

2.9 Oat Variety Trial

Researchers

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Aim

To evaluate the suitability of different grain oat varieties for the high rainfall zone.

Method

Sown on the 16/99 at 80 kg/ha of seed and 100 kg/ha of DAP.

VARIETY INFORMATION

Coomaloo

Tall milling variety released from WA. Its physical quality is inferior to Euro.

Echidna

Probably the most common oat in the South West. A high yielding dwarf variety that is resistant to lodging and shattering. It has a smaller grain size than Euro but is still considered for acceptable for milling.

Eurabbie

A newly released NSW variety that has performed well as a Hay line as well as a high yielding grain line.

Euro

A premium quality milling oat derived from a cross between Mortlock and Echidna. A short variety (not a semi-dwarf) that on average yields 89% of Echidna. It has better straw strength than other non-dwarf varieties. Moderately resistant to BYDV but susceptible to stem and leaf rust.

Hotham

An early maturing intermediate tall milling variety from WA. Its hectolitre weight is similar to Euro but it has 2.5% higher screenings. Very susceptible to stem rust.

Wandering (WAOAT 2052)

A newly released dwarf line from WA.

Mortlock

A very high protein oat but yields 10% less than Euro. Susceptible to leaf rust and moderately susceptible to stem rust and BYDV.

Needilup

Formerly WAOAT2014. It is a late maturing dwarf oat from WA with superior grain quality to Echidna. Its yield performance has been poor in Victoria and it is susceptible to stem and leaf rust.

Numbat

A naked oat variety developed in SA. It has a 5% higher yield than Bandicoot (the other commercial naked oat) but is about 75% lower than Echidna.

Potoroo

A dwarf oat that is high yielding and is highly digestible and is thus suitable for animal feed. It is slightly lower yielding than Echidna although its digestibility is better.

Quoll

A new dwarf variety with similar yields to Echidna but higher protein. Resistant to stem and leaf rust and moderately resistant to septoria. Tolerant to BYDV.

Toodyay

A tall milling variety from WA. Its grain yield and quality is slightly inferior to Euro. Susceptible to stem rust.

RESULTS

STREATHAM GRAIN OAT TRIAL			
VARIETY	Average Yield T/Ha	% site mean	% Echidna
HOTHAM	4.82	131	110
ECHIDNA	4.40	119	100
QUOLL	4.32	117	98
SV91108-3	4.27	116	97
EURRABIE	4.17	113	95
NEEDILUP	4.12	112	94
SV92040-54	4.01	109	91
SV91139-27	3.99	108	91
POTOROO	3.75	102	85
SV91139-20	3.71	101	84
TOODYAY	3.64	99	83
SV92070-86	3.55	96	81
NUMBAT	3.40	92	77
EURO	3.39	92	77
WAOAT 2052	3.19	86	73
COOMALLO	3.13	85	71
SV92070-94	3.13	85	71
SV91024-7	3.09	84	70
MORTLOCK	2.93	79	67
SV87073-10-14	2.83	77	64
Average	3.69		
LSD T/Ha	1.37		

STREATHAM HAY TRIAL. HARVESTED - 7/1/00.			
VARIETY	Average	% site mean	% Echidna
ECHIDNA	3.66	141	100
EURRABIE	3.11	119	85
WALLAROO	2.92	112	80
GLIDER	2.68	103	73
MARLOO	2.54	98	69
OX92;093-85CRH	2.51	97	69
SV88083-4	2.39	92	65
OX93;033-21	2.36	91	64
OX93;072-43	2.34	90	64
SWAN	2.32	89	63
SV87103-109	2.31	89	63
BETTONG	2.08	80	57
Site Mean	2.60		
LSD T/Ha	1.33		