



Velvetene

Description

TFWA02, commonly known as Velvetene™ is a Plant Breeders Rights registered variety of seashore paspalum (*paspalum vaginatum*), which exhibits significant salt tolerance and happily grows in a wide variety of soil types and ph levels. It has a similar texture and density to that of the finer Bermudas.

The leaf has a wax coating giving the appearance of a glistening bright green, shiny lustre with a velvet soft touch. The plant has very dense, laterally growing stolons with a close internode spacing, deep thick rhizomes which gives the plant good drought tolerance and a high re-generation rate following harvest or renovation.

It is not as invasive as many Bermudas but is a tough, hardy plant with excellent recuperative rates from wear and scalping; has good winter colour retention with early spring green-up rates following winter dormancy.

Winter dormancy generally occurs with ground temperatures consistently below 16°C with no top growth visible below 12°C. Bleaching of the upper leaves will occur with severe winter frost however the stolon appears unaffected even after say 10 days of continuous morning frosts around -2°C.

Velvetene™ has a low seed head production for a short duration and has non-viable seeds meaning the plant has to be vegetatively propagated from runners or stolons. Visual seed head is apparent with delayed mowing frequencies, however, under close mowing regimes seed head is only visual in a small sheath well down in the thatch during the seeding growth phase.

Origins

Thought to originate in South Africa, the parent 'Saltene' from which Velvetene™ was selected, is related to the 'halophyte' type plants and as such will grow naturally in poorly drained clay soils, whether excessively wet, salty or somewhat dry providing the soil is not anaerobic and will grow vigorously in salty beach sand or calcareous soils.

Propagation

Recommended propagation rates of one bag to 50m² or 600 bushels per hectare are recommended for tee or fairway establishment. This equates to a ratio of 1:10. Rates of up to 1:100 have successfully been used depending upon the finess of the shredded stolons.

Irrigation & Salt Tolerance

Irrigation water to establish Velvetene™ from stolons should not exceed 11,000 PPM salinity. Established turf will have no visible effect irrigated at 15,000 PPM. Occasional drenching with seawater is not adverse to Velvetene™.

Use of variable quality water resources on site specific soil types requires various changes in management strategies to deal with highly saline situations.

Drought Tolerance

Aesthetically pleasing turf surfaces during summer dry spells can be maintained with irrigation regimes as low as 60% Epan. Effective grass cover can be achieved with as little as 20% Epan however leaf colour and texture is a stippled green and brown with the surface a little brittle as a significant part of available moisture is stored in the rhizome.

Mowing

Velvetene™ is more easily mown than the Bermudas with a mowing height generally between 8mm -15mm and at frequencies 7 - 14 days apart with summer temperatures of 25 - 40°C.

With intensive grooming at 3mm, the surface of Velvetene™ will become very fine and dense as a putting green. Without mowing, it will generally grow to a height of 75 - 100mm with seed heads slightly higher. Velvetene™ paspalum will withstand severe scalping back at any time up until 6 weeks prior to winter dormancy.

Any later than this the grass will not fully recover leaf until the early spring following winter dormancy. If required, severe renovations are best carried out within three months post dormancy with light verti-cutting as and when required at any other time.

Fertilizer

If not intensively managed, there is no requirement for fertilizer. However, it responds quickly to fertilizer when used resulting in excessive growth at high rates. Apply around 25kg /ha/month N in the growing season on sands with less on heavier soils. Responds well to iron.

Weed Control

Current herbicides available are generally not labelled specifically for seashore paspalum with reference made to 'turf' only. Always test for herbicide sensitivity if effects are unknown. The following herbicides have been used for effective control of both grass and broadleaf weeds in Velvetene™.

Pre-emergent-

Ronstar (oxadiazon) and Dual Gold (Metolachlor) at label rates for pre-emergent grass weeds control before planting. Simazine at rates as high as 3 litres / ha have been used on mature stands of 'Saltene' and will produce quite severe root pruning and 'clubbing' of the feeder roots on re-generating stands.

Atrazine at rates up to 1litre / ha on sandy soils three months apart have no effect on Velvetene™ however at 2 litres and above some plants are decimated particularly if regular applications have been applied over a period of time. It is best applied when the turf is in or approaching dormancy. Kerb (propzamide) at recommended rates is OK with some post spraying leaf yellowing evident on any over-spray.

Post-emergent-

Metsulfuron-methyl useful post emergence control of broadleaf using rates of up to 20grms/ha shows no effect on 'Saltene' or Velvetene™ Spearhead at label recommendations for broadleaf weeds shows little effect on Velvetene™ Diclofop-methyl for selective control of some grass weeds Dicamba if used on actively growing turf will cause burning at recommended rates and set back will last 4 - 6 weeks.

An alternative is to use Lontrel (clopyralid) Tigrex (MCPA) (diflufenican). Gramoxone at 400 - 600mls/ha in 150 litres of water have been used as a salvage operation where weed control is out of control. That rate will 'brown- out' everything away however Velvetene™ will completely recover with new leaf within three to four weeks.

Low rates of Glyphosate will do a similar job but rates at 5 litres / ha will kill 98% of Velvetene™ Roundup-max at 6 litres with 2 litres Fusilade per hectare will kill 'Saltene' and Velvetene™.

Insects

In general, seashore paspalum has few problems with insects with chemical control required only in severe infestations. An occasional infestation with cutworm requiring chemical treatment for control may be necessary.

Disease

Fungus disease may occur under hot humid conditions when the grass is under stress, organisms such as Fusarium, Helminthosporium, Dollar spot may be found but rarely require treatment.

Cultural practices that injure the plant such as scalping should be avoided during periods of hot humid weather; avoid excessive nitrogen applications; avoid evening irrigation where possible. Maintain balanced levels of applied nutrients.

Note: TFWA02 Velvetene™

TFWA02 Paspalum vaginatum is protected under the Plant Breeder's Rights Act, PBR Licence Number 96/226. Unauthorised commercial propagation or any sale, conditioning, export, import or stocking of propagating material of this variety is an infringement under the Plant Breeder's Rights Act 1994