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Australian Native Plants Association (Australia)



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2018 Western Europe/U.K. travels continued.

Banksias in Western Europe ... France, Germany and The Netherlands.

This is another in this series and demonstrates the effort botanic garden curators, staff and individual private collectors put into growing our beautiful banksias in the northern hemisphere.

Jardin Exotique de Roscoff, France.

This interesting garden, on the north western coast of France, boasted a large granite hillock with steps to the top and stunning coastal vistas. The moderate weather enables banksias and other Australian species to grow in the garden. Plants are growing on granitic sands in raised beds with mulch. Informative panels in the garden show the early botanists' trips with Banks, Bauer, Solander and Cook being depicted with the French connection and Linnaeus's teachings. We felt very much at home with over 30 large Eucalypt trees and many colours of Callistemon and Melaleuca. The list of Banksias from our first edition of 'Banksias' has declined but there are some healthy specimens remaining.

Several *B. integrifolias*, the largest over 1m in diameter, had fallen over in a storm. One had been cut and moved off the path with roots still attached. It had shot along the trunk with 20 upright branches about 1.6m high growing like a row of trees. A couple of *B. serratas* with baubled trunks were not flourishing, however a large burgundy *praemorsa* (the pride of the garden), some *spinulosa* and a *seminuda* were doing well.

Other iconic Australian plants we observed were *Isopogon formosus*, *Hakeas salicifolia*, *macrocarpa*, *laurina* and *corymbosa*, a *Wollemi* pine, *Kunzea*, *Dryandra formosa*, *Calothamus*, *Leptospermum*, *Dodonea*, *Acacia* and even a *Hardenbergia* archway.

Staff informed us that they had a *minus 7* degrees C to contend with earlier in the year and a few young banksias succumbed or were badly burnt.

Pictures on next page.

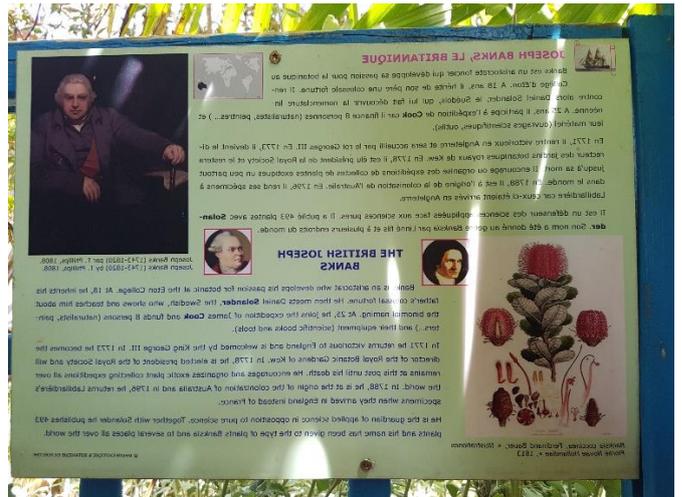
Top. - **Garden entry sign.**

Middle LHS. – **Labillardiere.**

Middle RHS. – **Banks.**

Bottom LHS. - ***B. integrifolia* trunk with upright branching.**

Bottom RHS. – ***B. integrifolia* fallen but still attached to the ground.**





B. praemorsa (burgundy).



B. spinulosa.



Granite hillock within the gardens with great ocean views.

Tim Darrington's private collection Vienne, France.

Tim has his banksias in pots and these are seasonally dug into the ground (pots and all) and mulched. Some are hand watered and others are on drippers, watered minimally during the warm months. They are all returned around mid-October (frost season) to heated glass houses for the duration of winter. Tim finds that weather monitoring is crucial. He keeps his plants slender and tall to enable them to be fitted into the glass house. They are pruned on their return prior to winter.

Vienne is warmer than Roscoff in the dry season and Tim's plants do well on his steep terraced slope with others in beds close to the dwelling. His collection, which is now recognised as the National Collection of France, has a meritorious 60 of the 79 banksias and around 40 of the dryandra species.

He has a moderate collection of other Australian species of Eucalypt, Boronia, Isopogon (dubious and amenifolius), Zanthorrea, Verticordia, Stylidium, Orchid and Callistemon.

Whilst Kathy and I were there, members of the Linnean society visited Tim's Open Garden Day and I assisted in a garden tour with banksia specifics. That evening we dashed to the Linnean headquarters in Lyons where I had the honour of giving a banksia presentation to more members of the Linnean Society, which was well received, with Tim as interpreter.



**Tim and I on his steep terraced garden with
B. laevigata var. *laevigata* in bloom between us**

Inside his heated winter storage igloo.



Tim with potted *B. dentata* in foreground.



***B. oblongifolia* in a pot in his garden bed.**



Note - Tim's water propagator.

Tim had struck some Eucalypts and other Proteaceous species using this method. Here he is using water only. Eucalypt cuttings developed roots quickly, however the plants collapsed when potted on. Tim says he will experiment further with this apparatus.

We asked Tim, the avid collector, the following questions;

Number of banksias in his collection? *53 species and several subspecies and variants.*

Favourite species? *Elderiana, nutans - both varieties, hookeriana and lanata.*

Best performer? *Generally eastern Australian species- canei (Kybean form), marginata, integrifolia, paludosa, oblongifolia and spinulosa var. neoanglica. Western Australian ones doing well are blechnifolia, laevigata subsp. laevigata and yellow praemorsa. Burgundy praemorsa is reluctant to flower.*

Most wanted to add to the collection? *Elegans, ashbyi var. boreoscaia, ornata, cuneata and oligantha.*



Presenting a talk on banksias to the Linnean Society members in Lyons with Tim as interpreter.

What an honour to have the opportunity to present in such a prestigious and historical venue. The home of Linnaeus. History oozed from the walls and the said gentleman's portrait proudly displayed above the screen.

Bormes les Mimosa Public Gardens in the coastal town of Le Lavendou, southern France.

This coastal town is close to the Italian border and enjoys a Mediterranean climate. How refreshing it was to see Grevilleas and Eucalypts along the streets and verges.

We were given an informative guided tour by head gardener, Giles Augias. He and Thierry Railheit are productive nurserymen specialising in Australian plants in this region of France. We had sold seeds to Thierry for several years.

The garden was formerly a private one featuring mostly Australian flora grown by Giles and Thierry in their nurseries. It was subsequently bequeathed, by the owner, to the local shire as a free-to-the-public Botanic Garden.

Built on steep south facing terraces, this garden has ocean views and cooling breezes. Plants are growing on well-drained schist (aged sandstone/ quartzite) covered with coarse bark mulch, some from cork oaks. The soil is neutral to alkaline and plant health is impressive with no pest damage.

The plants were of excellent health with around 15 species of banksia and 16 species of Hakea. Their *H. amplexicaulis* is the best we have ever witnessed in cultivation.

Banksias that had established, flowered and mostly set seed are *praemorsa* (burgundy), *media*, *nutans* var. *nutans*, *integrifolia*, *prionotes*, a *prionotes* hybrid, *victoriae*, *marginata*, *menziesii* and *robur* (struggling). New plantings of *spinulosa* var. *spinulosa*, *repens*, *blechnifolia* and *coccinea* had suffered some losses with wind damage.

Other significant plants include 55 species of *Grevillea* with some hybrids bred in Europe & Israel, several stunning *Eucalypt* (*illyarie*, *tetaptera*, *macrandra* and *tetragona*), *Zanthorrea*, which had flowered, *Macadamia* (from which the fruit is regularly borrowed!!!), *Wollemi*, *Cassia*, *Dodonea*, *Anigozanthos*, which do very well, *Boronia*, *Dryandra* (*praemorsa* - both varieties and *arctotidis*), *Isopogon* (stunning *formosus* and *amenifolius*), *Callistemon*, Queensland Bottle trees. THE LIST GOES ON!!!

Certainly, the best in-ground Botanic Garden collection we have seen in western Europe and comparable to Tresco Abbey Gardens on the Isles of Scilly.

Congratulations to all concerned.



Kathy in lush gardens admiring Kangaroo paws.



Kathy and Giles (*B. integrifolia* LHS)



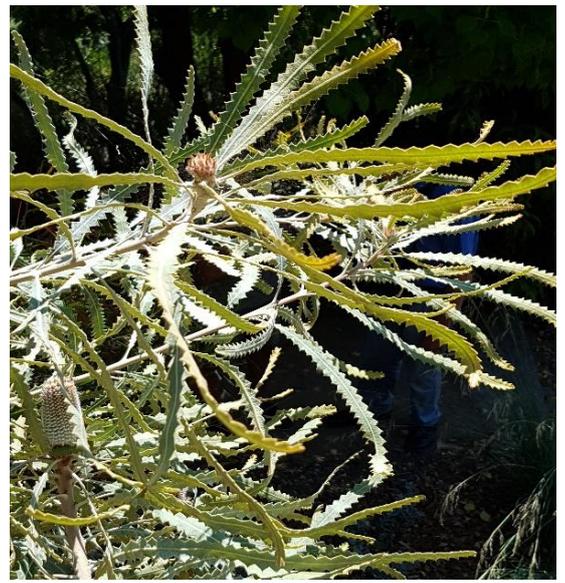
***B. media*.**



***B. nutans* (foreground) and *B. ericifolia* behind.**



B. nutans flowering.



B. prionotes in bud.



Young B. coccinea.



B. integrifolia.



Tim and Giles – Terraced gardens.

Bonn Botanic Gardens - Germany.



Stunning 50-year-old potted *B. serratas* at the entrance to the conservatorium.

WOW!!! What can we say? The show piece banksias at the foyer entrance were amongst the highlights of our huge European banksia tour. These are 50-year-old potted serrata in full bloom in large hexagonal purpose-built containers weighing 4.2 tonne. These plants are hand watered throughout the warmer months and then taken by forklift into the heated glass house for the cold months. Every year or two they are lifted out of the pots with a crane, have the roots trimmed a few inches and fresh soil added. They can no longer increase the container size as they had done over the years because this is the weight limit for their forklift!

All levels of staff were very welcoming. We had contacted staff in 2008 regarding details of their garden to put in our first edition of 'Banksias'. Head gardener, Klaus Jugen Bahr, gave us a tour of the gardens and showed us progeny of seed we had sent them many years ago. We met the curator, Cornelia Lohne and technical director, Marcus.

We gave a small banksia presentation to some of the gardening staff including Michael who had visited our garden in Mt. Barker back in 1999.

We were shown the soil mixes and told of propagation techniques, in particular how they had grown *B. coccinea* from cuttings. All their banksias are potted as the temperatures can get down to *minus* 12 degrees C with heavy frosts, frozen ground and water pipes, but rarely snow. The plants are put back under cover for the cold months.



Other huge potted *B. serrata* in the gardens.

They have an impressive collection of Banksia species including: 2x lovely *lullfitzii* (not seen elsewhere in Europe or UK), a very healthy tall *seminuda*, *pilostylis*, *baxteri*, *marginata*, *laevigata* var. *laevigata*, *gardneri* var. *gardneri* and many others. Several had set seed pollinated by native bees, bumble bees and moths.

They also had several well-established plants of *Dryandra*, *Hakea*, *Grevillea*, *Isopogon* and *Petrophile*.

Their focus is strongly Proteaceae and they are keen to acquire representatives of other genera growing in Australia.



Magnificent large blooms on potted *B. serrata*.

Behind closed doors, Klaus showed us his potting soil mix of sand, pumice, mineral rock and perlite. They use coir peat for growing seedlings and cuttings.

We were then shown their techniques for striking *B. coccinea* cuttings. This method is employed for hairy branched material - such as *coccinea*. They carefully pull the lower leaves upright removing the leaves of the cutting stem up to a length suitable for the cutting to sit low in a terracotta pot. The upper leaves are left entire. Using a cigarette lighter, they singe or lightly burn off the hairs on the stem where the leaves have been removed. The bottom end of the material is cut at an angle, leaf node to leaf node, so that it can sit on the wall of the terracotta pot. A wafer of terracotta is placed in the base of the pot to aid drainage. The cut surface is then placed against the inside edge of the pot near the bottom and then filled around with coir peat with some charcoal or fine ash mixed in to minimise fungal problems.

The porosity of the terracotta stimulates callousing. The cutting is kept in a zip lock bag initially to maintain moisture on the foliage, misted occasionally and grown on a heated bed. Once calloused, after about 6-8 months, they alternate wet and dry sessions for a period which stimulates root growth.

They do not use any NPK fertiliser but apply $MgSO_4$ or Fe and use a liquid nitrogen feed. We saw healthy *coccinea* plants grown in this manner. We also saw 24 of the 34 banksias species listed on their nursery records. Quite an achievement in such a testing climate.



Various potted banksia species.



B. candolleana



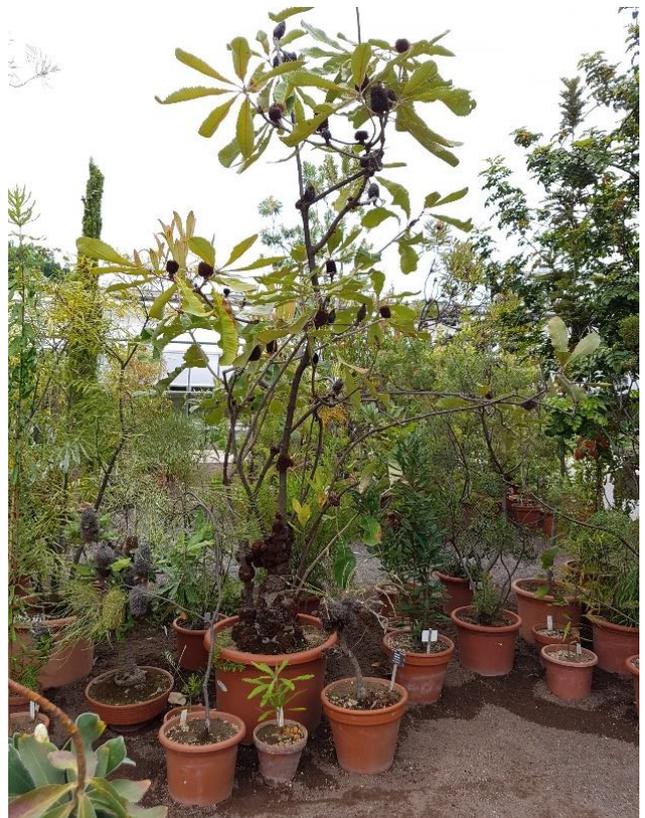
B. pilostylis (LHS-front) and laevigata subsp laevigata.



B. baueri.



B. serrata (bonsai).



B. robur (tall-central)

Liesbeth Uijtewaal's private collection, Neer, Netherlands.

Liesbeth and Bert's famous garden has been featured previously in our newsletters.

We relay our condolences to Liesbeth and family with the passing of Bert earlier this year after his heroic efforts following prolonged treatments for his cancer over recent years.

Their stunning gardens have fondly been referred to as 'Aussies in a cowshed'. Bert and Liesbeth transformed an old cow paddock and sheds into a lovely home with a beautiful garden containing various sections.



Part of the lush gardens.



Neighbouring cows framed in the rose hedge.

Liesbeth showed us pictures of the original site, ruins and rubble and we were privileged to be shown through the house renovations and lovely gardens. WHAT A TRANSFORMATION!!! Creative garden design with many clever concepts.

The gardens are all encompassing with a paved courtyard where potted plants enjoy the warmth of fine weather months. A large glass house, which is packed with inground Australian plants, stores potted plants during the bleak cold weather months. A woodland with a tranquil pond and boatshed, vegie patch, orchard and a hedged grass paddock with feature trees surround the house. A walk outside the back door extends into a paved mosaic cottage garden with fountain and a formal rose bed. A rose arbour fringes the cows next door in a window-patterned hedge.

All of this was achieved in just 18 years since purchase in 1999.



Liesbeth's courtyard with many potted banksia and other Aussie natives.



Her glass house packed with potted plants for the cold season.

The collection of Australian plants includes 65 taxa of banksia and is testament to this couple's amazing dedication and skills. This is undoubtedly the largest private collection of banksias in the northern hemisphere.

A few of the best flowering banksias at the time of our visit were: Banksia Farm selections of *speciosa*, 'low showy' and 'upright foliage' forms, *marginata* x *croajingolensis*, *menziesii* X *prionotes*, *victoriae*, *audax*, *incana* var. *brachyphylla* grafted onto *integrifolia* and on its own roots.



B. speciosa.



B. audax.



Liesbeth diligently hand watering.



B. menziesii X B. prionotes.

Liesbeth germinates her banksia seeds in clip top plastic containers on damp paper towels kept in a cool dark cupboard in her house. To prevent seed disruption when checking for roots, paper is placed underneath and on top of the seeds.

Cuttings are managed in clear plastic hinged lidded boxes with a bottom heat element covered with felt. She has had great joy and success with cuttings including a *Grevillea bipinnatifida* grown from a leaf cutting.

Potted plants are carefully starve-hand-watered, avoiding wetting the foliage and regularly checked for wilting. We found this procedure common with many successful growers in the northern hemisphere such as Bonn Botanic gardens, Tresco Abbey gardens and Eden.

Liesbeth gave us a comprehensive tour of her potted plants. Many of the progeny were from Banksia Farm seed including two forms of *Banksia plagiocarpa*, a burgundy red *occidentalis*, purple leafed and flowered *integrifolia* var. *monticola* (unfortunately didn't reproduce true from seed), a lovely bonsaiing form of *integrifolia* var. *compar* and several *Dryandras*, *Isopogons* and various *Eucalypts*. Her *Banksias* *incana*, *meisneri* and *pulchella* had formed buds but they aborted. *B. laevigata*, *paludosa*, *epica* and *media* do very well. *B. goodii* and *lullfitzii* grow but flower poorly. *B. aculeata* has flowered but *caleyi* is reticent to do so. Many of her banksias have set seed, most likely pollinated by bumble bees.

Success continues with grafting banksias, the most amazing being *incana* var. *brachyphylla* onto *integrifolia*. The rootstock was vigorous and caused a swollen bulb at the base but it is still growing well. We saw further evidence of successful grafts with various other *Banksias*, *Grevilleas*, *Isopogons*, *Petrophiles* and *E. ficifolia*. We even got a grafting lesson with Liesbeth demonstrating half wedge and side graft techniques. She often uses mummy grafts which are easier to handle and to tape up.

We asked Liesbeth, the avid collector and propagator, the following questions;

Total number of banksias in your collection? *65 including subsp's ... AMAZING!!!!*

Favourites? *ALL!!! Possibly aculeata, audax, croajingolensis, cuneata, epica, goodii, incana var. brachyphylla, laevigata subsp. laevigata & rosserae ... (Ed. Well, not quite all of them and interesting as we Aussies would most likely choose menziesii, coccinea, robur, prionotes, serrata and ashbyi.)*

Best Performers? *Most grow well with the proper care, right watering regime and appropriate housing when required.*

Five stubborn ones refusing to flower are: brownii (mountain form) at age 16, grossa age 10, repens and grafted solandri 12 years old and tricuspis which is ailing without flowering at age 12. Coastal brownii, in contrast, do flower.

Most wanted to add to your amazing collection? *Laevigata subsp fuscolutea, victoriae (dwarf form) and tricuspis (early flowering).* Best of luck, Liesbeth.

Kevin and Kathy.

Ongoing research into more naturally resistant *B. coccinea*.

Following on from the research Reported in Newsletter No , we now wish to extend the research efforts with Jeremy and Meredith Spencer to hopefully find more resistant plants from the tagged parents in the wild which produced the three resistant progeny in the first round of research.

The hope is to test another 20-50 seedlings from these wild parents in the hope of finding more naturally resistant offspring. These would be added to the three plants we currently have and consequently managed in a seed orchard remote from other *B. coccinea* plants to prevent cross pollination. The plan is to produce seed from this orchard and have the next generation of seedlings tested as well to ensure resistance retention.

We envisage that long term this seed would be invaluable for home gardeners, revegetation and floriculture use.

Kathy and I held an Open Garden Day at Banksia Farm on 22nd, May 2021 generating significant funds to support this ongoing research - 528 enthusiasts visited! We just *might* do this again!

Kevin.

Noteworthy mention - South East Melbourne should win the award for the initiative of planting many of our showy WA banksias as street trees. Well done!

Membership and Financial status.

Membership.

Our current membership stands at 110. Welcome to our new members, many of whom have joined as a result of hearing about us through the Banksia Lovers facebook site.

Congratulations to our member, Karlo Taliana, administrator of the very popular and friendly Banksia Lovers site. Membership is now a staggering 16,800.

With so many eyes focussing on this fabulous genus, many interesting hybrids, fungi, galls, fasciations, mistletoe and colour variants are being posted.

Finance.

Current balance. \$1,897.52.

REMINDER: - Feel free to donate to our study group as funds go towards banksia research. Direct credit BSB 633000. Account No. 158397885.

INPUT NEEDED: - We are going to feature banksia-related fungi in a forthcoming newsletter as well as fasciation features i.e., multi-heading of banksia inflorescences - causes and examples. If any members can contribute pics of any of these in your gardens or the wild, please email them with some notes to us, Kevin or Kathy.

banksia@westnet.com.au.

We always welcome reports on your garden, banksia growing successes and failures or observations in the wild.

Kevin and Kathy.