

Planting and managing your tissue culture plantlets in the field

Planting

Prepare soil to a fine tilth to ensure good soil/root contact. A seedling planter can be used if one is available, although hand planting small numbers is a not a huge job. Plant them deep at the bottom of a drill to prevent stool tipping. Fill in after early growth. Plant the plantlets 500 mm to 1 m apart. A good distance is 800 mm which will allow stooling out to produce a high number of sticks.

Irrigating

Provision of water is the most critical factor for successful establishment of tissue culture plantlets. So irrigate plantlets immediately after planting and monitor them to ensure they don't dry out over the first 3 weeks to get the roots well established. If you do not have access to flood or sprinkler irrigation a simple irrigation system can be set-up using cheap drip tape and an in-line filter hooked up to your garden tap or water tanker.

Insects

If you expect problems with insects then an application of an insecticide drench (such as chlorpyrifos or imidacloprid) at planting will protect the young plantlets. In cane grub-prone areas use your standard grub-control treatment.

Weeds

Weed control is important for good establishment and growth. Ideally pre-irrigate the soil to germinate weeds, then apply a knock-down herbicide or cultivate just prior to planting, this will reduce the weed pressure on young plantlets. Pre-emergent herbicides can be used. But do not use diuron, young plantlets are sensitive to diuron. Do not use paraquat unless you have no other option and only on established plantings. Established plantlets

can be treated with the same chemicals as the ratoons on your farm. Label rates of S-metolachlor plus atrazine have been applied successfully over the top after planting. For example we used Atradex @ 2.5 kg/ha plus Dual Goal @ 1.5 L/ha for grasses and broadleaf weeds and also Sempra @ 100 g/ha plus Activator @ 200 mL/100 L for nutgrass. Both applications were sprayed over the top after planting.

Fertiliser

Fertiliser requirements of the tissue cultured plantlets are the same as for your billet plantings. If possible, plant with a planter mix to maintain good early growth, and side-dress later to avoid fertiliser burn.



