

FLORA

ONE of the most spectacular sights nature has to offer is the annual display of everlastings — yellow, pink and white — that spreads as far as the eye can see beneath the mulga, wattle scrub and spinifex of Western Australia. Each year after heavy autumn or winter rains the red soil is carpeted with these ephemeral members of the daisy family. By far the most prominent are *Rhodanthe chlorocephala* subsp. *splendida* with solitary cream or white flower-heads up to six cm across, the yellow-headed *Cephalopterum drummondii*, and the handsome pink-headed *Schoenia cassiniana*. Other everlastings found amongst these include *Helipterum craspedioides* (yellow), *Helipterum venustum* (yellow), *Myriocephalus guerinae* (yellow), *Rhodanthe chlorocephala* subsp. *roseum* (pink or cream), *Waitzia acuminata* (golden). Scattered amongst them are often species of *Brachyscome*, not themselves everlastings, but also daisies and remarkable for their blue and yellow flower heads.

Particularly dense displays of everlastings can often be found around Payne's Find where a most curious phenomenon can be observed, namely that the pink and white colours of everlastings are found on flats and depressions, and the yellow colours on rising ground. *Cephalopterum drummondii* has two colour forms, white and yellow, otherwise identical, which segregate in this way, the yellow form associating with other yellow-flowered species. Although this behaviour can be observed elsewhere it is not so marked as around Payne's Find.

Everlastings (alternatively known as sunrays or paper daisies) are so-called because of their ability to retain natural colour and apparent freshness for exceptionally long periods. They are easy to recognize by the crisp, papery texture of their flower heads. For this reason they



EVERLASTINGS

By Nicholas Lander

form a vital component of the dried-flower export industry. Amongst the first plants cultivated by European horticulturalists during the 19th century was *Bracteantha bracteata* (Golden Everlasting) which was soon bred into a plethora of attractively coloured forms known simply as 'Immortelle'.

It is worth noting that whilst in the past many species of everlasting have been placed in the genera *Helichrysum* and *Helipterum*, recent research shows that these names are wrongly applied to Australian species. Furthermore, the variation within the many species of Australian everlasting is sufficient to necessitate not two genera but many. Thus species of everlasting formerly placed in *Helichrysum* are now distributed amongst *Bracteantha*, *Chrysocephalum*, *Lawrencella*, *Ozothamnus* and *Schoenia*. And most of those formerly placed in *Helipterum* have found a home in *Rhodanthe* with others scattered in smaller genera such as *Anemocarpa*, *Argentipallium*, *Hyalosperma*, *Leucochrysum* and *Triptilodiscus*.

Although they may differ in the microscopic features of their tiny flowers, a feature all everlastings

have in common is the coloured petal-like bracts of each individual flower head. A curious fact is that the colour range of the petal-like bracts of each flower head of Western Australian everlastings is confined to the range pink, white and yellow. Red and orange colours are not found in everlastings in Western Australia, unlike in South Africa where they are common, even dominant.

The phenomenon of plant movement can readily be observed in everlastings, the flower heads of which tend to track the movement of the sun, a curious fact in itself. Furthermore, at night the heads fold up forming a bud-like structure once more. They also do so when it rains. If you watch carefully as evening approaches, you can often see insects (especially native bees) alight on the central disc of the flower head and remain there as the bracts close around them. Early in the morning, as the flower head directs itself towards the sun and opens up, the insects set off on their forays once more. Thus everlastings provides shelter and warmth for the insects. Nectar secreted at the base of the tiny flowers within the head provides food for its visitors.

An unexplained feature of one of our commonest everlastings, *Rhodanthe chlorocephala* subsp. *splendida*, is the presence of a black spot at the base of the inside surface of the bract in cream-coloured specimens.

The seeds of many everlastings are myxogenic, that is, when moistened the tiny hairs that cover them burst and exude mucilage. The function of this slime is presumably to bind the seeds to a moistened substrate, so preventing them from blowing away to somewhere less hospitable.

In Western Australia, our wildflower tourism industry markets many tours based fairly and squarely on the displays of everlastings. This spectacular annual event points to

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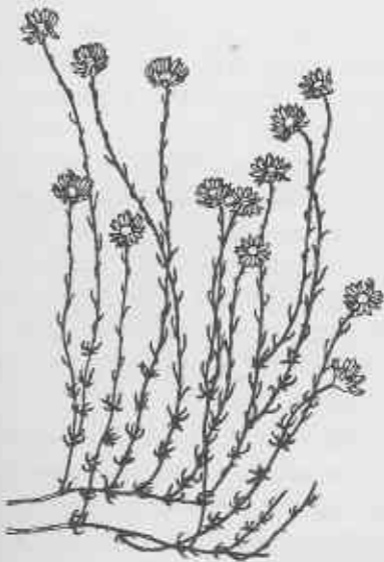
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the importance of the Astereaceae, or daisy family, to which they belong. Australia is a centre of diversity for this, the largest of plant families. Indeed, some 1,000 or so species make their home here. Aster, Calendula, Chrysanthemum, Dahlia, Gazania and Zinnia are familiar as garden subjects. Chicory, Endive, Globe Artichoke, Jerusalem Artichoke, Lettuce and Salsify are common vegetables. Safflower and Sunflower are commonly used for cooking oil. Absinthe, Chamomile, Dandelion, Tansy, Tarragon and Yarrow are traditional herbs. And Bindi-eye, Boneseed, Capeweed, Fleabane, Noorgoora Burr, Sow Thistle and Skeleton Weed are troublesome weeds.

Those seeking more information on everlastings and their relatives will find brief descriptions, photographic images, maps and a useful interactive identification system on the WA Herbarium's FloraBase website at

<http://florabase.calm.wa.gov.au/>

For current information on what is flowering visit The Wildflower News: Mid West Wildflower Watch at <http://www.wn.com.au/wildflowernews/>



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