

## A Note on *Dicaeum hirundinaceum* and the *Loranthus* seed.

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I have on two occasions witnessed a *Dicaeum* deposit the seed of the *Loranthus*. The first occasion was near Black Hill in October, 1900. I was watching a male *Dicaeum* when I suddenly noticed that something was adhering to the feathers of the vent. The bird flew to a neighbouring branch (which happened to be that of a mistletoe) applied the object to it, and then fluttering away left it adherent to the branch. I examined the object and found it to be a *Loranthus* seed with its sticky covering undigested. The second occasion was at Blackwood on October 7, 1908. I was watching a female *Dicaeum* building a nest in a wattle tree, the male took no part in the nest build-

ing but kept guard in a small dead tree nearby and fiercely attacked and chased away any other birds coming near the nest. Among others a new Holland Honey-eater and a Lunulated Honey-eater, birds both much larger than itself. At one time the male sat on a branch within 6 feet of me, I then saw a seed passed and transferred to the branch exactly as on the first occasion. Later on examining the small dead tree, on which the bird was perched most of the time, I found hundreds of seeds sticking to the branches, sometimes three or four in a row, they evidently having been passed together. I examined the first seed on several later dates, and although it germinated it did not take root, probably because it was upon old bark and the seed requires young and succulent bark to get a footing.

*Loranthus* seed will germinate anywhere. I have twice found it germinating upon bare granite in the Gawler Ranges and once upon the dead branch of a myall, on each of these occasions the seeds were mixed with droppings. The green shoot which springs from the seed is the radicle, this grows upwards, develops an expanded sucker like end, and then turns downwards and applies itself to the substance upon which it is deposited if this should be tender young bark. I presume that rootlets penetrate the bark of the host if it be succulent enough, but I have not myself observed this. From these observations I conclude that the seed is not regurgitated but is passed in the usual manner, and that the sticky covering is indigestible and serves not only to retain the seed upon the branch but also makes the seed adhere to the feathers of the birds vent and thus gives it a good chance of being deposited in a favourable situation and not dropped haphazard as would otherwise be the case.

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