another way to help is to send a letter to the editor of gardening magazines (*Gardening Australia*, *Your Garden*, *Grass Roots*, *Earth Garden*, *Organic Growing*, *Acres Australia*, etc.). Magazines that have gardening or environment columns are good also (*Woman's Day*, *Women's Weekly*, *Family Circle* and the like).

Feedback To Programmes

Besides ratings polls, media people measure the success of their show by the letters or telephone calls they receive on the subject. If you feel like it, write to shows like *Burke's Backyard* in response to the segment on Seed Savers on the 25th June



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they continue planting these non-hybrid forms. When I lived in the the State of Minas Gerais, I

wanted to plant the local corn. I was horrified to discover that it no longer existed. We found it in a remote valley with a farmer who was too poor to buy the hybrid seeds that everyone else was planting. We left the farm soon after that, but the person who rented it distributed these seeds through the biodynamic network so I believe that this strain was saved, although after reading the section on corn I realize that perhaps it might not have escaped some crossing. Our farm was surrounded by a 120 acre forest, so it was relatively isolated from the possibility of wind-borne pollen. The strain was not lost altogether, and, what was even more interesting, the local people began to realize that their old corn was important to save, as, though less prolific than the hybrid, it has a harder shell and resists infestation without treatment. The old farmers always traded corn among themselves.

Thanks again for all the encouragement.
Um grande abraço — *Marsha Hansi*
Instituto de Permacultura da Bahia, Lauro de Freitas, Bahia, Brazil, CEP 42700-000

Seed Passports

What a pity that we have all those seeds with so little information about them. Seeds' passports tell much the same information as people's: a reference number, their origins, where they have been, what their state of health is.

Here are guidelines for a seed passport:

1. The origin as far back as is known.

This is most important when you are **sending a new seed** in and should include how long you have had it, how long the previous person had it and so on back.

2. The accession number for when you are **sending back seed**.

If you send a note saying, "the yellow cucumber that you sent me is doing well here", we have no idea which of our four yellow cucumbers we had sent you. It is only through the number that we can accurately know what exact variety we are all dealing with.

3. Description of growth habits.

For example tomatoes can be vining or bush; beans, climbing or bush, and lettuces hearting or open-hearted. What times of the year that you sow the seed is also important. We are establishing a system where we match seeds with the four major climatic regions.

4. Taste as compared with similar plants.

5. Performance in harsh conditions.

Examples are frost, drought, resistance to diseases and pest infestations.

6. Length of bearing (the longer the bearing time, the more useful in the home garden) and productivity.

7. Your efforts to keep them pure particularly for cross pollinating plants such as the cucurbits like cucumbers, pumpkins and rockmelons.

PLEASE NOTE: Because we are filling in the gaps on all seed in the network, we need this information on ALL seeds that are sent in.

Requests



There seem to be some definite real old favourites that any seed company would do well to stock: Crookneck Squash, Ironbark Pumpkin, Oxheart Tomatoes are well out in front of their competitors. While we aim to collect these very ones, and have been sent them in the past, we never have enough and run out all too quickly when they come in. Surely this is evidence that they would do well commercially.

While we are talking about it, have you ever considered starting to sell seeds? The first step is to sell them to an already established seed company. Too many of our seed companies obtain their seeds from large scale wholesale operations in Australia and from overseas.

You may have to phone around to find an outlet; the small scale seed companies that specialize in non-hybrid seeds are usually very happy to have good seed. Naturally there are some conditions.

The next step is to sell seed at your local market. Seeds of local varieties are an excellent fund raiser for garden clubs, schools, church stalls etc.

You could then even consider starting up your own seed company which would specialize in local seeds.

Meanwhile you may be able to help the people listed below in their search for varieties that they have lost, that they remember from their childhood or that they have heard glowing reports about.

Please write directly to these people if you can help.

• Many years ago an aunt gave me some seeds of a plant, which I grew, and from which I had much pleasure. This was a climbing plant in the melon, pumpkin or gourd family. It produced round vegetables, about three inches in diameter. They were green with some yellow

colourings. We placed them in boiling water, and after brief cooking, we opened the top, in the way that one would open a boiled egg, and placed inside butter, salt and pepper. We then ate them with a spoon. The flesh was green, tender and with a slightly nutty flavour. There were flat seeds inside but these were very soft, and could be eaten as if they were part of the flesh.

We had great delight from these plants, but one year we did not keep the seeds, and we no longer have any plants. Could you tell us what they were, and if possible supply seeds? *Max Cooke, School of Music, University of Melbourne, Parkville 3052*

• Years and years ago we used to grow a sorghum called "Sackeleen" or "Sachaleen" I'm not sure how you spelt it, but that was how it was pronounced. It grew about 6 ft. high and when matured was as sweet as sugar cane. The stalks were as thick as your thumb, and we would twist the juice out of it. *Mrs. N. Schief, M.S. 537, Kingaroy 4610*

• I am looking for some sweet potato cuttings in season. The potato in question has a red skin and yellow inside (not yams). *R.E. Doyle, 2 Coopers Lane, Urunga 2455*

• I am hoping to find Pea eggplant (*Solanum torvum*) small yellow eggplant from Thailand *Jacqueline Wanner Box 169, Gladstone 4680*

• I would like Blue Banana Pumpkin and Yellow Siberian Tomato. *Neil Barraclough, Landy St. Briagolong 3860*

• Do you have seeds of "Nora, Morron, Romescos and Guindilla" chillies? They are Spanish in origin and I have not been able to buy seeds at all in Sydney. *A. Kershaw, 3 Padstow Street Rozelle 2039*

• I hope you can help me, I am having trouble obtaining the seeds for the Plant known as the "Moch Cypress" or "Summer Cypress" (*Kochia*). It has been a popular plant for a number of years. I can remember my parents growing them during the second war. I have not seen any in the shops for some time. *G.I. Cope, 18 Isobel Street, Clontarf 4019*

• I am looking for "Rutabaga" - good fodder for pigs and "White Oak" and "Sorghum" for cool climates. *John Campbell, "Lakeview", Hopkins Falls Road, Wangoom 3279*

• Do any members have herb seeds for exchange? They need to be correctly identified with botanical names as they are for medical usage. *Janet Henderson, P.O. Box 9, Kaiwaka, Northland 1240, New Zealand*

• Where may I obtain seed for the long yellow/white or yellowish/white marrow, approximately 30 to 35 cms long and about 10 cms in diameter. *Colin Tegg, 17 Clement St, Bribie Island 4507*

• I am presently trying to locate two old tomato seed varieties. They are "Develins Choice" and "Pearsons". *Thomas Walker, P.O. BOX 284, Condobolin 2877*

• Can you supply me with any "Early Grano" onion seed, as I can't get them anywhere down here? Yates seeds suggested I try you people. I had great success with them and "Market Wonder". *Owen Miller, 5 Somerville St, Bulli 2516*

• Some years ago I grew beautiful cauliflower of the "Deepheart" variety. I would be most grateful if there is member who could supply me with some seed. I would be happy to supply some other seed as a swap or whatever. *Barry Revill, 1037 Nepean Highway, Moorabbin 3189*

• Please may I have some strawberry corn seed. *Betty Wilcox, Grafton. Telephone 066 4393229*

• Have you Darwin Lettuce as detailed in 'The Seed Savers' Handbook page 110? I was pleased to read that it does exist! I was beginning to think it was a myth. *Ann Wellard, Box 40001, Casuarina 0811*

• I would like a tomato called Wight's Winter or Winter Wights, developed at Salisbury S.A., similar to Grosse Lisse in appearance, but in growth habit fruits later into times of lower temperature e.g. into July at Salisbury. Would travel well to Darwin. *C.N. Storry, Box 70, Monash 5342*



Seed Cattledog

As yet we have resisted the temptation to become a seed company! From the number of enquiries we get for a catalogue, we've nearly been convinced that we are one. Originally we simply intended to encourage and organise the swapping of seed between subscribers. Then we ourselves had a lot of excess seed and also we started to receive seed samples in varying quantities from seven beans in a matchbox – which were some anonymous Yugoslavian beans (SSN034) – to massive amounts, like half a sugar bag of silver beet seed from S.A. (SSN863)

The main reason that we don't print a catalogue is that the seeds move so fast through the seed bank that the catalogue could be out of date the day it is printed. Where do the seeds go so quickly?

- To everyone who writes we send a packet of seeds, usually lettuce or tomato. These two are easy to grow, easy to save the seeds of, light and small to send through the post and we always have plenty of them. Over the last three months we have had an average of fifteen first enquiries a day.
- To Handbook buyers we send a packet of seed usually something unusual that is mentioned in the book, like mizuna (Japanese cabbage).
- To new subscribers we send at least six packets of seed that are suited to their region.
- To current subscribers who call in, or write asking for seed, we also give packets.
- To people going to, or living in, troubled spots overseas, we send up to several dozen packets.

In a great spurt of effort, the local and the Mount Tamborine volunteers have packed over 10 000 packets in the last two months (I just went to the cup



This is what we have in stock at present in the lettuces. The number before the name is the accession no. If it also has a letter that means it has been multiplied and returned from SSN stock. The number after the name is the postcode of the originator of the seed, and that gives an indication of what climate it was grown.

- 189 Brown Romaine 4800 – big favourite, hot weather, cos style, red tinges
- 193c Mignonette 4814 – a little bitter, easy to grow
- 238c Loose Leaf 4740 – winter, easy to grow
- 263 Sucrine 4520 – tender, needs plenty water, sweet taste
- 282 Jade 5204 – small, open, red tinges
- 318c Brown Leaf – same as 189
- 459 Butter 3673 – also grown at Kuranda 4872
- 458c Rabbit's Ear 3673 – open-hearted, puckered, pointed, low bitterness
- 680 Webb's Wonderful 7270 – large old type, heading for spring and summer
- 686 German Cos 4883 – enormous tender yellow-green
- 795a American 7304 – also 3890
- 807a Loose Leaf 4740 – like large mignonette, long producer, nutty taste
- 970b Chilean Scarole 5570 – tender & tasty, long producer
- 980 Red Oak 2869 – colourful, loose leaf, tasty when young
- 1019 Continuous 4740 – non-hearting, large leaves
- 1060 Cos Verdi 3890 – green cos
- 1075 Gold Rush 3350 – frilly, yellow-green, open-hearted
- 1117 Red Mignonette 3381 – ?
- 1133 Green Cos 6721 – ?
- 1159 Australian Yellow 3936 – origin Diggers Seeds
- 1176 North Queensland Leaf 4820 – tender, long producer, self sows
- 1268 Jack Wilkinson Curly 3888 – at least 15 yrs in the district, cold-tolerant
- 1269 Red Mignonette 3888 – heirloom, loose leaf
- 1309 Light Green Cos 3381 – ?
- 1380 Mrs Higgins 3458 – long history, 19thC Italian Swiss, vigorous all year
- 1449 Italian 4883 – given to R Brookes, Parmesan Highway, by an Italian
- 1558 Winter Scarole 4520 – tender, pale green, long bearing
- 1559 Royal Oak Leaf 4520 – tender & sweet
- 1560 Gwenda White 4520 – origin Eden pale long leaves, sweet
- 1561 Celtuce 4520 – long bearing, edible stems when it flowers
- 1598 Red Cos 3381 – origin Phoenix Seeds

If you'd like one or more varieties, let us know. They'll be yours! By return mail.

board to count how many boxes of a thousand envelopes are left out of the 16 000 that I bought in March, and got quite a shock – I'll have to order some more).

So we have a lot of seeds packed, once again especially lettuce and tomato (they're moving on to bean and squash soon.)

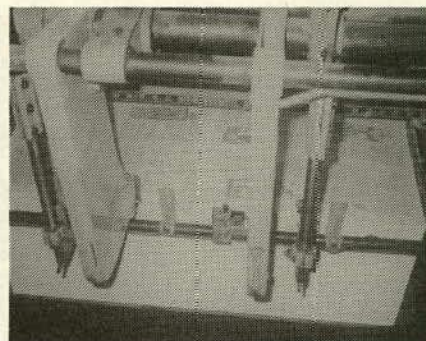
BOOK PRODUCTION



Typesetting



Graphic reproducing



Sixteen up



Beans for the printer



Quality control



Could we cross this "t" here?



Payment

At the time when we were supposed to have the manuscript finalised, and the text wrapped around the illustrations, we were still editing the text. Over Christmas and New Year, we went over the text twice again. We also had the pressure of all the people who had a read of the manuscript, saying "let it go, it is good enough and anyway you will never be one hundred per cent happy!" And although we had hundreds of subscribers who had paid for it ages beforehand, we still had to proof-read it again and again.

Now we feel it was well worth it. Those who have been and will be growing seeds will have a clearer idea of what to do to produce the best quality seeds possible.

With fabulous illustrations from Alfredo Bonanno, an attractive jacket by Janet Dawson-Boddy (she is a recipient of the Archibald prize), a text simply written, we felt happy to let the book finally go to the printer.

But it was only the start of another job, designing the book, which involves placing pictures, choosing the size and type of font and making sure that the text fits well on the page. Sue Bracewell, a professional typesetter at Merino Lithographics Printers, typeset the book.

At the next stage the graphic reproducers set up the pages in groups of sixteen, placed the illustrations, worked on the colour separations for the cover, reproduced the back cover photo and turned the paper copy into film, using a room-sized camera.

With the big sheets of black film, the printers made the metal plates and produced the "die lines", which are the first proof. The main purposes of this stage are to check for spots, and that the illustrations are in the right place. To make a correction at this stage is very expensive - not a time to have second thoughts about grammar or syntax. We did see a glaring omission though and had to pay \$120 for one new plate out of the eleven.

It's an odd feeling seeing cubic metres of paper stacked around the factory and realising that these will all come together as the book that you have spent so much time on. When all the sheets are printed, they are folded into sections of sixteen pages, ready for the binders. — J.F.



Book Review

by Michael McDonald
The Echo, Mullumbimby, NSW



Jude and Michel Fanton of The Seed Savers' Network at Byron Bay have just written and published a book called the Seed Savers' Handbook.

It is not your usual funky organic pamphlet but a book reaching international production standards. The Handbook is beautifully and clearly set out, features a colour cover by Janet Dawson Boddy and is lavishly illustrated throughout by Alfredo Bonanno.

Jude and Michel can be justifiably proud of their Handbook, which is a credit to all concerned. In a simple, entertaining manner, the text teaches you how to collect and save seeds, how to plant and grow them, and gives a comprehensive alphabetical listing of many of the yummy and colourful plants you can grow to liven up the dinner table.

More importantly, the Handbook explains why you should save seeds. The work of the seed saving volunteers can be regarded as a task more important than rescuing the books of the ancient Library of Alexandria from the barbarians.

Variety is the seed of life and up until the industrialization of the human race that biodiversity thrived upon the planet, delighting in its own originality and eccentricity. Now that diversity is under serious threat.

That threat is nowhere more evident than in the international monoculture of seed crops and the genetic manipulation of plant varieties. The transnational seed merchants seek to take a copyright on the living things they create for the purposes of profitable yield rather than taste or health.

"It is a scandal," say Michel and Jude, "that at a time when our world needs residue-free, nutritious food plants, bio-engineers are creating plants that are designed to accept a lot more chemical fertilisers, herbicides, insecticides and fungicides without suffering side effects. All this is at the expense of people's health, the survival of wildlife and the cleanliness of air and water-ways."

Because of its easy style and historical and ecological relevance, the Handbook is also fascinating reading for those not involved in gardening. And who can resist a book that has 'chook' listed in the glossary among the references to biological and genetic terminology?

The Network is an inspiring and practical application of the philosophy that if you look after the planet, the planet has a better chance of looking after you. Especially in the case of the world's treasure house of seeds, the more hands that hold them, the safer we will be.

The Seed Savers' Handbook

by the founders of The Seed Savers' Network,
Michel and Jude Fanton

176 pages with original illustrations
A complete reference for growing, preparing and conserving traditional varieties of food plants.

A background to the biodiversity of food plants globally; step by step methods of saving seeds; essential information on the seed and growth cycles of 117 vegetables, culinary herbs and edible flowers, including many of the rare and exotic varieties being preserved by The Seed Savers' Network; extra information on cultivation, uses and cooking methods.

Bill Mollison, recipient of an Australian Achiever Award 1993, says in the book's preface:

"I believe this book to be essential for all caring farmers, gardeners, cooks and parents, and I trust that it will speed our return to good nutrition and a healthy society."

\$22.95 in bookshops
\$23 post paid direct from Seed Savers

Order Form

INDICATE THE NUMBER OF COPIES:

☐ copies @ \$23 each post paid TOTAL \$ _____

Discount for bulk orders available - please enquire

Introduction to Permaculture is also available:

☐ copies @ \$30 each post paid TOTAL \$ _____

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No

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_____ P/Code: _____

Send to: The Seed Savers' Network
P.O. Box 975 Byron Bay NSW 2481

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| <input type="checkbox"/> | Five years' subscription | \$80 |
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| <input type="checkbox"/> | Donation to the trust | \$ _____ |

Name: _____

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Please send coupon and payment to:

The Seed Savers' Network
P.O. Box 975 Byron Bay
NSW 2481 Australia

JOIN UP A FRIEND!!

Send a stamped envelope
addressed to a friend
and we will forward a
complimentary seed packet
along with a pamphlet.

Offering Form

Offer plants/seeds in the Spring Newsletter and
reduce your subscription fees from \$20 to \$10.

Please send in no later than July 31

Name: _____

Address: _____

_____ Post Code _____

Seed, Cutting, Tuber offered _____

Common name: _____

Origin (Who had it before you? For how long): _____

Description (What is good about the plant? Any
particular cultivation notes, e.g; good for a short
growing season): _____

Limited Quantity (i.e, available only to other
people offering in the newsletter): Yes ☐ No ☐

Available for restricted length of time (Which
months?): _____

NOTE:
PLEASE NOTIFY US OF ADDITIONS TO, OR SUB-
TRACTIONS FROM YOUR LAST YEAR'S OFFER.

We'd be pleased to have any of these seeds here at
the seed bank.

Send to Seed Savers' Network
PO Box 975 Byron Bay 2481

Supporters

Foundation: Bill Mollison, Sally Smith, Neil Walker, Carmelo Casella, Jenni Edgerly and friends, A.J. Whyte, Frances Durdin, Susan & Jonathan Banks, Mrs B.R. Clapp, Irma Dixon, Aine, Anne Schilmoller, Jim & Dorothy Burns, anon, Martha Paitson, Wilma Bowers, Earth Garden, Lionel Fifield, Franklin Scarf, K. Berkley, N. Jefferson, Alfredo Bonanno, Dr. David Murray, Kevin Glucina, Ian McNicol,

Mary Horan, Edna Kiss, Father R. Stephens, Michael & Janet Boddy, David Cavagnaro, Ken Hanna, Valerie Garth, Margaret Williams, Alf Finch, Alno Newton of Brazil, Andrew Wright, Irene Keton and Mazza Welham donated \$300, or a great deal of their time to the long term goals of this project.

Recent Associate Supporters: Kate Wood, E. Graham, M. Myerscough, Noel Fowler. These people have all given \$100, or their time towards the better running of the Network.



Offers

If you have grown seeds, your excess will be most appreciated by other members.

Please tell us what you have to offer before the end of July. As we do every year, we will compile the list of offers by state.

It is suggested to those who respond to your offer that they send a large SASE (self-addressed stamped envelope) and payment of stamps as follows:

- 2 x 45¢ stamps for small seeds
- 3 x 45¢ stamps for each sample of large seed
- 5 to 7 x 45¢ stamps for tubers

Note: To all people who offered in '92 Spring Newsletter

Please notify us if there are changes in your listing or else we will continue your offers in the '93 spring Newsletter.

The exchange of seeds should flow freely between two or more offerers and money need not change hands, but for those members who require seeds and are unable to reciprocate with seed, we suggest that you follow the guidelines listed above.

ASK YOUR LIBRARIAN AND
YOUR BOOKSHOP IF SEED
SAVERS HANDBOOK IS IN

Profile Life Member Carmelo Casella

I grew up on a small sugarcane farm in a little place called Moresby (close to Innisfail, N.Q.). Formal schooling there had to end for me at sixth grade because there was no high school within fifty miles of me at that time.

As I was suffering from poor health in that extremely hot climate, I moved to Sydney. Within a year I was offered an opportunity to fulfil a longtime dream of going to university – a tuition scholarship in an accredited liberal arts university in Texas. I also did further graduate studies from time to time. I married and raised a family in the U.S., and lived there for some 30 years. Returning to Australia to retire, I chose a cooler cli-

mate by settling in Burnie, Tasmania.

Though I earned my living in a very wide variety of occupations, my chief lifelong interest has been to understand how man's mind affects his health, wealth and happiness. I have gained much information both by graduate studies in Psychology and by a intense study of the Bible. For many years I used this information in counselling. Now, with the help of interested friends who believe the information should be shared more widely, I put out a monthly paper on the subject (mailed free to anyone interested).

Having accumulated a lot of survival information, I am establishing myself on five acres of land south of Burnie, where I plan to have an underground house and live as self-sufficiently as possible from the food I am able to produce myself.

P E R M A C U L T U R E

Intensive Design Course Byron Bay, NSW • August 14th-27th 1993

The course offers a comprehensive understanding of permaculture design. Participants will gain practical knowledge through hands-on, excursions and design exercises and will receive a Permaculture Design Certificate. Particular emphasis will be placed on local strategies and their implementations.

with Jude & Michel Fanton

Write to: PO Box 975 Byron Bay, NSW 2481

D E S I G N



New Seeds!

All of the varieties listed have been received recently from a collector. These seeds are rare and should be multiplied as soon as possible. It will take quite a lot of work as many of these crops are cross-pollinators. Only one of each

group should be grown at a time, unless you are prepared to hand pollinate.

Write to us and tell us which of these you can grow, and we'll send you them. If you are able and willing to grow and send back seeds, send a long self-addressed envelope with a 70¢ stamp on it. *The ones with an asterisk * have a larger sample.*

- A collection of 19 EAST EUROPEAN ONIONS
- A collection of 13 SWEDES
- A collection of 20 LENTILS
- A collection of 11 CAPSICUMS
- A collection of 7 MUSTARD GREENS

Gramma (*Cucurbita moschata*) Bush Butternut, Chu Chiriman, Italian Vegetable Marrow, Futtu, Golden Cushaw, Kikuza, Klondike Sugar, Large Cheese, Neck Pumpkin.

Spinach (*Spinacia oleracea*) The longer-named ones come from Hungary: Ezkimo, Hegykoi, Kecskemeti, Mahai, Matador, Matador Dark, Mondunt, Mosonmagyaróvár, Munterlander, Nagyigmandi, Number 1, Number 2, Number 3, Palka, Popey, Solar RZ, Szekepferevari.

Pumpkin (*Cucurbita maxima*) Autumn Pride, Argentina Summer, Arikara, Baby Hubbard, Banana Grey, *Big Moon, Blue Hubbard, Boston Marrow, Butter, Doc, *Dunafoldvar, Golden Delicios, *Goliath, Guatemala Blue, Hubbard Blue, Hubbard Gill's Sugar, Kentucky, King of Giants, Mexican Indian, Ni-Es-Pah Long, No Name, Oros, Pink Giant, Quality, Red Gold, Red Kuri, Shanghai, Show King, Sweet Meat, *Szatmarceke, Tokyo, Triamble, Whangaparoa, Wolfish.

Squash (*Cucurbita pepo*) Amish Field Pie Pumpkin, Australian Bush, Bush Table Queen, Bush Ebony Acorn Marrow, Burpee's Bush Table Queen, Cocozelle Marrow, Connecticut Field, Creamy White Vegetable Marrow, Crookneck, Custard White, Delicata, Dumpling Marrow, *Early Sweet Sugar, French White Bush, Fisher's Acorn, Gem Marrow, Golden Arch Crookneck, Golden Zucchini, Green Bush Marrow, Green Cocozelle, Green Yellow Striped Vegetable Marrow, Howden's Field, Huicha, Idaho Gem Pumpkin, Ingot, Italian Cocozelle, *Jack-O-Lantern, *Kveta, Large Royal Acorn, Lebanon Marrow, Long Green Striped, Long Strain Cocozelle, Lunghissima Bianca Di Palermo, Mammoth White Bush, Mammoth Table Marrow, Mandan Marrow, Monon, Naked Seeded, Northern Bush, Orange Gourd, Patty Pan, Prostate Marrow, Royal Knight, Small Green Algerian Marrow, Super Acorn Marrow, *Tarpa, Tablegold, Trailing Green Marrow, Uncle Herman's Heritage Pumpkin, Vegetable Spaghetti, *Vegetable Spaghetti, White Bush Vegetable Marrow, White Egyptian Zucchini, Yellow Summer Crookneck, Zucchini Cereberus.

Jack-o'-lantern (*Cucurbita missa*) Castillian Winter, Chompa, Gold Striped Cushaw, Gila Indian Winter, Jonathan, Papago, Poinsett, Red Fox, Tamala, White Crookneck, White Cushaw.

Winter squash (*Cucurbita pepo*) Allsweet, Black Diamond (92 days to maturity, tough rind), Candy Red, Calboun Grey, Citron Green, Cherokee, Charleston Grey, Crimson Sweet, Dixiee, Garissonian, Georgian Rattlesnake, Gold Baby, Hairy, Honey Cream, Jubilee Improved, King and Queen, Kleckley Sweet, Ledmon, Moon and Stars, Mountain Hosic, Northern Sweet, Orangelo, Peacock Improved (small seeds, arid areas), Rattlesnake, Shin Yamato, Smokey Lee, Special Jubilee, Stone Mountain, Sugarlea, Supersweet, Tendersgold, Tendersweet, Tendersweet Orangeflesh, Texas Tendersweet, Verona, Wibb, Will Robins, Winter, Winterking, Yellow Doll, Yellow Flesh Black Diamond, 1930's Irish Grey.

