

Fluorescence test of ryegrass

A fluorescence test shall be made on all samples of ryegrass for which the percentage of perennial ryegrass (Lolium perenne) and/or annual ryegrass (L. multiflorum) is to be reported. Fluorescence results are to be reported as Test Fluorescence (TFL) to two decimal places as follows:

$$\% \text{ TFL} = \frac{\text{Number of normal fluorescent seedlings}}{\text{Total number of normal seedlings}} \times 100$$

The percent perennial ryegrass is calculated as follows:

$$\% \text{ Perennial ryegrass} = \frac{\% \text{ VFL (annual)} - \% \text{ TFL}}{\% \text{ VFL (annual)} - \% \text{ VFL (perennial)}} \times \% \text{ Pure ryegrass}$$

where VFL is Varietal Fluorescence. Percent TFL and % Pure ryegrass are from seed test measurements.

The percent annual ryegrass is calculated as follows:

$$\% \text{ Annual ryegrass} = \% \text{ Pure Ryegrass} - \% \text{ Perennial Ryegrass}$$

Notes: When testing a variety of perennial ryegrass and the test fluorescence (TFL) is equal to or less than the level described for the variety [VFL (perennial)], the formula will not be applied; in these cases “pure ryegrass” shall be considered to be perennial. When testing a variety of annual ryegrass and the test fluorescence (TFL) is equal to or greater than the level described for the variety [VFL (annual)], the formula will not be applied; in these cases “pure ryegrass” shall be considered to be annual.

A list of described fluorescence levels (VFL) for perennial ryegrass varieties having more than zero percent fluorescence and annual ryegrass varieties having less than 100 percent fluorescence is maintained and published by the National Grass Variety Review Board of the Association of Official Seed Certifying Agencies (AOSCA).

If the variety being tested is not stated, or the fluorescence level has not been described, the fluorescence level shall be considered to be zero percent for perennial ryegrass or one hundred percent for annual ryegrass. Both VFL (annual) and VFL (perennial) values must always be entered in the formula. If a perennial ryegrass variety is being tested the VFL (annual) value is 100%. If an annual ryegrass variety is being tested the VFL (perennial) value is 0%.