

Hello Everyone,

In October last year an ASGAP Workshop/Seminar for Study Group leaders was held in Canberra, co-ordinated by the Australian Network for Plant Conservation. Geoff. Butler was in charge of our activities with voluntary help from many Canberra SGAP members.

Discussions covered the current and potential functions of study groups, communications and media skills, newsletters, questionnaires, recording and use of information, collections of dried specimens, living collections, propagation, seed banks, cutting exchanges, quarantine and several allied topics.

We had excellent speakers from many sources such as the Aust. National Parks and Wildlife Service, The Canberra Times, Technical Services Unit ACT Govt. and A.N.B.G. Herbarium Staff.

Plant collecting was discussed very thoroughly. Under the Australian constitution, control of indigenous flora and fauna rests with the States and Territories. The collecting and moving of flora and fauna about Australia is managed by State, Territory or Commonwealth licensing systems. Because species of the flora and fauna live across the whole landscape including rivers, lakes, in the air above and seas around Australia, there are a number of administering authorities in each State or Territory. Before collecting, it is essential to obtain the permission of each relevant authority.

The collecting of indigenous flora and fauna for scientific purposes or any other purpose for that matter, should not be undertaken lightly. Penalties under the many laws are quite severe. When you have your necessary permits you are urged to make voucher specimens as follows:

A voucher specimen is an identifiable piece of the plant lodged as a specimen (with fullest possible collection data) at an official herbarium. This is incorporated as a permanent archival specimen for future reference and research, and any documented live material or pieces from your reference set can be related back to it for identification if records become muddled in the future. Archival herbaria aim for their specimens to last at least four hundred years; your collections, from our all-too-rapidly diminishing native bush, may be more important than you think. Very many new species have come to light as the result of good collections made by interested non-botanists who took the trouble to forward specimens to an official herbarium (examples include *Pomaderris gilmourii*, *P. parrisiae*, *Grevillea 'wilkinsonii'* ms - the epithets in each case honour the discoverer). Some taxa change appearance in cultivation, and a voucher may be the only sure means of a positive identification. Some taxa are identified in cultivation as having interesting pharmaceutical compounds, and a voucher may be the only way of tracing the original wild population. Don't trust to memory; take notes when collecting, and lodge a voucher with your state/federal herbarium!

I had not been to the Canberra Botanic Gardens for about twelve years and so found the changes in growth and planning quite remarkable. After the Saturday session ended and a barbecue was being prepared we were let loose to wander where we wished. The first thing that struck me was the enormous bird activity and their complete lack of fear or inhibitions! A family of kangaroos emerged and gently grazed, an emu stalked further away and I found the proteaceae section and could scarcely believe how many there were. In the hakea section I found 45 species but there were others in the rockery and other parts. Many of the species were very large and tall but this may have happened because of the overall effect of shade from the tall eucalypts and the slope of the hill. A few things that caught my attention were the beautiful silky pale green new foliage on *H. constablei*, the jagged covering on the seed capsules of *H. propinqua*, the white flowers of *H. prostrata* and a new hakea with affinity to *H. lasiocarpa*. Unlike *H. lasiocarpa* which is sometimes referred to as the "elephant's trunk hakea" because of its long thin arching branches, this was a shapely small tree with very sharply toothed leaves.

Recently I wondered just how many different shaped leaves could a *H. varia* produce. This came about because I had been given some foliage to identify that came from a very strongly growing plant about two years old and I felt unable to give a definite answer. I find that many hakeas at different stages of development produce odd leaves that are not strictly "normal". Many years ago I had a tall form of *H. nitida* which defied identification according to the then available information. It had never produced seed capsules although flowering profusely, the leaves occasionally toothed. As it matured (to 9m.) the leaves appeared entire, eventually Fred Rogers found the answer in a book referring to this characteristic.

On the next page you will see life-size reproductions of the leaves from my *H. varia*. This plant is about 15 years old and about 1m. high. The form usually sold is a tall very shaggyshrub.

The next two species shown are species formerly known as *H. varia*. *H. florida* has variable leaves and I have seen some much larger and broader than these. The only ones I have seen in the wild were on the outskirts of Mt. Barker W.A. and were less than 2m., mine is taller than that but shaded by a neighbour's tree which probably accounts for it not flowering. *H. horrida* was known as *varia* until the current revision when it reverted to its original name of *horrida*, a tall species widespread in the south of W.A. *Horridus* means shaggy, bristly, prickly, very thorny.

*H. linearis* grows to about 3m. and flowers in summer. Mine produces very white blooms.

*H. lasiocarpa*, formerly known as *H. dolichostyla*, produces many differently shaped leaves and has white flowers in winter.

The last two shown are fan leaved species. There is another fan leaved species *H. brownii* but I have no leaves available. There was a small plant at Canberra but my impression is that it had smaller leaves like *H. baxteri* in shape. People confuse these two illustrated species but as you can see, *H. flabellifolia* has a much narrower fan and a longer petiole but the biggest difference is in the size of the plants. *H. baxteri* is a tall shrub up to 3m., *H. flabellifolia* is a small shrub rarely up to .7m and makes a good rockery plant.

#### SLIDE SET No. 1

This set of 50 slides with accompanying tape is available to any member or group on request. Borrowing time is a fortnight.

#### SEED BANK LIST

I have a new list available. It has been impossible to find out whether seed being sold comes under the new classifications so I can only list them as they are labelled by the suppliers.

#### LIST OF MEMBERS

Ted Beasley has kindly updated this list and printed our labels. Thanks Ted.

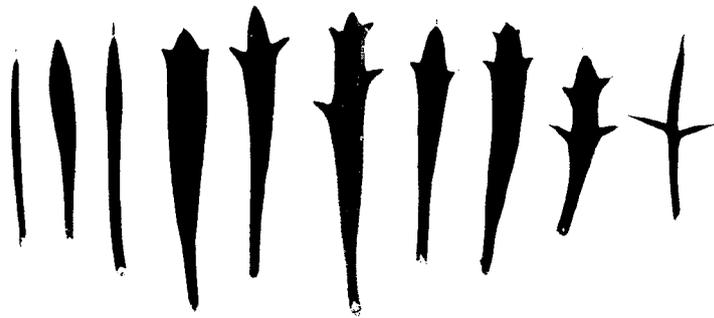
#### HERBARIUM SPECIMENS FOR STUDY GROUPS

Study groups are encouraged to build up a collection of dried specimens to be kept in the group for identification purposes. When this topic came up in Canberra much amusement was caused by someone asking how to press a banksia? I wondered how to press specimens of *H. platysperma*, *pandanicarpa* etc. but in fact it is quite easy. The problem has been to keep the leaves flat while the flowers and seed capsules sometimes sit up in the air. The answer is to use layers of foam rubber packed on top of the leaves (turning one leaf over to show the back) and thus producing flat leaves and flat flowers where applicable. In the case of the banksia it is possible to cut the flower in half if desired.

This newsletter is very overdue due to a chain of events physical and unavoidable and I apologise for the long delay. The next newsletter will be out in July and will have a questionnaire enclosed. Please think of the type of information you need and submit your ideas.

FOLIAGE

*H. varia*

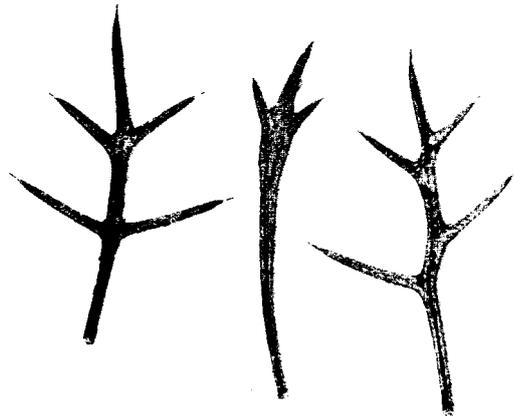


All leaves shown were taken from the same mature plant.

*H. florida*



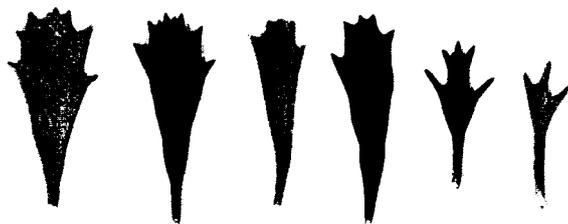
*H. horrida*



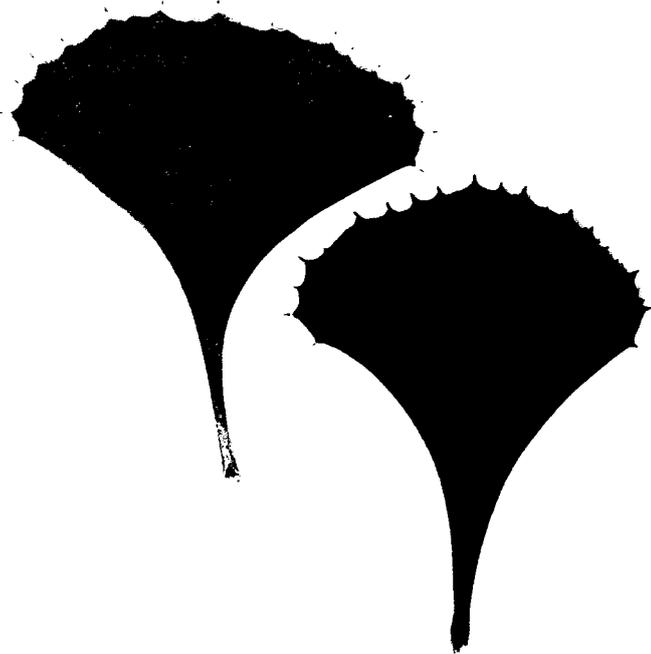
*H. linearis*



*H. lasiocarpa*



*H. baxteri*



*H. flabellifolia*

