

TASMANIA 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.

Tasmania: Forage Value Index 2018

Cultivar	FVI Tas	Autumn	Winter	Early spring	Late spring	Summer	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Base AR37	153	113	118	98	98	114	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Bealey NEA2	138	112	116	97	97	114	NEA2	Tetraploid	Very late	Heritage Seeds	8
Kidman AR1	122	110	113	100	97	110	AR1	Diploid	Early	Heritage Seeds	5
Fitzroy SE	119	106	112	104	96	108	SE	Diploid	Early	PGG Wrightson Seeds	6
One50 SE	110	108	114	98	96	112	SE	Diploid	Late	Agricom	4
Halo AR37	110	110	115	95	96	114	AR37	Tetraploid	Late	Agricom	8
One50 AR37	108	109	114	98	97	110	AR37	Diploid	Late	Agricom	4
Impact2 NEA2	108	108	112	98	98	112	NEA2	Diploid	Late	Heritage Seeds	8
Prospect AR37	95	107	113	98	96	110	AR1	Diploid	Late	Agricom	3
Ansa AR1	88	107	111	98	97	111	AR1	Diploid	Mid-late	Pasture Genetics	3
Alto AR37	88	107	112	98	97	111	AR37	Diploid	Late	Heritage Seeds	3
Banquet II Endo5	87	108	112	96	97	112	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Excess AR37	86	109	112	97	97	111	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Extreme AR37	85	109	111	97	97	108	AR37	Diploid	Mid	PGG Wrightson Seeds	5
Arrow AR1	85	106	108	100	99	110	AR1	Diploid	Mid	Heritage Seeds	9
Matrix	83	108	111	97	96	111	SE	Diploid	Late	Cropmark Seeds	3
Endure WT	76	107	110	98	98	109	SE	Tetraploid	Mid	Vicseeds	3
SF Tenacity WT	72	107	108	99	97	107	SE	Diploid	Early	Seed Force	3
One50 AR1	69	107	111	97	96	112	AR1	Diploid	Late	Agricom	7
Alto AR1	64	106	110	97	97	109	AR1	Diploid	Late	Heritage Seeds	3
Wintas II	63	106	109	96	98	109	LE	Diploid	Mid	TasGlobal Seeds	3
Revolution	59	105	111	96	96	109	AR1	Diploid	Mid	Seed Force	4
Avalon AR1	57	106	111	96	98	107	AR1	Diploid	Mid	Vicseeds	5
Helix	25	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.

Tasmania early spring seasonal performance

Cultivar		Earl spri			r Autumn	Winter	FVI Tas	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Fitzroy SE		104	96	108	106	112	119	SE	Diploid	Early	PGG Wrightson Seeds	6
Arrow AR1		100	99	110	106	108	85	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	122	AR1	Diploid	Early	Heritage Seeds	5
SF Tenacity WT		99	97	107	107	108	72	SE	Diploid	Early	Seed Force	3
Prospect AR37		98	96	110	107	113	95	AR1	Diploid	Late	Agricom	3
Impact2 NEA2		98	98	112	108	112	108	NEA2	Diploid	Late	Heritage Seeds	8
One50 AR37		98	97	110	109	114	108	AR37	Diploid	Late	Agricom	4
One50 SE		98	96	112	108	114	110	SE	Diploid	Late	Agricom	4
Ansa AR1		98	97	111	107	111	88	AR1	Diploid	Mid-late	Pasture Genetics	3
Endure WT		98	98	109	107	110	76	SE	Tetraploid	Mid	Vicseeds	3
Alto AR37		98	97	111	107	112	88	AR37	Diploid	Late	Heritage Seeds	3
Base AR37		98	98	114	113	118	153	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Extreme AR37		97	97	108	109	111	85	AR37	Diploid	Mid	PGG Wrightson Seeds	5
Bealey NEA2		97	97	114	112	116	138	NEA2	Tetraploid	Very late	Heritage Seeds	8
Helix		97	96	107	102	107	25	AR1	Diploid	Mid	Cropmark Seeds	4
Matrix		97	96	111	108	111	83	SE	Diploid	Late	Cropmark Seeds	3
One50 AR1		97	96	112	107	111	69	AR1	Diploid	Late	Agricom	7
Alto AR1		97	97	109	106	110	64	AR1	Diploid	Late	Heritage Seeds	3
Excess AR37		97	97	111	109	112	86	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Wintas II		96	98	109	106	109	63	LE	Diploid	Mid	TasGlobal Seeds	3
Revolution		96	96	109	105	111	59	AR1	Diploid	Mid	Seed Force	4
Avalon AR1		96	98	107	106	111	57	AR1	Diploid	Mid	Vicseeds	5
Banquet II Endo5		96	97	112	108	112	87	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Halo AR37		95	96	114	110	115	110	AR37	Tetraploid	Late	Agricom	8

Tasmania late spring seasonal performance

Cultivar		Late spring	Summer	Autumn	Winter	Early spring	FVI Tas	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	85	AR1	Diploid	Mid	Heritage Seeds	9
Wintas II		98	109	106	109	96	63	LE	Diploid	Mid	TasGlobal Seeds	3
Impact2 NEA2		98	112	108	112	98	108	NEA2	Diploid	Late	Heritage Seeds	8
Base AR37		98	114	113	118	98	153	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Endure WT		98	109	107	110	98	76	SE	Tetraploid	Mid	Vicseeds	3
Avalon AR1		98	107	106	111	96	57	AR1	Diploid	Mid	Vicseeds	5
Kidman AR1		97	110	110	113	100	122	AR1	Diploid	Early	Heritage Seeds	5
Bealey NEA2		97	114	112	116	97	138	NEA2	Tetraploid	Very late	Heritage Seeds	8
Banquet II Endo5		97	112	108	112	96	87	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Extreme AR37		97	108	109	111	97	85	AR37	Diploid	Mid	PGG Wrightson Seeds	5
SF Tenacity WT		97	107	107	108	99	72	SE	Diploid	Early	Seed Force	3
Alto AR1		97	109	106	110	97	64	AR1	Diploid	Late	Heritage Seeds	3
Alto AR37		97	111	107	112	98	88	AR37	Diploid	Late	Heritage Seeds	3
Excess AR37		97	111	109	112	97	86	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Ansa AR1		97	111	107	111	98	88	AR1	Diploid	Mid-late	Pasture Genetics	3
One50 AR37		97	110	109	114	98	108	AR37	Diploid	Late	Agricom	4
Matrix		96	111	108	111	97	83	SE	Diploid	Late	Cropmark Seeds	3
Revolution		96	109	105	111	96	59	AR1	Diploid	Mid	Seed Force	4
One50 SE		96	112	108	114	98	110	SE	Diploid	Late	Agricom	4
Fitzroy SE		96	108	106	112	104	119	SE	Diploid	Early	PGG Wrightson Seeds	6
Prospect AR37		96	110	107	113	98	95	AR1	Diploid	Late	Agricom	3
One50 AR1		96	112	107	111	97	69	AR1	Diploid	Late	Agricom	7
Helix		96	107	102	107	97	25	AR1	Diploid	Mid	Cropmark Seeds	4
Halo AR37		96	114	110	115	95	110	AR37	Tetraploid	Late	Agricom	8

Tasmania summer seasonal performance

Cultivar		Summer	Autumn	Winter	Early spring	Late spring	FVI Tas	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Bealey NEA2		114	112	116	97	97	138	NEA2	Tetraploid	Very late	Heritage Seeds	8
Halo AR37		114	110	115	95	96	110	AR37	Tetraploid	Late	Agricom	8
Base AR37		114	113	118	98	98	153	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Impact2 NEA2		112	108	112	98	98	108	NEA2	Diploid	Late	Heritage Seeds	8
One50 SE		112	108	114	98	96	110	SE	Diploid	Late	Agricom	4
Banquet II Endo5		112	108	112	96	97	87	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
One50 AR1		112	107	111	97	96	69	AR1	Diploid	Late	Agricom	7
Matrix		111	108	111	97	96	83	SE	Diploid	Late	Cropmark Seeds	3
Ansa AR1		111	107	111	98	97	88	AR1	Diploid	Mid-late	Pasture Genetics	3
Excess AR37		111	109	112	97	97	86	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Alto AR37		111	107	112	98	97	88	AR37	Diploid	Late	Heritage Seeds	3
One50 AR37		110	109	114	98	97	108	AR37	Diploid	Late	Agricom	4
Kidman AR1		110	110	113	100	97	122	AR1	Diploid	Early	Heritage Seeds	5
Arrow AR1		110	106	108	100	99	85	AR1	Diploid	Mid	Heritage Seeds	9
Prospect AR37		110	107	113	98	96	95	AR1	Diploid	Late	Agricom	3
Alto AR1		109	106	110	97	97	64	AR1	Diploid	Late	Heritage Seeds	3
Revolution		109	105	111	96	96	59	AR1	Diploid	Mid	Seed Force	4
Wintas II		109	106	109	96	98	63	LE	Diploid	Mid	TasGlobal Seeds	3
Endure WT		109	107	110	98	98	76	SE	Tetraploid	Mid	Vicseeds	3
Fitzroy SE		108	106	112	104	96	119	SE	Diploid	Early	PGG Wrightson Seeds	6
Extreme AR37		108	109	111	97	97	85	AR37	Diploid	Mid	PGG Wrightson Seeds	5
SF Tenacity WT		107	107	108	99	97	72	SE	Diploid	Early	Seed Force	3
Avalon AR1		107	106	111	96	98	57	AR1	Diploid	Mid	Vicseeds	5
Helix		107	102	107	97	96	25	AR1	Diploid	Mid	Cropmark Seeds	4
Victorian SE		100	100	100	100	100	0	SE	Diploid	Early	Many	8

Tasmania autumn seasonal performance

Cultivar	Autumn	Winter	Early spring	Late spring	Summer	FVI Tas	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Base AR37	113	118	98	98	114	153	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Bealey NEA2	112	116	97	97	114	138	NEA2	Tetraploid	Very late	Heritage Seeds	8
Halo AR37	110	115	95	96	114	110	AR37	Tetraploid	Late	Agricom	8
Kidman AR1	110	113	100	97	110	122	AR1	Diploid	Early	Heritage Seeds	5
Extreme AR37	109	111	97	97	108	85	AR37	Diploid	Mid	PGG Wrightson Seeds	5
One50 AR37	109	114	98	97	110	108	AR37	Diploid	Late	Agricom	4
Excess AR37	109	112	97	97	111	86	AR37	Diploid	Mid	PGG Wrightson Seeds	3
One50 SE	108	114	98	96	112	110	SE	Diploid	Late	Agricom	4
Banquet II Endo5	108	112	96	97	112	87	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Impact2 NEA2	108	112	98	98	112	108	NEA2	Diploid	Late	Heritage Seeds	8
Matrix	108	111	97	96	111	83	SE	Diploid	Late	Cropmark Seeds	3
Prospect AR37	107	113	98	96	110	95	AR1	Diploid	Late	Agricom	3
Ansa AR1	107	111	98	97	111	88	AR1	Diploid	Mid-late	Pasture Genetics	3
Alto AR37	107	112	98	97	111	88	AR37	Diploid	Late	Heritage Seeds	3
One50 AR1	107	111	97	96	112	69	AR1	Diploid	Late	Agricom	7
Endure WT	107	110	98	98	109	76	SE	Tetraploid	Mid	Vicseeds	3
SF Tenacity WT	107	108	99	97	107	72	SE	Diploid	Early	Seed Force	3
Fitzroy SE	106	112	104	96	108	119	SE	Diploid	Early	PGG Wrightson Seeds	6
Wintas II	106	109	96	98	109	63	LE	Diploid	Mid	TasGlobal Seeds	3
Alto AR1	106	110	97	97	109	64	AR1	Diploid	Late	Heritage Seeds	3
Avalon AR1	106	111	96	98	107	57	AR1	Diploid	Mid	Vicseeds	5
Arrow AR1	106	108	100	99	110	85	AR1	Diploid	Mid	Heritage Seeds	9
Revolution	105	111	96	96	109	59	AR1	Diploid	Mid	Seed Force	4
Helix	102	107	97	96	107	25	AR1	Diploid	Mid	Cropmark Seeds	4
Victorian SE	100	100	100	100	100	0	SE	Diploid	Early	Many	8

Tasmania winter seasonal performance

Cultivar		Winter	Early spring	Late spring	Summer	Autumn	FVI Tas	Endophyte	Ploidy	Heading date	Marketer	No. of trials
Base AR37		118	98	98	114	113	153	AR37	Tetraploid	Late	PGG Wrightson Seeds	8
Bealey NEA2		116	97	97	114	112	138	NEA2	Tetraploid	Very late	Heritage Seeds	8
Halo AR37		115	95	96	114	110	110	AR37	Tetraploid	Late	Agricom	8
One50 SE		114	98	96	112	108	110	SE	Diploid	Late	Agricom	4
One50 AR37		114	98	97	110	109	108	AR37	Diploid	Late	Agricom	4
Kidman AR1		113	100	97	110	110	122	AR1	Diploid	Early	Heritage Seeds	5
Prospect AR37		113	98	96	110	107	95	AR1	Diploid	Late	Agricom	3
Banquet II Endo5		112	96	97	112	108	87	Endo5	Tetraploid	Late	PGG Wrightson Seeds	9
Impact2 NEA2		112	98	98	112	108	108	NEA2	Diploid	Late	Heritage Seeds	8
Alto AR37		112	98	97	111	107	88	AR37	Diploid	Late	Heritage Seeds	3
Fitzroy SE		112	104	96	108	106	119	SE	Diploid	Early	PGG Wrightson Seeds	6
Excess AR37		112	97	97	111	109	86	AR37	Diploid	Mid	PGG Wrightson Seeds	3
Matrix		111	97	96	111	108	83	SE	Diploid	Late	Cropmark Seeds	3
One50 AR1		111	97	96	112	107	69	AR1	Diploid	Late	Agricom	7
Ansa AR1		111	98	97	111	107	88	AR1	Diploid	Mid-late	Pasture Genetics	3
Extreme AR37		111	97	97	108	109	85	AR37	Diploid	Mid	PGG Wrightson Seeds	5
Avalon AR1		111	96	98	107	106	57	AR1	Diploid	Mid	Vicseeds	5
Revolution		111	96	96	109	105	59	AR1	Diploid	Mid	Seed Force	4
Alto AR1		110	97	97	109	106	64	AR1	Diploid	Late	Heritage Seeds	3
Endure WT		110	98	98	109	107	76	SE	Tetraploid	Mid	Vicseeds	3
Wintas II		109	96	98	109	106	63	LE	Diploid	Mid	TasGlobal Seeds	3
SF Tenacity WT		108	99	97	107	107	72	SE	Diploid	Early	Seed Force	3
Arrow AR1		108	100	99	110	106	85	AR1	Diploid	Mid	Heritage Seeds	9
Helix		107	97	96	107	102	25	AR1	Diploid	Mid	Cropmark Seeds	4
Victorian SE		100	100	100	100	100	0	SE	Diploid	Early	Many	8

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