At tea with Purple Diuris

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It would be hard to picture a more pleasant setting for an outdoor tea break. We were sitting under a grand old River Red Gum surrounded by large purple orchids. The breeze, though a little chilly, carried the garglings of Magpies along with the insistent calls of Willie Wagtails. The orchids were the Purple Diuris (*Diuris punctata*), a threatened species that grows in several spots round the southern parts of the Victoria Valley. This year the flowering has been particularly prolific. In some places they have been estimated to be in their thousands.

Although locally common in a few places, they are considered vulnerable in Victoria. This is because their preferred habitat, grassy woodland with sandy loam soil, has been drastically reduced over the years. While the orchids seem able to withstand light grazing, and therefore are able to persist in some paddocks on farms, they cannot withstand cultivation. Regretably, many stands have disappeared in recent years. Another danger is the recent emergence of the African Weed Orchid, a very competitive and productive weedy species capable of ousting them from their preferred habitat.

One of the party was a PhD student from Melbourne University whose studies include Purple Diuris. Although this is a threatened species it is much more common than the closely related Sunshine Diuris of which there is only a handful growing in the wild. It is hoped that techniques learnt from studying Purple Diuris can be applied to the conservation of the Sunshine Diuris.

Purple Diuris belongs to the genus Diuris, which translates as "double tails", a feature which can be seen in the photograph. The species name is "punctata" which means spotted, a feature that cannot be seen in the photograph. Why not? Because the plant specimens used by the botanist who first described and named the species had been attacked by insects, giving them a spotty appearance! One rarely, if ever, sees "spotted flowers" of this species in the wild.

Like many other orchids Diuris are pollinated by insects that are deceived into thinking that the flower is a prospective mate. The faint sweet smell contains some of the qualities of the pheromone chemicals released by a female insect to attract a suitor. The flower shape and markings may also play a part in this deception.

