

## CONTROL OF WHITE ROT OF ONIONS IN STORAGE

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### SUMMARY

A promising result against *Sclerotium cepivorum* storage rot was obtained with Dichloran fungicide used as a post-harvest dip.

White rot caused by the fungus *Sclerotium cepivorum* Berk. occasionally causes damage in the field in winter-grown onion crops of southern Queensland. The inclusion of diseased bulbs at harvest may lead to storage rot.

In 1964 two fungicides were evaluated as dip treatments for storage rot control. The onion variety used was Early Lockyer White. Bulbs were selected from a planting showing severe white rot damage and a proportion of obviously diseased bulbs was included to ensure adequate natural inoculum.

The following four treatments were compared:

1. Water
2. Untreated
3. Sodium salicylanilide 95% dip (1½ lb/100 gal)
4. "Dichloran" 50% dip (2 lb/100 gal).

Six replicates were used, 100-bulb lots being used as a plot size. Dip treatments were of 30 sec duration. Storage after treatment was in the dark at a temperature of 10°C and a relative humidity of 80–90%.

After 33 days' storage the percentages of bulbs rotted were for water dip 100%, untreated 99%, sodium salicylanilide 90% and Dichloran 18%. After 61 days' storage all of the first three treatments were 100% diseased, while in the Dichloran treatments the percentage had only increased to 34%.

None of the treatments caused injury to the bulbs. An examination of diseased bulbs showed 50% of the infections to be basal in origin and 20% to follow neck injury due to topping.

The fungicide Dichloran gave useful control of white rot of onions during storage under adverse conditions. This fungicide has previously been shown useful against *Sclerotinia sclerotiorum* storage rot of beans in southern Queensland (Pegg 1962).

### REFERENCE

PEGG, K. G. (1962).—Control of *Sclerotinia* rot of French bean. *Qd J. agric. Sci.* 19:561-4.

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