

GIPPSLAND 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.

Gippsland: Forage Value Index 2018

Cultivar		FVI Gipps	Autumn	Winter	Early spring	Late spring	Summer	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Base AR37		218	113	118	98	98	114	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Bealey NEA2		201	112	116	97	97	114	NEA2	Tetraploid	Very late	Heritage Seeds	8
Kidman AR1		168	110	113	100	97	110	AR1	Diploid	Early	Heritage Seeds	5
Halo AR37		166	110	115	95	96	114	AR37	Tetraploid	Late	Agricom	8
Impact2 NEA2		160	108	112	98	98	112	NEA2	Diploid	Late	Heritage Seeds	8
One50 SE		160	108	114	98	96	112	SE	Diploid	Late	Agricom	4
One50 AR37		152	109	114	98	97	110	AR37	Diploid	Late	Agricom	4
Fitzroy SE		151	106	112	104	96	108	SE	Diploid	Early	PGG Wrightson Seeds	6
Banquet II Endo5		137	108	112	96	97	112	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Prospect AR37		135	107	113	98	96	110	AR1	Diploid	Late	Agricom	3
Alto AR37		131	107	112	98	97	111	AR37	Diploid	Late	Heritage Seeds	3
Ansa AR1		130	107	111	98	97	111	AR1	Diploid	Mid-late	Pasture Genetics	3
Excess AR37		129	109	112	97	97	111	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Arrow AR1		127	106	108	100	99	110	AR1	Diploid	Mid	Heritage Seeds	9
Matrix		126	108	111	97	96	111	SE	Diploid	Late	Cropmark Seeds	3
Extreme AR37		119	109	111	97	97	108	AR37	Diploid	Mid	PGG Wrightson Seeds	5
Endure WT		113	107	110	98	98	109	SE	Tetraploid	Mid	Vicseeds	3
One50 AR1		107	107	111	97	96	112	AR1	Diploid	Late	Agricom	7
Wintas II		101	106	109	96	98	109	LE	Diploid	Mid	TasGlobal Seeds	3
SF Tenacity WT		100	107	108	99	97	107	SE	Diploid	Early	Seed Force	3
Alto AR1		100	106	110	97	97	109	AR1	Diploid	Late	Heritage Seeds	3
Revolution		94	105	111	96	96	109	AR1	Diploid	Mid	Seed Force	4
Avalon AR1		87	106	111	96	98	107	AR1	Diploid	Mid	Vicseeds	5
Helix		46	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.

Gippsland early spring seasonal performance

Cultivar		Early spring	Late spring	Summer	Autumn	Winter	FVI Gipps	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Fitzroy SE		104	96	108	106	112	151	SE	Diploid	Early	PGG Wrightson Seeds	6
Arrow AR1		100	99	110	106	108	127	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	168	AR1	Diploid	Early	Heritage Seeds	5
SF Tenacity WT		99	97	107	107	108	100	SE	Diploid	Early	Seed Force	3
Prospect AR37		98	96	110	107	113	135	AR1	Diploid	Late	Agricom	3
Impact2 NEA2		98	98	112	108	112	160	NEA2	Diploid	Late	Heritage Seeds	8
One50 AR37		98	97	110	109	114	152	AR37	Diploid	Late	Agricom	4
One50 SE		98	96	112	108	114	160	SE	Diploid	Late	Agricom	4
Ansa AR1		98	97	111	107	111	130	AR1	Diploid	Mid-late	Pasture Genetics	3
Endure WT		98	98	109	107	110	113	SE	Tetraploid	Mid	Vicseeds	3
Alto AR37		98	97	111	107	112	131	AR37	Diploid	Late	Heritage Seeds	3
Base AR37		98	98	114	113	118	218	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Extreme AR37		97	97	108	109	111	119	AR37	Diploid	Mid	PGG Wrightson Seeds	5
Bealey NEA2		97	97	114	112	116	201	NEA2	Tetraploid	Very late	Heritage Seeds	8
Helix		97	96	107	102	107	46	AR1	Diploid	Mid	Cropmark Seeds	4
Matrix		97	96	111	108	111	126	SE	Diploid	Late	Cropmark Seeds	3
One50 AR1		97	96	112	107	111	107	AR1	Diploid	Late	Agricom	7
Alto AR1		97	97	109	106	110	100	AR1	Diploid	Late	Heritage Seeds	3
Excess AR37		97	97	111	109	112	129	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Wintas II		96	98	109	106	109	101	LE	Diploid	Mid	TasGlobal Seeds	3
Revolution		96	96	109	105	111	94	AR1	Diploid	Mid	Seed Force	4
Avalon AR1		96	98	107	106	111	87	AR1	Diploid	Mid	Vicseeds	5
Banquet II Endo5		96	97	112	108	112	137	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Halo AR37		95	96	114	110	115	166	AR37	Tetraploid	Late	Agricom	8

Gippsland late spring seasonal performance

Cultivar		Late spring	Summer	Autumn	Winter	Early spring	FVI Gipps	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	127	AR1	Diploid	Mid	Heritage Seeds	9
Wintas II	■ ■ ■	98	109	106	109	96	101	LE	Diploid	Mid	TasGlobal Seeds	3
Impact2 NEA2	■ ■ ■	98	112	108	112	98	160	NEA2	Diploid	Late	Heritage Seeds	8
Base AR37	■ ■ ■	98	114	113	118	98	218	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Endure WT	■ ■ ■	98	109	107	110	98	113	SE	Tetraploid	Mid	Vicseeds	3
Avalon AR1	■ ■ ■	98	107	106	111	96	87	AR1	Diploid	Mid	Vicseeds	5
Kidman AR1	■ ■ ■	97	110	110	113	100	168	AR1	Diploid	Early	Heritage Seeds	5
Bealey NEA2	■ ■ ■	97	114	112	116	97	201	NEA2	Tetraploid	Very late	Heritage Seeds	8
Banquet II Endo5	■ ■ ■	97	112	108	112	96	137	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Extreme AR37	■ ■ ■	97	108	109	111	97	119	AR37	Diploid	Mid	PGG Wrightson Seeds	5
SF Tenacity WT	■ ■ ■	97	107	107	108	99	100	SE	Diploid	Early	Seed Force	3
Alto AR1	■ ■ ■	97	109	106	110	97	100	AR1	Diploid	Late	Heritage Seeds	3
Alto AR37	■ ■ ■	97	111	107	112	98	131	AR37	Diploid	Late	Heritage Seeds	3
Excess AR37	■ ■ ■	97	111	109	112	97	129	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Ansa AR1	■ ■ ■	97	111	107	111	98	130	AR1	Diploid	Mid-late	Pasture Genetics	3
One50 AR37	■ ■ ■	97	110	109	114	98	152	AR37	Diploid	Late	Agricom	4
Matrix	■ ■ ■	96	111	108	111	97	126	SE	Diploid	Late	Cropmark Seeds	3
Revolution	■ ■ ■	96	109	105	111	96	94	AR1	Diploid	Mid	Seed Force	4
One50 SE	■ ■ ■	96	112	108	114	98	160	SE	Diploid	Late	Agricom	4
Fitzroy SE	■ ■ ■	96	108	106	112	104	151	SE	Diploid	Early	PGG Wrightson Seeds	6
Prospect AR37	■ ■ ■	96	110	107	113	98	135	AR1	Diploid	Late	Agricom	3
One50 AR1	■ ■ ■	96	112	107	111	97	107	AR1	Diploid	Late	Agricom	7
Helix	■ ■ ■	96	107	102	107	97	46	AR1	Diploid	Mid	Cropmark Seeds	4
Halo AR37	■ ■ ■	96	114	110	115	95	166	AR37	Tetraploid	Late	Agricom	8

Gippsland summer seasonal performance

Cultivar		Summer	Autumn	Winter	Early spring	Late spring	FVI Gipps	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Bealey NEA2		114	112	116	97	97	201	NEA2	Tetraploid	Very late	Heritage Seeds	8
Halo AR37		114	110	115	95	96	166	AR37	Tetraploid	Late	Agricom	8
Base AR37		114	113	118	98	98	218	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Impact2 NEA2		112	108	112	98	98	160	NEA2	Diploid	Late	Heritage Seeds	8
One50 SE		112	108	114	98	96	160	SE	Diploid	Late	Agricom	4
Banquet II Endo5		112	108	112	96	97	137	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
One50 AR1		112	107	111	97	96	107	AR1	Diploid	Late	Agricom	7
Matrix		111	108	111	97	96	126	SE	Diploid	Late	Cropmark Seeds	3
Ansa AR1		111	107	111	98	97	130	AR1	Diploid	Mid-late	Pasture Genetics	3
Excess AR37		111	109	112	97	97	129	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Alto AR37		111	107	112	98	97	131	AR37	Diploid	Late	Heritage Seeds	3
One50 AR37		110	109	114	98	97	152	AR37	Diploid	Late	Agricom	4
Kidman AR1		110	110	113	100	97	168	AR1	Diploid	Early	Heritage Seeds	5
Arrow AR1		110	106	108	100	99	127	AR1	Diploid	Mid	Heritage Seeds	9
Prospect AR37		110	107	113	98	96	135	AR1	Diploid	Late	Agricom	3
Alto AR1		109	106	110	97	97	100	AR1	Diploid	Late	Heritage Seeds	3
Revolution		109	105	111	96	96	94	AR1	Diploid	Mid	Seed Force	4
Wintas II		109	106	109	96	98	101	LE	Diploid	Mid	TasGlobal Seeds	3
Endure WT		109	107	110	98	98	113	SE	Tetraploid	Mid	Vicseeds	3
Fitzroy SE		108	106	112	104	96	151	SE	Diploid	Early	PGG Wrightson Seeds	6
Extreme AR37		108	109	111	97	97	119	AR37	Diploid	Mid	PGG Wrightson Seeds	5
SF Tenacity WT		107	107	108	99	97	100	SE	Diploid	Early	Seed Force	3
Avalon AR1		107	106	111	96	98	87	AR1	Diploid	Mid	Vicseeds	5
Helix		107	102	107	97	96	46	AR1	Diploid	Mid	Cropmark Seeds	4
Victorian SE		100	100	100	100	100	0	SE	Diploid	Early	Many	8

Gippsland autumn seasonal performance

Cultivar		Autumn	Winter	Early spring	Late spring	Summer	FVI Gipps	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Base AR37		113	118	98	98	114	218	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Bealey NEA2		112	116	97	97	114	201	NEA2	Tetraploid	Very late	Heritage Seeds	8
Halo AR37		110	115	95	96	114	166	AR37	Tetraploid	Late	Agricom	8
Kidman AR1		110	113	100	97	110	168	AR1	Diploid	Early	Heritage Seeds	5
Extreme AR37		109	111	97	97	108	119	AR37	Diploid	Mid	PGG Wrightson Seeds	5
One50 AR37		109	114	98	97	110	152	AR37	Diploid	Late	Agricom	4
Excess AR37		109	112	97	97	111	129	AR37	Diploid	Mid	PGG Wrightson Seeds	3
One50 SE		108	114	98	96	112	160	SE	Diploid	Late	Agricom	4
Banquet II Endo5		108	112	96	97	112	137	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Impact2 NEA2		108	112	98	98	112	160	NEA2	Diploid	Late	Heritage Seeds	8
Matrix		108	111	97	96	111	126	SE	Diploid	Late	Cropmark Seeds	3
Prospect AR37		107	113	98	96	110	135	AR1	Diploid	Late	Agricom	3
Ansa AR1		107	111	98	97	111	130	AR1	Diploid	Mid-late	Pasture Genetics	3
Alto AR37		107	112	98	97	111	131	AR37	Diploid	Late	Heritage Seeds	3
One50 AR1		107	111	97	96	112	107	AR1	Diploid	Late	Agricom	7
Endure WT		107	110	98	98	109	113	SE	Tetraploid	Mid	Vicseeds	3
SF Tenacity WT		107	108	99	97	107	100	SE	Diploid	Early	Seed Force	3
Fitzroy SE		106	112	104	96	108	151	SE	Diploid	Early	PGG Wrightson Seeds	6
Wintas II		106	109	96	98	109	101	LE	Diploid	Mid	TasGlobal Seeds	3
Alto AR1		106	110	97	97	109	100	AR1	Diploid	Late	Heritage Seeds	3
Avalon AR1		106	111	96	98	107	87	AR1	Diploid	Mid	Vicseeds	5
Arrow AR1		106	108	100	99	110	127	AR1	Diploid	Mid	Heritage Seeds	9
Revolution		105	111	96	96	109	94	AR1	Diploid	Mid	Seed Force	4
Helix		102	107	97	96	107	46	AR1	Diploid	Mid	Cropmark Seeds	4
Victorian SE		100	100	100	100	100	0	SE	Diploid	Early	Many	8

Gippsland winter seasonal performance

Cultivar		Winter	Early spring	Late spring	Summer	Autumn	FVI Gipps	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Base AR37		118	98	98	114	113	218	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Bealey NEA2		116	97	97	114	112	201	NEA2	Tetraploid	Very late	Heritage Seeds	8
Halo AR37		115	95	96	114	110	166	AR37	Tetraploid	Late	Agricom	8
One50 SE		114	98	96	112	108	160	SE	Diploid	Late	Agricom	4
One50 AR37		114	98	97	110	109	152	AR37	Diploid	Late	Agricom	4
Kidman AR1		113	100	97	110	110	168	AR1	Diploid	Early	Heritage Seeds	5
Prospect AR37		113	98	96	110	107	135	AR1	Diploid	Late	Agricom	3
Banquet II Endo5		112	96	97	112	108	137	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Impact2 NEA2		112	98	98	112	108	160	NEA2	Diploid	Late	Heritage Seeds	8
Alto AR37		112	98	97	111	107	131	AR37	Diploid	Late	Heritage Seeds	3
Fitzroy SE		112	104	96	108	106	151	SE	Diploid	Early	PGG Wrightson Seeds	6
Excess AR37		112	97	97	111	109	129	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Matrix		111	97	96	111	108	126	SE	Diploid	Late	Cropmark Seeds	3
One50 AR1		111	97	96	112	107	107	AR1	Diploid	Late	Agricom	7
Ansa AR1		111	98	97	111	107	130	AR1	Diploid	Mid-late	Pasture Genetics	3
Extreme AR37		111	97	97	108	109	119	AR37	Diploid	Mid	PGG Wrightson Seeds	5
Avalon AR1		111	96	98	107	106	87	AR1	Diploid	Mid	Vicseeds	5
Revolution		111	96	96	109	105	94	AR1	Diploid	Mid	Seed Force	4
Alto AR1		110	97	97	109	106	100	AR1	Diploid	Late	Heritage Seeds	3
Endure WT		110	98	98	109	107	113	SE	Tetraploid	Mid	Vicseeds	3
Wintas II		109	96	98	109	106	101	LE	Diploid	Mid	TasGlobal Seeds	3
SF Tenacity WT		108	99	97	107	107	100	SE	Diploid	Early	Seed Force	3
Arrow AR1		108	100	99	110	106	127	AR1	Diploid	Mid	Heritage Seeds	9
Helix		107	97	96	107	102	46	AR1	Diploid	Mid	Cropmark Seeds	4
Victorian SE		100	100	100	100	100	0	SE	Diploid	Early	Many	8