A SCORING SYSTEM FOR SCRUB WEEDS

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Summary

A scoring system for desiccation of scrub weeds is described and discussed.

INTRODUCTION

The factors involved in making visual assessments have been fully covered by Lynch (1966). The assessments of desiccation effects on woody weeds is difficult particularly where a mixture of species is involved. Under the conditions existing in areas being prepared for afforestation from felled bush and scrub, there is a great variation in size of plants between and within species, and any assessment method must be applicable to individual plants or small groups of similar plants.

METHOD

The method was first developed at Kinleith in 1967 for the assessment of results of operational desiccant spraying (Church and Bowers, 1971), but no mathematical values were attached to the ratings. For assessment of aerial desiccation trials greater detail was necessary, and the method has been slightly modified, and mathematical values allotted to the ratings. The scoring system is given in Table 1, and the mathematical values are shown in Fig. 1.

TABLE 1: SCORING SYSTEM

Score	Symptoms
0	No effect
1	Slight effect
2	One third of plant browned
3	Two thirds of plant browned
4	Severe desiccation but still alive
5	Aerial parts of plant dead
These scores are further qualified by the addition, if necessary, of one of three factors.	
a	Twigs affected
b	Branches affected
c	Stem(s) affected

The possible combinations are shown in Table 2.

TABLE 2: POSSIBLE SCORINGS

Basic Score	Qualifying Score		
	a	b	c
0	—	—	—
1	—	—	—
2	1	—	—
3	1	1	—
4	1	1	1
5	—	—	—

Scrub Weeds and Forestry

DISCUSSION

The effects of desiccation are not always as clear as indicated by the scoring, and training of observers is necessary. For example, a rating of 3 may be given if two thirds of the plant is affected, either by browning of the foliage, or a combination of browning, severe distortion and leaf-fall. Training of observers has in practice proved fairly simple, as the ratings are related to easily recognisable stages in desiccation. Because of the variation in size and form of the vegetation, each plant should be assessed individually.

CONCLUSION

The scoring system has proved easy to use in practice with a number of observers, as it is related to readily recognisable symptoms in the plant. The mathematical basis of the system enables more accurate comparisons to be made between treatments.

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