

# SOUTH WEST VICTORIA FORAGE VALUE INDEX

#### **2020 UPDATE**



The Forage Value Index (FVI) is a tool that helps Australian dairy farmers and their advisors to make more informed decisions when selecting perennial ryegrass cultivars. It provides an accurate, reliable and independent assessment of the potential economic value of perennial ryegrass cultivars in different dairy regions of southeast Australia.

The FVI is calculated by multiplying the Performance Value of each cultivar (i.e. total kilograms dry matter produced per hectare per season) by its Economic Value (i.e. the estimated value of this extra production per season).

Performance Values are determined by industry assessed trial data. To be included in the FVI database, each cultivar must have data from at least three, three-year trials that have been conducted using strict industry protocols. The Performance Value is expressed as a percentage change relative to 'Victorian' cultivar of perennial ryegrass.

Economic Values are determined by assessing the economic value of extra pasture grown during the respective seasons through an economic analysis of 'case study' farms in the four different dairying regions in southeast Australia.

The FVI for each cultivar is expressed as a colour, whereby those cultivars with the same colour are not significantly different to each other. The green colour indicates those cultivars that have performed the best in each region and have the most potential to contribute to operating profit.

The FVI information allows users to rank cultivars according to their region and user nominated attributes (e.g. seasonal yields, ploidy, heading date, endophyte). The number of trials in which the cultivar has been tested is also included in the table.

The accompanying tables of the performance of the cultivars during the various seasons are of particular importance to dairy farmers, depending upon their farming system and calving pattern. For example, dairy farmers that calve in the autumn would favour those cultivars that have a high performance value for autumn and winter as they would value more highly greater winter growth of their pastures.

# South West Victoria: Forage Value Index 2020

		FVI SW Vic	Autumn	Winter	Early Spring	Late Spring	Summer	Endophyte	Ploidy	Heading Date	Marketer	No. of trials
Base AR37		181	111	119	98	99	113	AR37	Tetraploid	Late	PGG Wrightson Seeds	12
Bealey NEA2		166	111	116	98	99	113	NEA2	Tetraploid	Very Late	Barenbrug	13
Halo AR37		140	109	115	96	97	113	AR37	Tetraploid	Late	Agricom	12
Kidman AR1		136	109	113	100	98	110	AR1	Diploid	Early	Barenbrug	8
Impact2 NEA2		131	107	113	99	99	111	NEA2	Diploid	Late	Barenbrug	12
SF Hustle AR1		128	107	113	99	99	110	AR1	Diploid	Mid	Seedforce	6
One50		125	107	113	98	97	111	SE	Diploid	Late	Agricom	4
Shogun NEA2		125	105	112	100	98	112	NEA2	Tetraploid	Late	Barenbrug	6
Banquetll Endo5		118	107	112	96	98	111	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Reward Endo5		113	107	112	97	98	110	Endo5	Tetraploid	Very late	PGG Wrightson Seeds	5
One50 AR37		112	107	113	98	97	110	AR37	Diploid	Late	Agricom	8
Fitzroy		110	106	112	102	97	108	SE	Diploid	Early	PGG Wrightson Seeds	4
Matrix - Festulolium		109	107	112	97	97	111	Nil	Diploid	Late	Cropmark	7
Excess AR37		109	108	112	97	97	110	AR37	Diploid	Mid	PGG Wrightson Seeds	6
One50 AR1		108	106	113	97	97	111	AR1	Diploid	Late	Agricom	11
Expo AR37		108	107	112	97	98	109	AR37	Diploid	Late	PGG Wrightson Seeds	5
Ansa AR1		106	106	111	98	98	110	AR1	Diploid	Mid-Late	Seed Distributors	7
Arrow AR1		106	105	109	99	99	110	AR1	Diploid	Mid	Barenbrug	9
Jackal AR1		105	107	111	98	98	109	AR1	Diploid	Mid	AGF Seeds	6
Prospect AR37		104	106	113	98	97	109	AR37	Diploid	Late	Agricom	7
Platinum		103	107	112	97	98	109	Low	Diploid	Late	Valley Seeds	5
Revolution - Festulolium		91	105	111	97	98	109	AR1	Diploid	Late	Cropmark	4
AusVic		88	105	109	98	98	109	Low	Diploid	Mid	Vic Seeds	3
Endure		85	105	110	98	98	108	SE	Tetraploid	Mid	Vic Seeds	5
Avalon AR1		70	105	110	96	99	106	AR1	Diploid	Mid	Vic Seeds	8
Ultra - Festulolium		63	104	108	96	97	109	AR1	Diploid	Late		6
Helix - Festulolium		62	103	108	97	97	108	AR1	Diploid	Mid	Cropmark	4
Jeta AR1		59	104	102	98	99	109	AR1	Tetraploid	Mid	Pasture Genetics	6
Victorian		0	100	100	100	100	100	SE	Diploid	Early	Many	12

## Legend

Heading	Description
Cultivar	A plant variety that has been produced by selective breeding. Cultivars are as listed as on the Australian Seed Federation Pasture Seed Database
Colour bars	Cultivars with the same colour are not significantly different from each other. Select from any of the cultivars in the green bars.
FVI	The rating is based on the outcome of economic and performance values for each cultivar.
Seasonal performance	A performance value is based on the difference in dry matter production between a cultivar's seasonal performance and that of Victorian ryegrass. This is a percentage ranking – percent better or worse than Victorian ryegrass.
Autumn	March/April/May
Winter	June/July
Early spring	August/September
Late spring	October/November
Summer	December/January/February
Endophyte	A fungus which protects plants from a range of insect pests. Different types of endophytes affect persistence, dry matter production, insect pest species and nutritive value in different ways.
Ploidy	The number of chromosomes per cell in the plant. A diploid ryegrass has two, while a tetraploid has four.
Heading date	The date when 50% of the plants of a variety have emerged seed heads in a typical year. Heading dates are listed on the Australian Seed Federation Pasture Seed Database.
Marketer	The company marketing the cultivar.
No. of trials	To be included in the Forage Value Index database, each cultivar must have data from at least three, three-year trials.
No. of trials	To be included in the Forage Value Index database, each cultivar must have data from at least three, three-year trial

# South West Victoria early spring seasonal performance

Cultivar		Early Spring	Late Spring	Summer	Autumn	Winter	FVI SW Vic	Endophyte	Ploidy	Heading Date	Marketer	No. of trials
Fitzroy		102	97	108	106	112	110	SE	Diploid	Early	PGG Wrightson Seeds	4
Kidman AR1		100	98	110	109	113	136	AR1	Diploid	Early	Barenbrug	8
Victorian		100	100	100	100	100	0	SE	Diploid	Early	Many	12
Shogun NEA2		100	98	112	105	112	125	NEA2	Tetraploid	Late	Barenbrug	6
Arrow AR1		99	99	110	105	109	106	AR1	Diploid	Mid	Barenbrug	9
Impact2 NEA2		99	99	111	107	113	131	NEA2	Diploid	Late	Barenbrug	12
SF Hustle AR1		99	99	110	107	113	128	AR1	Diploid	Mid	Seedforce	6
Prospect AR37		98	97	109	106	113	104	AR37	Diploid	Late	Agricom	7
Ansa AR1		98	98	110	106	111	106	AR1	Diploid	Mid-Late	Seed Distributors	7
One50		98	97	111	107	113	125	SE	Diploid	Late	Agricom	4
Base AR37		98	99	113	111	119	181	AR37	Tetraploid	Late	PGG Wrightson Seeds	12
Jeta AR1		98	99	109	104	102	59	AR1	Tetraploid	Mid	Pasture Genetics	6
Jackal AR1		98	98	109	107	111	105	AR1	Diploid	Mid	AGF Seeds	6
AusVic		98	98	109	105	109	88	Low	Diploid	Mid	Vic Seeds	3
Bealey NEA2		98	99	113	111	116	166	NEA2	Tetraploid	Very Late	Barenbrug	13
One50 AR37		98	97	110	107	113	112	AR37	Diploid	Late	Agricom	8
Endure		98	98	108	105	110	85	SE	Tetraploid	Mid	Vic Seeds	5
Expo AR37		97	98	109	107	112	108	AR37	Diploid	Late	PGG Wrightson Seeds	5
Helix - Festulolium		97	97	108	103	108	62	AR1	Diploid	Mid	Cropmark	4
One50 AR1		97	97	111	106	113	108	AR1	Diploid	Late	Agricom	11
Platinum		97	98	109	107	112	103	Low	Diploid	Late	Valley Seeds	5
Matrix - Festulolium		97	97	111	107	112	109	Nil	Diploid	Late	Cropmark	7
Reward Endo5		97	98	110	107	112	113	Endo5	Tetraploid	Very late	PGG Wrightson Seeds	5
Excess AR37		97	97	110	108	112	109	AR37	Diploid	Mid	PGG Wrightson Seeds	6
Revolution - Festulolium		97	98	109	105	111	91	AR1	Diploid	Late	Cropmark	4
BanquetII Endo5		96	98	111	107	112	118	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Avalon AR1		96	99	106	105	110	70	AR1	Diploid	Mid	Vic Seeds	8
Ultra - Festulolium		96	97	109	104	108	63	AR1	Diploid	Late		6
Halo AR37		96	97	113	109	115	140	AR37	Tetraploid	Late	Agricom	12

# South West Victoria late spring seasonal performance

Cultivar	Late Spring	Summer	Autumn	Winter	Early Spring	FVI SW Vic	Endophyte	Ploidy	Heading Date	Marketer	No. of trials
Victorian	100	100	100	100	100	0	SE	Diploid	Early	Many	12
Arrow AR1	99	110	105	109	99	106	AR1	Diploid	Mid	Barenbrug	9
Base AR37	99	113	111	119	98	181	AR37	Tetraploid	Late	PGG Wrightson Seeds	12
Impact2 NEA2	99	111	107	113	99	131	NEA2	Diploid	Late	Barenbrug	12
Avalon AR1	99	106	105	110	96	70	AR1	Diploid	Mid	Vic Seeds	8
Bealey NEA2	99	113	111	116	98	166	NEA2	Tetraploid	Very Late	Barenbrug	13
Jeta AR1	99	109	104	102	98	59	AR1	Tetraploid	Mid	Pasture Genetics	6
SF Hustle AR1	99	110	107	113	99	128	AR1	Diploid	Mid	Seedforce	6
Reward Endo5	98	110	107	112	97	113	Endo5	Tetraploid	Very late	PGG Wrightson Seeds	5
Kidman AR1	98	110	109	113	100	136	AR1	Diploid	Early	Barenbrug	8
AusVic	98	109	105	109	98	88	Low	Diploid	Mid	Vic Seeds	3
Banquetll Endo5	98	111	107	112	96	118	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Expo AR37	98	109	107	112	97	108	AR37	Diploid	Late	PGG Wrightson Seeds	5
Platinum	98	109	107	112	97	103	Low	Diploid	Late	Valley Seeds	5
Jackal AR1	98	109	107	111	98	105	AR1	Diploid	Mid	AGF Seeds	6
Ansa AR1	98	110	106	111	98	106	AR1	Diploid	Mid-Late	Seed Distributors	7
Shogun NEA2	98	112	105	112	100	125	NEA2	Tetraploid	Late	Barenbrug	6
Endure	98	108	105	110	98	85	SE	Tetraploid	Mid	Vic Seeds	5
Revolution - Festulolium	98	109	105	111	97	91	AR1	Diploid	Late	Cropmark	4
One50	97	111	107	113	98	125	SE	Diploid	Late	Agricom	4
Excess AR37	97	110	108	112	97	109	AR37	Diploid	Mid	PGG Wrightson Seeds	6
Fitzroy	97	108	106	112	102	110	SE	Diploid	Early	PGG Wrightson Seeds	4
Helix - Festulolium	97	108	103	108	97	62	AR1	Diploid	Mid	Cropmark	4
One50 AR37	97	110	107	113	98	112	AR37	Diploid	Late	Agricom	8
Matrix - Festulolium	97	111	107	112	97	109	Nil	Diploid	Late	Cropmark	7
Halo AR37	97	113	109	115	96	140	AR37	Tetraploid	Late	Agricom	12
One50 AR1	97	111	106	113	97	108	AR1	Diploid	Late	Agricom	11
Prospect AR37	97	109	106	113	98	104	AR37	Diploid	Late	Agricom	7
Ultra - Festulolium	97	109	104	108	96	63	AR1	Diploid	Late		6

## South West Victoria summer seasonal performance

Cultivar	Summer	Autumn	Winter	E.Spring	L.Spring	FVI SW Vic	Endophyte	Ploidy	Heading Date	Marketer	No. of trials
Bealey NEA2	113	111	116	98	99	166	NEA2	Tetraploid	Very Late	Barenbrug	13
Halo AR37	113	109	115	96	97	140	AR37	Tetraploid	Late	Agricom	12
Base AR37	113	111	119	98	99	181	AR37	Tetraploid	Late	PGG Wrightson Seeds	12
Shogun NEA2	112	105	112	100	98	125	NEA2	Tetraploid	Late	Barenbrug	6
One50	111	107	113	98	97	125	SE	Diploid	Late	Agricom	4
Banquetll Endo5	111	107	112	96	98	118	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Impact2 NEA2	111	107	113	99	99	131	NEA2	Diploid	Late	Barenbrug	12
Matrix - Festulolium	111	107	112	97	97	109	Nil	Diploid	Late	Cropmark	7
One50 AR1	111	106	113	97	97	108	AR1	Diploid	Late	Agricom	11
SF Hustle AR1	110	107	113	99	99	128	AR1	Diploid	Mid	Seedforce	6
Reward Endo5	110	107	112	97	98	113	Endo5	Tetraploid	Very late	PGG Wrightson Seeds	5
Kidman AR1	110	109	113	100	98	136	AR1	Diploid	Early	Barenbrug	8
Ansa AR1	110	106	111	98	98	106	AR1	Diploid	Mid-Late	Seed Distributors	7
Arrow AR1	110	105	109	99	99	106	AR1	Diploid	Mid	Barenbrug	9
Excess AR37	110	108	112	97	97	109	AR37	Diploid	Mid	PGG Wrightson Seeds	6
One50 AR37	110	107	113	98	97	112	AR37	Diploid	Late	Agricom	8
Prospect AR37	109	106	113	98	97	104	AR37	Diploid	Late	Agricom	7
Revolution - Festulolium	109	105	111	97	98	91	AR1	Diploid	Late	Cropmark	4
Jackal AR1	109	107	111	98	98	105	AR1	Diploid	Mid	AGF Seeds	6
Expo AR37	109	107	112	97	98	108	AR37	Diploid	Late	PGG Wrightson Seeds	5
Jeta AR1	109	104	102	98	99	59	AR1	Tetraploid	Mid	Pasture Genetics	6
Platinum	109	107	112	97	98	103	Low	Diploid	Late	Valley Seeds	5
Ultra - Festulolium	109	104	108	96	97	63	AR1	Diploid	Late		6
AusVic	109	105	109	98	98	88	Low	Diploid	Mid	Vic Seeds	3
Endure	108	105	110	98	98	85	SE	Tetraploid	Mid	Vic Seeds	5
Fitzroy	108	106	112	102	97	110	SE	Diploid	Early	PGG Wrightson Seeds	4
Helix - Festulolium	108	103	108	97	97	62	AR1	Diploid	Mid	Cropmark	4
Avalon AR1	106	105	110	96	99	70	AR1	Diploid	Mid	Vic Seeds	8
Victorian	100	100	100	100	100	0	SE	Diploid	Early	Many	12

## South West Victoria autumn seasonal performance

Cultivar		Autumn	Winter	Early Spring	Late Spring	Summer	FVI SW Vic	Endophyte	Ploidy	Heading Date	Marketer	No. of trials
Base AR37		111	119	98	99	113	181	AR37	Tetraploid	Late	PGG Wrightson Seeds	12
Bealey NEA2		111	116	98	99	113	166	NEA2	Tetraploid	Very Late	Barenbrug	13
Halo AR37		109	115	96	97	113	140	AR37	Tetraploid	Late	Agricom	12
Kidman AR1		109	113	100	98	110	136	AR1	Diploid	Early	Barenbrug	8
Excess AR37		108	112	97	97	110	109	AR37	Diploid	Mid	PGG Wrightson Seeds	6
SF Hustle AR1		107	113	99	99	110	128	AR1	Diploid	Mid	Seedforce	6
One50 AR37		107	113	98	97	110	112	AR37	Diploid	Late	Agricom	8
Reward Endo5		107	112	97	98	110	113	Endo5	Tetraploid	Very late	PGG Wrightson Seeds	5
One50		107	113	98	97	111	125	SE	Diploid	Late	Agricom	4
Banquetll Endo5		107	112	96	98	111	118	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Jackal AR1		107	111	98	98	109	105	AR1	Diploid	Mid	AGF Seeds	6
Impact2 NEA2		107	113	99	99	111	131	NEA2	Diploid	Late	Barenbrug	12
Matrix - Festulolium		107	112	97	97	111	109	Nil	Diploid	Late	Cropmark	7
Expo AR37		107	112	97	98	109	108	AR37	Diploid	Late	PGG Wrightson Seeds	5
Platinum		107	112	97	98	109	103	Low	Diploid	Late	Valley Seeds	5
One50 AR1		106	113	97	97	111	108	AR1	Diploid	Late	Agricom	11
Prospect AR37		106	113	98	97	109	104	AR37	Diploid	Late	Agricom	7
Ansa AR1		106	111	98	98	110	106	AR1	Diploid	Mid-Late	Seed Distributors	7
Fitzroy		106	112	102	97	108	110	SE	Diploid	Early	PGG Wrightson Seeds	4
AusVic		105	109	98	98	109	88	Low	Diploid	Mid	Vic Seeds	3
Endure		105	110	98	98	108	85	SE	Tetraploid	Mid	Vic Seeds	5
Arrow AR1		105	109	99	99	110	106	AR1	Diploid	Mid	Barenbrug	9
Shogun NEA2		105	112	100	98	112	125	NEA2	Tetraploid	Late	Barenbrug	6
Revolution - Festulolium		105	111	97	98	109	91	AR1	Diploid	Late	Cropmark	4
Avalon AR1		105	110	96	99	106	70	AR1	Diploid	Mid	Vic Seeds	8
Ultra - Festulolium		104	108	96	97	109	63	AR1	Diploid	Late		6
Jeta AR1		104	102	98	99	109	59	AR1	Tetraploid	Mid	Pasture Genetics	6
Helix - Festulolium		103	108	97	97	108	62	AR1	Diploid	Mid	Cropmark	4
Victorian		100	100	100	100	100	0	SE	Diploid	Early	Many	12

## South West Victoria winter seasonal performance

Cultivar		Winter	Early Spring	Late Spring	Summer	Autumn	FVI SW Vic	Endophyte	Ploidy	Heading Date	Marketer	No. of trials
Base AR37		119	98	99	113	111	181	AR37	Tetraploid	Late	PGG Wrightson Seeds	12
Bealey NEA2		116	98	99	113	111	166	NEA2	Tetraploid	Very Late	Barenbrug	13
Halo AR37		115	96	97	113	109	140	AR37	Tetraploid	Late	Agricom	12
One50		113	98	97	111	107	125	SE	Diploid	Late	Agricom	4
SF Hustle AR1		113	99	99	110	107	128	AR1	Diploid	Mid	Seedforce	6
Kidman AR1		113	100	98	110	109	136	AR1	Diploid	Early	Barenbrug	8
One50 AR37		113	98	97	110	107	112	AR37	Diploid	Late	Agricom	8
Impact2 NEA2		113	99	99	111	107	131	NEA2	Diploid	Late	Barenbrug	12
Prospect AR37		113	98	97	109	106	104	AR37	Diploid	Late	Agricom	7
One50 AR1		113	97	97	111	106	108	AR1	Diploid	Late	Agricom	11
Expo AR37		112	97	98	109	107	108	AR37	Diploid	Late	PGG Wrightson Seeds	5
Shogun NEA2		112	100	98	112	105	125	NEA2	Tetraploid	Late	Barenbrug	6
Excess AR37		112	97	97	110	108	109	AR37	Diploid	Mid	PGG Wrightson Seeds	6
Banquetll Endo5		112	96	98	111	107	118	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Platinum		112	97	98	109	107	103	Low	Diploid	Late	Valley Seeds	5
Matrix – Festulolium		112	97	97	111	107	109	Nil	Diploid	Late	Cropmark	7
Reward Endo5		112	97	98	110	107	113	Endo5	Tetraploid	Very late	PGG Wrightson Seeds	5
Fitzroy		112	102	97	108	106	110	SE	Diploid	Early	PGG Wrightson Seeds	4
Jackal AR1		111	98	98	109	107	105	AR1	Diploid	Mid	AGF Seeds	6
Revolution - Festulolium		111	97	98	109	105	91	AR1	Diploid	Late	Cropmark	4
Ansa AR1		111	98	98	110	106	106	AR1	Diploid	Mid-Late	Seed Distributors	7
Avalon AR1		110	96	99	106	105	70	AR1	Diploid	Mid	Vic Seeds	8
Endure		110	98	98	108	105	85	SE	Tetraploid	Mid	Vic Seeds	5
Arrow AR1		109	99	99	110	105	106	AR1	Diploid	Mid	Barenbrug	9
AusVic		109	98	98	109	105	88	Low	Diploid	Mid	Vic Seeds	3
Helix - Festulolium		108	97	97	108	103	62	AR1	Diploid	Mid	Cropmark	4
Ultra - Festulolium		108	96	97	109	104	63	AR1	Diploid	Late		6
Jeta AR1		102	98	99	109	104	59	AR1	Tetraploid	Mid	Pasture Genetics	6
Victorian		100	100	100	100	100	0	SE	Diploid	Early	Many	12