

LONGEVITY OF ACACIA SEEDS

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The following results from germination tests with seeds of Queensland silver wattle (Mt. Morgan wattle) Acacia podalyriaefolia A. Cunn. and black wattle Acacia decurrens Willd. are of interest, particularly because of the current interest in Acacia sp. seed for dieback and bauxite areas rehabilitation.

Acacia podalyriaefolia Serial No. 1069

Seed was collected by the Kalgoorlie district in January 1953 and tested for germination in October 1976 - nearly 24 years later.

1 gram of seed containing 37 seeds was tested, with 21 germinants in 15 days and another 9 on the next few days.

This total of 30/37 germinants is 81%.

Acacia decurrens Serial No. 84

The black wattle seed was collected by Forester Ken of Hamel district in May 1925.

In October 1976 a germination test was carried out with one gram of seed (70 seeds) with the following results:

4 days	.....	17 germinants
7 days	.....	52 germinants
Whole test	.....	64 germinants (91%)

The test was repeated in November 1976 and gave comparable results.

4 days	.....	11 germinants
8 days	.....	31 germinants
Whole test	.....	41 germinants (58%)

It is of interest that the October trial was done using an abbreviated technique, while the November test, giving 58% germination was done in the standard manner.

A further germination test on this same 1925 seed was done in November 1977 with the results from 100 seeds being:

6 days	.....	33 seeds
15 days	.....	66 seeds
27 days	.....	66 seeds (66%)

The resulting 66% germination with seed over 52 years old probably helps to explain why Acacia germination will often appear after fire in an area where the species have not previously been recorded.