

Understanding the rooting nature of perennial ryegrasses in turf

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"The ryegrasses are considered bunchgrasses with no creeping habit of growth". This statement is paraphrased from the plant description section, describing ryegrasses by Dr. Rod Drakes, author of the chapter on "Ryegrasses" in the widely used college textbook titled "Forages, The Science of Grassland Agriculture".

This has been the thinking concerning perennial ryegrass growth until recent years. They do not produce lateral shoots called wither stolons or rhizomes that occur in a true spreading or creeping growth habit and have the ability to root at every node.

A noncreeping growth habit is commonly observed in perennial ryegrasses. This has been called a tufted growth habit by Beard in "Turfgrass Science and Culture" and occurs when turfs, such as perennial ryegrass, are limited to tillering from lateral shoot development. Tiller-ing is primarily shoot development that occurs from intravaginal (on the inside of the tiller adjacent to the centre of the plant) and in newer ryegrasses from extravaginal growth (on the outside of the tiller). The selection of perennial ryegrasses with high tillering capacity, fine leaf texture and low leaf extension characteristics has resulted in a number of varieties which have the ability to form tufted growth that results in the appearance of a creeping characteristic.

In these perennial ryegrass types, the first, second or even third tiller is intravaginal with the next tillers ex-

travaginal. These extravaginal, decumbent tillers are not true stolons since they tend to root only at the first node and this rooting is most apparent in spring and under short cutting heights and higher nutrition. Under low maintenance and unmowed amenity turf this feature is of less importance and varieties should be selected for overall performance rather than this spreading type of growth.

A number of the newer turfgrass varieties available today have some degree in this spreading nature in their parentage. It has been observed at the Puyallup Research Station for the past ten years. Examples of varieties that appear to have some degree of this spreading characteristic in their parentage are Citation 11, Omega 1, Charger, Dimension, Legacy, Manhattan 1, Navajo, Al-laire, Aquarius, SR4100 and SR4200. I am sure there are others. This extravaginal growth that develops in some perennial ryegrass clones has been specifically selected for in varieties, such as Nomad and Barclay. Barclay, a lighter green European type, seems better adapted to the Oregon/Washington area. Red thread susceptibility in these types may be a leaf disease of importance in local environments where red thread has been of significant importance in the past.

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The Lighter side of the Lawn



Typical - Here it is - Christmas Eve
& WE have to work!

ERRATA

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