

# SOUTH WEST VICTORIA FORAGE VALUE INDEX 2018



The Forage Value Index (FVI) is a new 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 2018

Cultivar		FVI SW Vic	Autumn	Winter	Early spring	Late spring	Summer	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Base AR37		191	113	118	98	98	114	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Bealey NEA2		179	112	116	97	97	114	NEA2	Tetraploid	Very late	Heritage Seeds	8
Halo AR37		152	110	115	95	96	114	AR37	Tetraploid	Late	Agricom	8
Kidman AR1		143	110	113	100	97	110	AR1	Diploid	Early	Heritage Seeds	5
Impact2 NEA2		143	108	112	98	98	112	NEA2	Diploid	Late	Heritage Seeds	8
One50 SE		140	108	114	98	96	112	SE	Diploid	Late	Agricom	4
One50 AR37		132	109	114	98	97	110	AR37	Diploid	Late	Agricom	4
Banquet II Endo5		128	108	112	96	97	112	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Excess AR37		118	109	112	97	97	111	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Fitzroy SE		118	106	112	104	96	108	SE	Diploid	Early	PGG Wrightson Seeds	6
Alto AR37		117	107	112	98	97	111	AR37	Diploid	Late	Heritage Seeds	3
Prospect AR37		117	107	113	98	96	110	AR1	Diploid	Late	Agricom	3
Ansa AR1		115	107	111	98	97	111	AR1	Diploid	Mid-late	Pasture Genetics	3
Matrix		114	108	111	97	96	111	SE	Diploid	Late	Cropmark Seeds	3
One50 AR1		111	107	111	97	96	112	AR1	Diploid	Late	Agricom	7
Arrow AR1		111	106	108	100	99	110	AR1	Diploid	Mid	Heritage Seeds	9
Extreme AR37		106	109	111	97	97	108	AR37	Diploid	Mid	PGG Wrightson Seeds	5
Endure WT		101	107	110	98	98	109	SE	Tetraploid	Mid	Vicseeds	3
Wintas II		96	106	109	96	98	109	LE	Diploid	Mid	TasGlobal Seeds	3
Alto AR1		93	106	110	97	97	109	AR1	Diploid	Late	Heritage Seeds	3
Revolution		87	105	111	96	96	109	AR1	Diploid	Mid	Seed Force	4
SF Tenacity WT		86	107	108	99	97	107	SE	Diploid	Early	Seed Force	3
Avalon AR1		82	106	111	96	98	107	AR1	Diploid	Mid	Vicseeds	5
Helix		44	102	107	97	96	107	AR1	Diploid	Mid	Cropmark Seeds	4
Victorian SE		0	100	100	100	100	100	SE	Diploid	Early	Many	8

# 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.

# 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 SE		104	96	108	106	112	118	SE	Diploid	Early	PGG Wrightson Seeds	6
Arrow AR1		100	99	110	106	108	111	AR1	Diploid	Mid	Heritage Seeds	9
Victorian SE		100	100	100	100	100	0	SE	Diploid	Early	Many	8
Kidman AR1		100	97	110	110	113	143	AR1	Diploid	Early	Heritage Seeds	5
SF Tenacity WT		99	97	107	107	108	86	SE	Diploid	Early	Seed Force	3
Prospect AR37		98	96	110	107	113	117	AR1	Diploid	Late	Agricom	3
Impact2 NEA2		98	98	112	108	112	143	NEA2	Diploid	Late	Heritage Seeds	8
One50 AR37		98	97	110	109	114	132	AR37	Diploid	Late	Agricom	4
One50 SE		98	96	112	108	114	140	SE	Diploid	Late	Agricom	4
Ansa AR1		98	97	111	107	111	115	AR1	Diploid	Mid-late	Pasture Genetics	3
Endure WT		98	98	109	107	110	101	SE	Tetraploid	Mid	Vicseeds	3
Alto AR37		98	97	111	107	112	117	AR37	Diploid	Late	Heritage Seeds	3
Base AR37		98	98	114	113	118	191	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Extreme AR37		97	97	108	109	111	106	AR37	Diploid	Mid	PGG Wrightson Seeds	5
Bealey NEA2		97	97	114	112	116	179	NEA2	Tetraploid	Very late	Heritage Seeds	8
Helix		97	96	107	102	107	44	AR1	Diploid	Mid	Cropmark Seeds	4
Matrix		97	96	111	108	111	114	SE	Diploid	Late	Cropmark Seeds	3
One50 AR1		97	96	112	107	111	111	AR1	Diploid	Late	Agricom	7
Alto AR1		97	97	109	106	110	93	AR1	Diploid	Late	Heritage Seeds	3
Excess AR37		97	97	111	109	112	118	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Wintas II		96	98	109	106	109	96	LE	Diploid	Mid	TasGlobal Seeds	3
Revolution		96	96	109	105	111	87	AR1	Diploid	Mid	Seed Force	4
Avalon AR1		96	98	107	106	111	82	AR1	Diploid	Mid	Vicseeds	5
Banquet II Endo5		96	97	112	108	112	128	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Halo AR37		95	96	114	110	115	152	AR37	Tetraploid	Late	Agricom	8

# 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 SE		100	100	100	100	100	0	SE	Diploid	Early	Many	8
Arrow AR1		99	110	106	108	100	111	AR1	Diploid	Mid	Heritage Seeds	9
Wintas II		98	109	106	109	96	96	LE	Diploid	Mid	TasGlobal Seeds	3
Impact2 NEA2		98	112	108	112	98	143	NEA2	Diploid	Late	Heritage Seeds	8
Base AR37		98	114	113	118	98	191	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Endure WT		98	109	107	110	98	101	SE	Tetraploid	Mid	Vicseeds	3
Avalon AR1		98	107	106	111	96	82	AR1	Diploid	Mid	Vicseeds	5
Kidman AR1		97	110	110	113	100	143	AR1	Diploid	Early	Heritage Seeds	5
Bealey NEA2		97	114	112	116	97	179	NEA2	Tetraploid	Very late	Heritage Seeds	8
Banquet II Endo5		97	112	108	112	96	128	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Extreme AR37		97	108	109	111	97	106	AR37	Diploid	Mid	PGG Wrightson Seeds	5
SF Tenacity WT		97	107	107	108	99	86	SE	Diploid	Early	Seed Force	3
Alto AR1		97	109	106	110	97	93	AR1	Diploid	Late	Heritage Seeds	3
Alto AR37		97	111	107	112	98	117	AR37	Diploid	Late	Heritage Seeds	3
Excess AR37		97	111	109	112	97	118	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Ansa AR1		97	111	107	111	98	115	AR1	Diploid	Mid-late	Pasture Genetics	3
One50 AR37		97	110	109	114	98	132	AR37	Diploid	Late	Agricom	4
Matrix		96	111	108	111	97	114	SE	Diploid	Late	Cropmark Seeds	3
Revolution		96	109	105	111	96	87	AR1	Diploid	Mid	Seed Force	4
One50 SE		96	112	108	114	98	140	SE	Diploid	Late	Agricom	4
Fitzroy SE		96	108	106	112	104	118	SE	Diploid	Early	PGG Wrightson Seeds	6
Prospect AR37		96	110	107	113	98	117	AR1	Diploid	Late	Agricom	3
One50 AR1		96	112	107	111	97	111	AR1	Diploid	Late	Agricom	7
Helix		96	107	102	107	97	44	AR1	Diploid	Mid	Cropmark Seeds	4
Halo AR37		96	114	110	115	95	152	AR37	Tetraploid	Late	Agricom	8

# South West Victoria summer seasonal performance

Cultivar		Summer	Autumn	Winter	Early spring	Late spring	FVI SW Vic	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Bealey NEA2		114	112	116	97	97	179	NEA2	Tetraploid	Very late	Heritage Seeds	8
Halo AR37		114	110	115	95	96	152	AR37	Tetraploid	Late	Agricom	8
Base AR37		114	113	118	98	98	191	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Impact2 NEA2		112	108	112	98	98	143	NEA2	Diploid	Late	Heritage Seeds	8
One50 SE		112	108	114	98	96	140	SE	Diploid	Late	Agricom	4
Banquet II Endo5		112	108	112	96	97	128	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
One50 AR1		112	107	111	97	96	111	AR1	Diploid	Late	Agricom	7
Matrix		111	108	111	97	96	114	SE	Diploid	Late	Cropmark Seeds	3
Ansa AR1		111	107	111	98	97	115	AR1	Diploid	Mid-late	Pasture Genetics	3
Excess AR37		111	109	112	97	97	118	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Alto AR37		111	107	112	98	97	117	AR37	Diploid	Late	Heritage Seeds	3
One50 AR37		110	109	114	98	97	132	AR37	Diploid	Late	Agricom	4
Kidman AR1		110	110	113	100	97	143	AR1	Diploid	Early	Heritage Seeds	5
Arrow AR1		110	106	108	100	99	111	AR1	Diploid	Mid	Heritage Seeds	9
Prospect AR37		110	107	113	98	96	117	AR1	Diploid	Late	Agricom	3
Alto AR1		109	106	110	97	97	93	AR1	Diploid	Late	Heritage Seeds	3
Revolution		109	105	111	96	96	87	AR1	Diploid	Mid	Seed Force	4
Wintas II		109	106	109	96	98	96	LE	Diploid	Mid	TasGlobal Seeds	3
Endure WT		109	107	110	98	98	101	SE	Tetraploid	Mid	Vicseeds	3
Fitzroy SE		108	106	112	104	96	118	SE	Diploid	Early	PGG Wrightson Seeds	6
Extreme AR37		108	109	111	97	97	106	AR37	Diploid	Mid	PGG Wrightson Seeds	5
SF Tenacity WT		107	107	108	99	97	86	SE	Diploid	Early	Seed Force	3
Avalon AR1		107	106	111	96	98	82	AR1	Diploid	Mid	Vicseeds	5
Helix		107	102	107	97	96	44	AR1	Diploid	Mid	Cropmark Seeds	4
Victorian SE		100	100	100	100	100	0	SE	Diploid	Early	Many	8

### 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		113	118	98	98	114	191	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Bealey NEA2		112	116	97	97	114	179	NEA2	Tetraploid	Very late	Heritage Seeds	8
Halo AR37		110	115	95	96	114	152	AR37	Tetraploid	Late	Agricom	8
Kidman AR1		110	113	100	97	110	143	AR1	Diploid	Early	Heritage Seeds	5
Extreme AR37		109	111	97	97	108	106	AR37	Diploid	Mid	PGG Wrightson Seeds	5
One50 AR37		109	114	98	97	110	132	AR37	Diploid	Late	Agricom	4
Excess AR37		109	112	97	97	111	118	AR37	Diploid	Mid	PGG Wrightson Seeds	3
One50 SE		108	114	98	96	112	140	SE	Diploid	Late	Agricom	4
Banquet II Endo5		108	112	96	97	112	128	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Impact2 NEA2		108	112	98	98	112	143	NEA2	Diploid	Late	Heritage Seeds	8
Matrix		108	111	97	96	111	114	SE	Diploid	Late	Cropmark Seeds	3
Prospect AR37		107	113	98	96	110	117	AR1	Diploid	Late	Agricom	3
Ansa AR1		107	111	98	97	111	115	AR1	Diploid	Mid-late	Pasture Genetics	3
Alto AR37		107	112	98	97	111	117	AR37	Diploid	Late	Heritage Seeds	3
One50 AR1		107	111	97	96	112	111	AR1	Diploid	Late	Agricom	7
Endure WT		107	110	98	98	109	101	SE	Tetraploid	Mid	Vicseeds	3
SF Tenacity WT		107	108	99	97	107	86	SE	Diploid	Early	Seed Force	3
Fitzroy SE		106	112	104	96	108	118	SE	Diploid	Early	PGG Wrightson Seeds	6
Wintas II		106	109	96	98	109	96	LE	Diploid	Mid	TasGlobal Seeds	3
Alto AR1		106	110	97	97	109	93	AR1	Diploid	Late	Heritage Seeds	3
Avalon AR1		106	111	96	98	107	82	AR1	Diploid	Mid	Vicseeds	5
Arrow AR1		106	108	100	99	110	111	AR1	Diploid	Mid	Heritage Seeds	9
Revolution		105	111	96	96	109	87	AR1	Diploid	Mid	Seed Force	4
Helix		102	107	97	96	107	44	AR1	Diploid	Mid	Cropmark Seeds	4
Victorian SE		100	100	100	100	100	0	SE	Diploid	Early	Many	8

### 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		118	98	98	114	113	191	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Bealey NEA2		116	97	97	114	112	179	NEA2	Tetraploid	Very late	Heritage Seeds	8
Halo AR37		115	95	96	114	110	152	AR37	Tetraploid	Late	Agricom	8
One50 SE		114	98	96	112	108	140	SE	Diploid	Late	Agricom	4
One50 AR37		114	98	97	110	109	132	AR37	Diploid	Late	Agricom	4
Kidman AR1		113	100	97	110	110	143	AR1	Diploid	Early	Heritage Seeds	5
Prospect AR37		113	98	96	110	107	117	AR1	Diploid	Late	Agricom	3
Banquet II Endo5		112	96	97	112	108	128	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Impact2 NEA2		112	98	98	112	108	143	NEA2	Diploid	Late	Heritage Seeds	8
Alto AR37		112	98	97	111	107	117	AR37	Diploid	Late	Heritage Seeds	3
Fitzroy SE		112	104	96	108	106	118	SE	Diploid	Early	PGG Wrightson Seeds	6
Excess AR37		112	97	97	111	109	118	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Matrix		111	97	96	111	108	114	SE	Diploid	Late	Cropmark Seeds	3
One50 AR1		111	97	96	112	107	111	AR1	Diploid	Late	Agricom	7
Ansa AR1		111	98	97	111	107	115	AR1	Diploid	Mid-late	Pasture Genetics	3
Extreme AR37		111	97	97	108	109	106	AR37	Diploid	Mid	PGG Wrightson Seeds	5
Avalon AR1		111	96	98	107	106	82	AR1	Diploid	Mid	Vicseeds	5
Revolution		111	96	96	109	105	87	AR1	Diploid	Mid	Seed Force	4
Alto AR1		110	97	97	109	106	93	AR1	Diploid	Late	Heritage Seeds	3
Endure WT		110	98	98	109	107	101	SE	Tetraploid	Mid	Vicseeds	3
Wintas II		109	96	98	109	106	96	LE	Diploid	Mid	TasGlobal Seeds	3
SF Tenacity WT		108	99	97	107	107	86	SE	Diploid	Early	Seed Force	3
Arrow AR1		108	100	99	110	106	111	AR1	Diploid	Mid	Heritage Seeds	9
Helix		107	97	96	107	102	44	AR1	Diploid	Mid	Cropmark Seeds	4
Victorian SE		100	100	100	100	100	0	SE	Diploid	Early	Many	8

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