

## African lovegrass

### Scientific name(s)

*Eragrostis curvula*

Agronomic type: conferta

### Strengths

- Drought hardy
- Tolerates extremely acid soils with high aluminium
- Grows into late autumn and begins growth again in early spring
- Stands thicken up over time
- Relatively tolerant of frost
- Rapid growth rate where moisture, temperature and fertility are favourable
- Very competitive against a number of weeds including spiny burr grass and blue heliotrope

### Limitations

- Can be difficult to establish in very dry spring/summer conditions
- Can lose feed value quickly if grass growth is not controlled by grazing
- Not suitable for waterlogged soils or heavy clays

### Plant description

**Plant:** Densely tufted perennial 0.5-1.2 m high. The plant is generally erect but stems may bend at the lower nodes, where the whole plant often adopts a weeping habit. Light blue to grey-green foliage.

**Stems:** The flowering stems are smooth and round with purple to olive green nodes, lower nodes are usually purple.

**Leaves:** Leaves are rigid and narrow - up to 30 cm long and 7 mm wide. The leaf blades are hairless with distinct parallel veins and can be flat or rolled but usually taper to curly tip. The ligule is about 1 mm long with a fringe of hairs and long lateral hairs. The leaf sheaths are usually purple at the base, ridged with hairs on the lower surface.

**Seedhead:** The inflorescence is an open, olive green panicle up to 15-20 cm long and roughly triangular in outline. The flowering parts (spikelets) are 5-8 mm long dark olive green, leaden grey or purple in colour clustered on branches up to 2 cm long.

**Seeds:** The seed is orange to dark brown, smooth and elongated (approximately twice as long as broad). There is about 3.5 - 5 million seeds/kg.

### Pasture type and use

A persistent perennial spring/summer/autumn grass. Suitable for grazing, hay and silage. Well suited to acidic light sandy, sandy loam and loam soils. Is useful for the control of spiny burr grass and other summer growing weeds such as blue heliotrope.

Warning: Not for use in regions where African lovegrass is a declared noxious weed. Consol is distinguishable from naturalised African lovegrass and cannot outcross with less desirable types. It is impossible to differentiate Consol and less desirable varieties from seed so it is important to purchase certified Consol seed.

### Where it grows

#### Rainfall

Best suited to areas of NSW with a minimum average annual rainfall of 350 mm (southern NSW) and 400 mm (northern NSW). It is sown more widely in central and northern NSW than southern NSW as it responds well to summer rain.

### **Soils**

Grows best on acid sandy soils to medium loams. Not suited to black earths or heavy clay soils. Can tolerate pH (Ca) of 4.0 and exchangeable soil aluminium greater than or equal to 30%.

### **Temperature**

Consol has the ability to germinate at lower temperatures than other tropical grasses. Some germination will occur as low as 10oC but is optimal at 20oC. Established plants can endure quite high temperatures (>35oC) and are quite tolerant of frost.

## **Establishment**

### **Companion species**

Grasses: Other tropical grasses such as Premier digit grass, Rhodes grass.

Autumn sown Consol can be oversown with a cereal crop but the sowing rate of the crop should be no more than 15 kg/ha.

Legumes: Annual legumes such as serradella and sub clover. In some cases where soil isn't too acid lucerne.

### **Sowing/planting rates as single species**

0.3-1.0 kg/ha

### **Sowing/planting rates in mixtures**

0.3 -0.5 kg/ha

### **Sowing time**

In southern NSW the best time to sow is in early spring when there is a good store of soil moisture. In central and northern NSW Consol can be sown from early spring to early autumn (preferred time is late summer to early autumn).

### **Inoculation**

Not applicable.

### **Fertiliser**

Lightly crushed super phosphate can be used to achieve an even distribution of seed at sowing.

## **Management**

### **Maintenance fertiliser**

To increase production and forage quality of Consol stands, apply Nitrogen. Although Consol has a low requirement for Phosphorus, it (and sulphur and occasionally potassium) should be applied to meet the requirements of the legume.

### **Grazing/cutting**

New stands of Consol should not be grazed until the plants are adequately anchored. Avoid the build up of mature, coarse rank growth as the feed quality will decline and will not be as palatable to stock. Consol can tolerate short periods of set stocking but rotational grazing is preferred. Stock should be managed to graze the stand between 800 - 2000 kg DM/ha.

It is important to allow plants to periodically seed down if initial stands are thin.

Consol lovegrass can tolerate fire which can be used strategically to rejuvenate old stands. Rank pastures that have been under-grazed can be burnt in early spring to promote a new flush of growth.

### **Seed production**

Most commercial seed of Consol is produced from dryland stands. Average yields range from 50-150 kg/ha.

### **Ability to spread**

Spread by seed is lower than the undesirable types of African lovegrass. Consol will spread from seed in ungrazed areas where soil conditions are suitable.

### **Weed potential**

African lovegrass is very competitive with other pasture species and is difficult to eradicate but Consol is less competitive than the naturalised types. Consol cannot outcross with less desirable types.

### **Major pests**

No major pest problems

### **Major diseases**

No major disease problems

### **Herbicide susceptibility**

Consol is sensitive to Glyphosate but will require high rates to kill mature stands

## **Animal production**

### **Feeding value**

Consol has moderate forage quality which varies with stage of growth and season.

Quality parameters for regrowth in the vegetative stage are:-

Digestibility: 55-60%  
Crude protein: 10-12.5%  
7.7-8.4 MJ/kg

### **Palatability**

Vegetative growth of Consol is palatable to stock but palatability declines as plants mature.

### **Production potential**

Dry matter production is greatest from spring to autumn (in summer will depend on moisture). Unlike most over tropical grasses Consol will grow slowly over winter but in areas that receive heavy frosts will have lower feeding value.

### **Livestock disorders/toxicity**

No reported problems

## **Cultivars**

<b>Cultivar</b>	<b>Seed source/Information</b>
Consol	Public variety - available from Heritage Seeds. Seed may be difficult to obtain.

## **Further information**

NSW DPI - Primefact 121 Consol lovegrass

## **Acknowledgements**

Information has been adapted from NSW Department of Primary Industries Prime Fact 121 Consol Lovegrass 2006 and NSW Department of Primary Industries Agnote DPI-299 Consol Lovegrass 3rd Edition 2004

## **Author and date**

Carol Harris NSW DPI Glen Innes

January 2009