

## IN BRIEF

### Pollination of Christmas Morrison



Christmas Morrison under banksia woodland in Moore River National Park (P. Hussey)

**T**HE waist-high stems of brilliant orange-flowered Christmas Morrison, *Verticordia nitens*, are familiar to anyone who has seen the banksia woodland on the Coastal Plain north of Perth in early summer. Moore River National Park, just south of Regan's Ford, is ablaze with it in December. If you live in the Perth area, a trip to this Park make a great day's outing. I suggest you go up Brand Highway, stop at the Roadside Flora Area (shown by a sign of a kangaroo paw) and go for a walk along the firebreaks. A 'wildflower buff' will spot at least 150 species, while a 'twitcher' should get at least 30 birds!

Christmas Morrison also has the distinction of being one of the few plants yet determined in WA that are known to be pollinated by one specific animal, in this case the native bee *Euryglossa morrisoni*. Terry Houston (from the WA Museum) and Byron Lamont (from Curtin Uni) worked out the story ...

Christmas Morrison has curiously shaped anthers, with a strange helmet over the top. Pollen is secreted in an oily fluid into this helmet, which terminates in a spout. The bee squeezes the helmet and laps up the pollen mixture from the spout, and also takes nectar from the nectaries at the base of the petals - in the process moving pollen from one

flower to another. Little seed is set if this particular bee is not present, although other insects visit the flowers, and, in fact, a number of invertebrate herbivores and carnivores appear to depend on it.

Little is known about the life history of the morrison bee, apart from only ever being found on Christmas Morrison flowers. Since the plant germinates from seed after a fire, if there is no morrison bee there will be no seed, so no regeneration, so no Christmas Morrison.

Another example of the complexity of the bushland ecosystem.