

# Register of Australian Herbage Plant Cultivars

## A. Grasses

### 2. Ryegrass

#### *Lolium multiflorum* Lam. (Italian ryegrass) cv. Tama

Reg. No. A-2b-2

Registered August 1972

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#### Origin

A tetraploid developed by the Grasslands Division of the D.S.I.R., New Zealand by treating a diploid line of Westerwolds (Western wolds) ryegrass with colchicine (1,2). Westerwolds is an annual form of Italian ryegrass originating in the Netherlands (4,6). The treated diploid line had been bred in the late 1940s from New Zealand and introduced material. Following several generations of selection, the tetraploid population was stabilised and named Grasslands 4707. The name was later changed to Grasslands Tama (1).

The cultivar was placed under test in 1965 and released for certification by the New Zealand Department of Agriculture in 1968. Certified seed became generally available in 1970. Breeders' seed is maintained by the Grasslands Division of D.S.I.R., Palmerston North.

Submitted for registration by the Tasmanian Department of Agriculture and recommended by the Tasmanian Herbage Plant Liaison Committee. Registered in August 1972.

#### Morphological description

Grasslands Tama is a vigorous grass with broad, soft, glossy, deep green coloured leaves and thick stems. Compared with Grasslands Paroa, it is more open in habit and is greener in the base of the sward.

Floral parts of the seed heads are larger than those of other ryegrasses, and seeds are very large (up to 8mm in length), strongly awned (4-8mm long) and are twice the weight of other ryegrass seeds, ranging from 3.8-5.1 mg/seed (1,2).

It flowers at the same time as Grasslands Manawa.

#### Agronomic characters

In New Zealand Grasslands Tama is adapted to areas of high rainfall and soils of good fertility (1), and often requires additional dressings of nitrogen fertiliser, especially when cereal crops precede it in the rotation. Recommended seeding rates are about 50% higher than Grasslands Paroa and early sowings are advised (1,3,5). Its production in late winter and early spring exceeds that of the grazing cereals, oats, barley and ryecorn. It has generally outyielded Grasslands Paroa and, in some cases, has been found more palatable to sheep. Trials have shown that it can be successfully oversown into legume dominant swards (2). It has a high nutritive value and, being high in soluble carbohydrate, it produces high solids-not-fat percentages in milk (1,2). It has a significantly higher moisture content than the other ryegrasses and requires extra wilting before freshly harvested seed is stored.

In Tasmanian trials Grasslands Tama has yielded significantly more dry matter than Grasslands Paroa in the autumn and early winter; thereafter it has yielded the same or slightly less. In other characteristics most of the New Zealand findings were confirmed. It has behaved as a strict annual with autumn sowing and frequent close grazing. Under these conditions less than 6% of the original plants have survived into the second autumn.

In New Zealand, it has considerable resistance to barley yellow dwarf virus but appears susceptible to attack by stem weevil and leaf rust (1).

## References

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