# **Fathom** Barley - SA Seed Fact Sheet

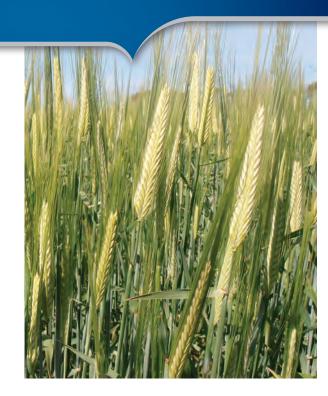


### **Key Features**

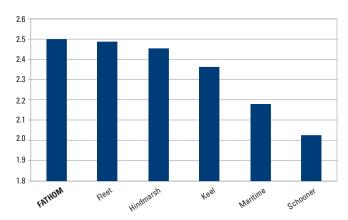
- √ Early maturity
- √ Broad adaptation
- √ Strong disease resistance including CCN
- √ Very low screenings similar to Maritime
- √ Higher test weight than Fleet
- ✓ Consistently high grain yield

# **Breeding History**

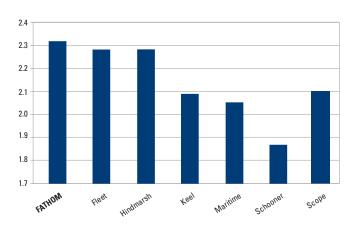
Fathom was tested as the breeding line WI4483 and produced from a cross between a 'wild barley' derivative and WI3806 which is a sister line to Fleet. The wild barley was used to improve stress tolerance and water use efficiency. Fathom has been bred as a dedicated feed variety with very reliable high grain yield and stable physical grain quality.



#### **Grain Yield**



**Figure 1:** Predicted grain yield from analysis of long term NVT results on Upper Eyre Peninsula.



**Figure 2:** Predicted grain yield from analysis of long term NVT results in the Murray Mallee.

# **Physical Grain Quality**

**Table 3:** Mean screenings (% < 2.2mm) performance of current feed varieties in 2010 and 2011 SA NVT. Data is from all NVT trials and individual trial data is available from http://www.nvtonline.com.au.

	2010	2011	Mean	
Fathom	1.9	2.9	2.4	
Fleet	2.6	2.7	2.7	
Hindmarsh	3.5	6.7	5.1	
Keel	4.2	12.4	8.3	
Maritime	2.3	2.5	2.4	
Oxford	4.0	3.5	3.8	
Scope	5.1	6.7	5.9	

**Table 4:** Mean test weight (kg/hL) performance of current varieties in 2010 and 2011 SA NVT. Data is from all NVT trials and individual trial data is available from http://www.nvtonline.com.au.

	2010	2011	Mean		
Fathom	66.4	66.4	66.4		
Fleet	65.7	66.4	66.1		
Hindmarsh	67.8	67.2	67.5		
Keel	66.3	65.3	65.8		
Maritime	65.9	67.0	66.5		
Oxford	66.8	68.3	67.6		
Scope	66.5	66.3	66.4		

#### **Disease Resistance**

**Table 1:** Disease resistance profile of Fathom compared to other feed varieties.

	Powdery mildew	Leaf Rust	Scald	SFNB	CCN	NFNB	Covered Smut
Fathom	MR	MR-S/VS	MR	MR	R	MS/S	R/MR
Keel	MR/MS	VS	MS	R/MR	R	MS	R
Fleet	MR/MS	MR/MS-S	MR/MS	R/MR	R	MR	MR
Hindmarsh	MS	MR/MS-S	R-S	S	R	MR	MS
Barque	MR	MR/MS-S	S/VS	R/MR	R	MS/S	MS/S

R=Resistant; MR=Moderately Resistant; MS=Moderately Susceptible; VS=Very Susceptible.

Ratings reproduced from the SARDI Cereal Variety Disease Guide 2012

Table 2: Plant profile of Fathom compared to other feed barley varieties

	Maturity	Coleoptile length	Early vigour	Early growth habit	Tillering ability	Plant height	Standing ability	Head retention	Boron leaf symptoms
Fathom	early	long	moderate high	semi prostrate	moderate high	medium tall	good	moderate	moderate low
Keel	early	medium	moderate high	erect	moderate	medium	moderate	moderate	moderate
Fleet	mid	long	moderate high	semi prostrate	moderate high	medium tall	moderate poor	moderate	moderate low
Hindmarsh	early	short	low	erect	moderate low	short medium	good	moderate high	high
Barque	mid	medium	moderate high	semi prostrate	moderate high	tall	moderate poor	moderate	moderate low

#### **Contact & Seed Purchasing**

Fathom is sold through your local rural seed retail agent. Check with your local store for seed availability and seek advice from your agronomist on optimum sowing time and crop management. Wholesale distribution by Viterra Seeds.

Jason Scott - Wholesale Seeds Manager 0458 009 804 jason.scott@viterra.com

Chris Farlow - Retail Seeds Manager 0439 277 122 chris.farlow@viterra.com

www.viterra.com.au/agriproducts/seed

# **Plant Breeding Rights & Royalties**

Fathom is protected by Plant Breeder's Rights under the Plant Breeder's Rights Act 1994 (Cth) (Plant Breeder's Rights Act). Any unauthorised commercial propagation or any sale, conditioning, export, import or stocking of propagating material of this variety is an infringement under the Plant Breeder's Rights Act. Grower to Grower seed sales are NOT permitted. Fathom is subject to an End Point Royalty (EPR) of \$2.00 per metric tonne (GST excl.), payable on all production excluding farm saved seed.

Viterra manages the collection of EPR as part of the Plant Breeder's Rights variety licensing agreement. The royalties are collected for investing back to the plant breeder for research and development of improved varieties for Australian farmers.



<sup>\*</sup> Due to multiple strains of leaf rust and scald, the table provides a range of reactions that may be observed. Different ratings are separated by "/".