

VJ Prairie grass (*Bromus catharticus*) Version 1.3 15 January 2012

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Introduction

This VJ 1 prairie grass originates from the best plant in a 30 year old two hectare eastern Waikato paddock that I selected in 1990. Most years since then I have sown seed and kept seed from the best plant.

Bromus is a self pollinating species which means that most varieties are based on very few parents (VJ 1 is from one plant) and are very narrow genetically, so are very similar.

Ryegrasses cross pollinate so are not as inbred, and are much more variable, and as we know, ryegrass plants die out at different stages over decades. When a Prairie grass gets a problem* all plants are equally susceptible, so in theory all could die quickly. This is probably one of the reasons why other prairie grasses like *Matua* don't fade out over decades, but disappear after two or three years.

* Problems of all plants can be mineral imbalances, pugging, drought, cold, heat, rust, acid or alkali soils, aluminium toxicity, over-grazing occasionally or for too long, under-grazing, and insects, which I have often found are exaggerated when the cause is really infertility of one kind or another, mostly a lack of calcium.

VJ Prairie grass is a diploid perennial leafy fast growing and long lasting under good management in tolerant conditions.

This map of North America (Date unknown.) shows where *Bromus* prairie grasses (not the VJ Prairie grass which is a similar, but new variety) are growing. Old prairie grasses are highly likely to now be in more States, and cover most countries. Reports indicate that they don't like very wet soils.

VJ Prairie grass is descended from the biggest and best plant in a thirty year old eastern Waikato two hectare paddock. No other prairie grass has lasted anywhere near that long under intensive grazing in the Waikato, or anywhere I know of, unless allowed to self seed, which some northern hemisphere farmers allow to keep them in the paddock.

When I first saw it in 1990, I asked the farmer how old it was, where he got the seed and if it ever seeded. It had not seeded and was sown in about 1960 so was 30 years old, he could not remember where he bought the seed or its name. I've had it growing in our garden since 1990 and since 2006 in the park next to us in Hamilton, Waikato. The park has had no lime or fertiliser for 30 years and is mown down to 3 cm every week or two which is not what prairie grass likes, but this variety (VJ) has survived.

I have given seeds and plants to many farmers at no charge for them to grow seed because New Zealand farmers need a grass to go with ryegrass to get out of the monoculture most NZ grazing farmers are now in. Those in facial eczema areas need a grass other than ryegrass that doesn't host facial eczema and has fewer nitrate problems, which VJ Prairie Grass with its 3% nitrogen (21% protein) has.

It is being tried in Australia and here. It is not a sheep grass.

It doesn't grow as fast as *Matua*, which only lasts for two or three years so is useless under controlled grazing on expensive land as in New Zealand. In countries where land is cheap, reseeding is allowed, but that is not profitable in high value grazing land in New Zealand, hence the usefulness of VJ Prairie grass.

One plant can grow a metre tall and a quarter metre wide. See photo. I was letting it go to seed.

Please try some on a flat fertile area and some on a dry hill area with new grasses if possible so it grows with them, but not with winter ryegrasses which are short lived.

One seed every 20 cm is enough. Other grasses like *Bealey NEA2* and *Trojan NEA2* and the best clovers like *Tahora 2* should be sown with it. Don't sow it with *AR37* perennial ryegrasses because they are unpalatable so will not be eaten while Prairie grasses will be preferred and grazed short as is done to *NEA2* grasses.



http://books.google.co.nz/books?id=-OOx1fq9EDYC&pg=PA575&lpg=PA575&dq=prairie+grass+survival+by+maps&source=bl&ots=tGwb34rrmd&sig=tnPW124LOQUeHWwtrOpSVjOJoSU&hl=en&ei=g1aJTbWBDokWsgPD3_CbDA&sa=X&oi=book_result&ct=result&resnum=3&ved=0CCgQ6AEwAg#v=onepage&q&f=false

The above MAF trials were done in 1986 showing that the problem of grasses not lasting because of pulling is not new. It also shows that our top research people didn't find the cause, so blamed insects - before black beetle which they now blame because they don't know that a lack of lime and its synergisms are the reason. It shows how useless many MAF, Ruakura trials are by running for only two years and using Matua prairie grass than lasts only two to three years in perfect conditions.

The chair shows the 2 metre height of one VJ Prairie grass plant. I'd removed the seed from the dead stems.

Below left is ten days growth in spring in the park next to us, usually cut short every week or two.



Right is in the park with 15 days growth over the 2010/2011 summer holidays with reasonable rainfall. In the Waikato in mid February in hot dry weather it stops growing.



I confirm that we require no reward for the seed. Our reward is beef and dairy farmers benefitting from it.



Single plants of VJ Prairie grass in our garden in Hamilton, Waikato, in June 2011 two weeks after cutting it. It was a comparatively mild June (southern hemisphere).