Perennial Ryegrasses with Late Spring and Summer Production Potential

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Introduction

In recent times an increasing number of late maturing and/or late spring and summer active perennial ryegrass varieties have been appearing in public trials.

This autumn, Heritage Seeds is releasing two varieties in this category. This paper briefly outlines the application and difference of Javelin and Yatsyn ryegrasses.

Varietal Description and Application

Cultivar Javelin: Javelin was bred in Holland. It is a fine leafed, diploid, late maturing perennial ryegrass. Winter activity is low and it has a dry matter peak up to 6 weeks later than conventional types (*eg.* Victorian perennial ryegrass, Ellett, Super Nui). Leaf:stem ratio, and as a consequence, metabolisable energy and digestibility, are maintained well into the summer. Grown in its recommended areas, Javelin's persistence is similar to other ryegrasses adapted to those areas. Due to its leafy spreading habit, Javelin provides a better ground cover than conventional types, but does not attain the erect height as a consequence. This characteristic may be a drawback in swards mixed with clovers. Javelin has some susceptibility to crown rust (*Puccinia coronata*).

It is suggested that Javelin's area of utilization will be south of Sydney on the coast and inalnd where good summer rainfall or irrigation is available. Practical experience has shown good results when sown in a mix with a winter active, short rotation ryegrass variety.

Cultivar Yatsyn 1: Yatsyn 1 was bred in New Zealand by NZ Agriseeds. It is a conventional, early flowering diploid, with medium width leaves and an intermediate growth habit. It has similar winter activity and total dry matter production to Ellett. The main difference between Yatsyn 1 and the other currently available cultivars is that it has more summer and autumn activity, especially in the presence of summer rainfall or irrigation where it shows good persistence and summer survival.

It is more drought tolerant and crown rust resistant than Javelin. Crown rust resistance in northern NSW and Queensland was significantly better than Ellett, Nui and Super Nui. In southern NSW and Victoria, resistance is similar to Nui, Ellett, and Kangaroo Valley, but is better than Victorian, Brumby and Marlet. Net Blotch resistance is good. Yatsyn 1 is better suited to mixed clover-ryegrass pastures than the denser, more prostrate Javelin.

Production Data

Seasonal distribution for two-year-old swards of Ellett, Yatsyn 1 and Javelin measured in 1990 at Corryong are given in Table 1. Note that the dry November/December period disadvantaged Javelin which needs good moisture levels to perform well in summer.

Table 1: Comparison of seasonal and total production for three ryegrass cultivars at Corryong (Two year old pastures).

Cultivar	Spring	Summer	Autumn	Winter	Total
Ellett	5190	1620	760	1880	9450
Yatsyn 1	4576	2320	860	1600	9356
Javelin	4780	1900	640	1200	8520

Conclusion

These two varieties are expected to help fill the important summer/autumn feed trough in the areas where perennial ryegrasses are currently grown, especially in higher rainfall and irrigation areas.