FIRE TOLERANCE
INTRODUCTION

Vetiver grass is well-known for its fire tolerance. It is almost impossible to destroy a mature vetiver plant by fire.

Field experience showed that it is not burnt readily even under very dry and windy conditions. This is due mainly to:

- the growing points are underground
- They are tightly packed and well protected by the thick crown
- The shoots are relatively high in silica content

Paul Truong, TVN.
Regrowth following a very severe burning when plant tops were not removed after slashing
Regrowth continued with new shoots replacing old dead ones in the centre.
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Two examples

1- Burning of hedgerows to control weeds and vermin

2- Wild fire along a railway
Even under dry and windy conditions burning is difficult and slow.
Very hot fire burnt most of its top growth
Recovery 2 months after burning
Complete recovery seven months after burning with adequate soil moisture and warm weather.
WILDFIRE IN AUSTRALIA

• Bushfire is a common hazard in eastern Australia as in western USA in summer

• Every year thousand of hectares of forest as well as suburban land are severely burnt.

• Due to the current drought the fire season started in October instead of the usual time in December

• The following slides show the devastation of the fire on vetiver planting and how quickly it recovers with only residual soil moisture.
A typical mature vetiver row along the Toowoomba railway. Vetiver was used extensively to stabilize this 32km mountain section.
Severely burnt stools, note the soil trapped above the old hedge
No fear !!
Regrowth started from below ground buds
Regrowth stated very soon after fire
25 days after fire
8 weeks after fire
8 weeks after fire
On old hedges, the centre was burnt out and regrowth started along the edges, resulting in double rows!!
8 weeks after fire
Three months after fire
Seven months after fire
Seven months after fire
Seven months after fire