



# Research, Installation and Care Guide

## Great Winter Colour

Kenda® turf has the **best winter colour** of any Kikuyu or any warm season turf grass. We have conducted a trial to see what effect a product called Carbon Trader has on warm season turf grasses. Carbon Trader is an activated charcoal in liquid form that claims to keep turf more green in winter. The results to these tests prove that Carbon Trader does what it claims.

Kenda® turf, Common Kikuyu and Village green were in the trial. The trial consisted of a plot of each with Carbon Trader and a plot of each with no Carbon Trader. The results can be seen in the table below.

	Treated with Carbon Trader	Untreated	Average
Kenda® Turf	9	7.5	8.25
Common Kikuyu	8	5.5	6.75
Village Green	6.5	5.5	6

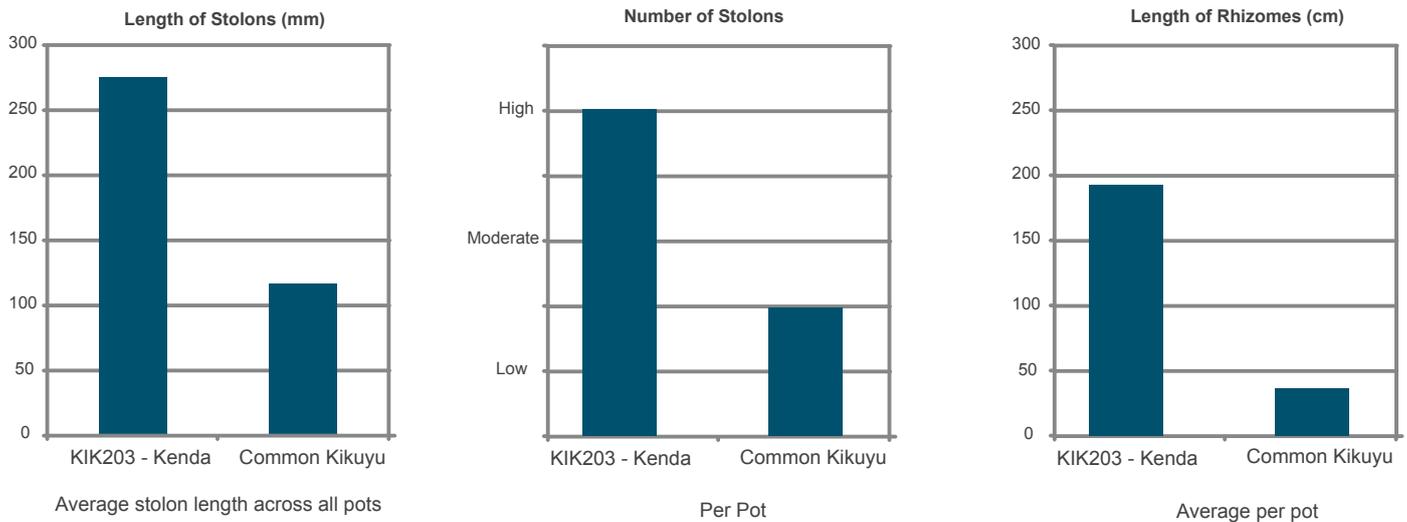
The turf plots were rated by Stephen Kincade, who is an independent consultant from Turf Wise. He rates them from 0-10 for winter colour and activity (10 being the highest possible rating). The tests were conducted at Clarendon, NSW. A number of frosts had occurred prior to rating over the previous few months. The date of rating was the 1st of July 2011.

See <http://www.ozbreed.com.au/download/research-papers/baricadecarbontrader.pdf> for the full paper.



## Benefits of Kenda® turf over other Kikuyu

Kenda is proven to have far more vigorous rhizomes and stolons compared to common Kikuyu. This allows it to cope with the vigours of high traffic. See the tables below for more information.



Based on replicated pot trials grown over 2008 and 2009. Measurements were taken on a number of pots.

1. According to our research, Kenda® turf has 4 times as many rhizomes as common Kikuyu and twice as many as Village Green.
2. According to our research, its stolons grow almost three times faster than common Kikuyu in pot tests.
3. According to all growers who have grown Kenda® Kikuyu, its turf rolls and slabs are significantly better than common Kikuyu turf rolls.
4. Low to moderate thatch. Kenda® turf scalps less, and has significantly less thatch than common Kikuyu and Village Green according to tests at Clarendon NSW.
5. No sign of Kikuyu Yellows Disease on Kenda at this stage.
6. On two sites, one in Clarendon NSW, and one in King Lake Victoria, Kenda® turf had significantly better winter colour than Village Green and Common Kikuyu.
7. Kenda® Kikuyu turf is out performing common Kikuyu on a soccer field and a race course. It hasn't needed to be patched.
8. When left unmown, Kenda® turf is shorter than common Kikuyu.
9. Has stolons and rhizomes that are larger, more vigorous and wider than common Kikuyu and Village Green.
10. Kenda® turf is male sterile and rarely, if ever, produces a viable seed, whilst common Kikuyu seeds and becomes highly invasive for native areas, spreading by seed for kilometers.
11. Kenda® turf had 50% more growth in May under a number of frost events compared to common Kikuyu and Village Green.

## Similarities between Kenda® and Village Green

1. Both are male sterile. Occasionally under certain conditions it is possible for both to seed, but it is unusual, and they certainly produce no or very little seed compared to common Kikuyu.
2. Both have a similar leaf width when mown regularly, with Village green only being ever so fractionally finer. NOTE: When left unmown for some time, the leaf of Kenda® turf is significantly wider.



# Installation and Care Guide

The fact is that failing to improve the soil before planting is only inviting a much greater and continual investment of both time and money, that will never return its value as fully as preparing the soil properly before planting any grass.

## WATCH THE VIDEO ONLINE: Preparing Your Soil For Your New Lawn

Visit <http://youtu.be/-yIhIGydzPM> to watch the video.

## Soil Preparation

The benefits of proper and complete soil preparation are:

- Improved uniformity
- Increased density
- Faster recovery from wear
- Reduced use of water, fertiliser and chemicals
- Reduced maintenance

### Why is Good Soil Important

For optimum growth, Kenda® grass needs just four things (in the proper balance) to grow: sunlight, air, water and nutrients. Reduce any of these, or provide too much of any one, and the grass may die or simply suffer. In the right proportions, the grass will flourish, providing not only beauty to the landscape, but also a clean and safe place to play and many benefits to the environment.

Grass obtains three of these four essential factors (air, water and nutrients) from the soil, but many soils are less than ideal for growing grass. Some soils contain too much clay and may be very compacted. It's great for roads, but bad for grass because air and water aren't available to the roots and the roots can't grow. Other soils may have too much sand. They are beautiful on a beach, but difficult to grow grass because water and nutrients won't stay in the root zone long enough for the plant to use. Another frequently observed problem with many soils is that its pH (the degree of acidity or alkalinity) is too high or too low for optimum grass growth.

### What is the Best Soil for Kenda® Kikuyu?

Loams, sandy loams and loamy sands, with a pH of 6.0 to 7.0 are the very best soils for producing a beautiful, high-use, low-maintenance Kenda® lawn. Unfortunately, this ideal soil mixture is seldom found on any property after construction.

### How Deep Should the Soil Be?

The absolute minimum soil depth for a care-free lawn is 10 cm; however, for deeper root penetration and the benefits that brings, the accepted standard is 15 cm.

### Can Soils Be Improved?

Practically without exception, not only can most soils be improved, they usually need to be improved to obtain the maximum results with only a minimum of other on-going effort.

The knowledge of what is necessary, the amount and availability of materials and the immediate costs of time and money are the factors that typically deter people from taking the steps necessary to improving the soil. While some people do not fully understand the importance of good soils for grass, many also believe they can save time and money by ignoring the need to improve their lawns soil.

## Installing Kenda® Turf

Having to rip out your whole lawn and start again is the last thing you want to do, right? So...

It pays to lay your Kenda® Kikuyu Turf properly from the start. Follow these instructions and you'll be right.

- Remove all building waste & weeds.
- Spread a free draining soil to a depth of 7-15cm (roots can penetrate much deeper) or loosen ground and mix in appropriate soil conditioners. Phone your supplier for more advice on this option. For sandy soils, simply mix in organic material and rotary hoe.
- Level the surface using a screeding board, lawn leveller or similar device.
- In hot months, moisten the soil but do not make the soil too wet. Do not lay turf on hot, dry soil.
- Lay the Kenda® Kikuyu Turf as soon as possible after delivery.
- On hot days, lay a section of Kenda® grass and lightly water. Repeat until all Kenda® turf is laid. On cool days, turf can be laid all at once. Roll and water thoroughly within one hour of laying turf.
- Water thoroughly for 7-10 days or until turf is established take care that the water is saturating the soil beneath the turf. In colder months, the turf will take longer to establish. The turf should not dry out until roots are established.
- When the soil has firmed and the Kenda® Kikuyu Turf has rooted down, usually 2-3 weeks after laying (longer during winter), mow lightly to tidy up the lawn.

## Mowing Kenda® Turf

- Mow your Kenda lawn every 7-10 days in the hot months; mow every 3-6 weeks in the cold months.
- Mowing height will vary: 2-5cm in sunny/lightly shaded situations, 5-7cm in heavier shaded situations.

## Watering Tips

- Begin watering new kenda Turf within a half hour after it is laid on the soil. Apply at least 2 to 3 cm (1 inch) of water so that the soil beneath the turf is very wet. Ideally the soil should be moist 7 to 10 cm (3 to 4 inches) below the surface.
- Water thoroughly and regularly after Kenda® Kikuyu Turf has been laid to encourage a deep and vigorous root system (turf will be able to fossick for water and therefore be more able to withstand hot dry conditions).

- Pull back a corner of the turf and push a screwdriver or other sharp tool into the soil. It should push in easily and have moisture along the first 7 to 10 cm (3 or 4 inches) or you need to apply more water.
- As the Kenda grass starts to establish its new roots into the soil, it will be difficult, impossible and/or harmful to pull back a corner to check beneath the turf, but you can still use a sharp tool to check moisture depth by pushing it through the turf and into the soil
- Once the root system has fully established, water thoroughly only when needed (when a slight wilting is visible), usually once every 7-10 days in summer (on sandy soils more often), with much less or no water in cooler months.
- Remember that infrequent, deep watering promotes a healthy lawn. Deeply rooted Kenda grass has a larger "soil-water bank" to draw moisture from and this will help the grass survive drought and hot weather that rapidly dries out the upper soil layer.
- Over watering encourages excessive growth, disease and root rot.
- It is best to water in the early morning; night watering is not recommended.
- Make absolutely certain that water is getting to all areas of your new Kenda® lawn, regardless of the type of sprinkling system you use. Corners and edges are easily missed by many sprinklers (if windy) and are particularly vulnerable to drying out faster than the centre portion of your Kenda lawn. Also, areas near buildings dry out faster because of reflected heat and may require more water.
- Runoff may occur on some soils and sloped areas before the soil is adequately moist. To conserve water and ensure adequate soak in, turn off the water when runoff begins, wait 30 minutes to an hour and restart the watering on the same area. Repeating this start and stop process until correct soil moisture is achieved. For the next two weeks keep the below-turf soil surface moist with daily (or more frequent) watering. Especially hot, dry or windy periods will necessitate increased watering amounts and frequency.
- If the temperature approaches 37 °C (100 F), or high winds are constant for more than half of the day, reduce the temperature of the turf surface by lightly sprinkling the area. This sprinkling does not replace the need for longer, deeper watering, which will become even more critical during adverse weather conditions. During the rest of the growing season most lawns will grow very well with a maximum total of 2.5cm of water a week, coming either from rain or applied water. This amount of water, properly applied, is all that is required for the health of the grass, providing it is applied evenly and saturates the underlying soil to a depth of 10 to 15 cm (4 to 6 inches).

### **WATCH THE VIDEO ONLINE: Watering and Fertilising Tips For Your Lawn**

Visit <http://youtu.be/iQh7aQvI4Sk> to watch the video.

- Lawns need to be fed to remain strong and healthy.
- It's important to use a slow release fertiliser one month after laying (applying fertiliser before this time has shown not to make a difference to lawn establishment).
- We recommend fertilising at least twice a year using a slow release fertiliser. Firstly in early April using our Summer/Autumn blend slow release fertiliser, and again in September using our Spring blend slow release fertiliser.
  - For a better winter colour you can use our Summer/Autumn blend slow release fertiliser.
  - And if required you can also fertilise again in summer using our Summer/Autumn blend.
  - If you need a quick green up, a high nitrogen fertiliser can be used e.g. Supergreen or an organic based slow release fertiliser, however slow release fertilisers are generally better for your lawn and more cost effective. In the heat of summer avoid over fertilising or using manure based products.

### **WATCH THE VIDEO ONLINE: Watering and Fertilising Tips For Your Lawn**

Visit <http://youtu.be/iQh7aQvI4Sk> to watch the video.

## Pests, Weeds and Diseases

Kenda® kikuyu Turf is resistant to pests, weeds etc compared to most other turf varieties, but as with any natural product, occasional problems can occur. If these problems occur we recommend the following:

- Pests - watch for the lawn grub (e.g. web worm or army worm) and african black beetle- apply suitable pesticides according to directions.
- Weeds - if weeds infest, hand eradicate before seed head develops or apply a suitable weedicide (ask your local garden centre.)

### **WATCH THE VIDEO ONLINE: Lawn Grub and Disease Control**

Visit <http://youtu.be/6isTKHlw5tw> to watch the video.

### **WATCH THE VIDEO ONLINE: Killing and Keeping Weeds Out Of Your Lawn**

Visit <http://youtu.be/08IVHpXQ-TU> to watch the video.