



INDEPENDENT TRIAL RESULTS

April 2007

AQUATAIN TRIAL RESULTS

‘TARCOOLA’ DALBY QUEENSLAND

TOTAL AG SERVICES

April 2007

Further Information

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BACKGROUND

Access to reliable water is the single most important issue facing Australian farmers today.

A new product, Aquatain, is being marketed as a liquid evaporation blanket, and Total Ag Services conducted an independent trial in April 2007 to assess its benefits.

TRIAL PROCEDURE

- The trial was on a 1 acre dam at 'Tarcoola' near Dalby in Queensland. Dalby is on the Darling Downs about 200 km inland from Brisbane.
- The trial was conducted over a 3 week period beginning on 2 April 2007.
- Temperature, wind speed, relative humidity and rainfall readings were taken with an automatic weather station.
- An evaporation tub was used as a control.
- Aquatain was applied at a rate of 7 litres per hectare initially, followed by a second application at a rate of 3.5 litres per hectare on Day 9.

TRIAL RESULTS

- The maximum daily temperature ranged from 28°C to 35°C over the period.
- The maximum daily wind speed ranged from 24 kph to 41 kph, with the average daily speed being about 10 kph.
- No rainfall was recorded over the period.
- For the entire period, the water loss in the dam was 108 mm, compared with 207 mm for the Control. This is a saving of just under 50%.
- Aquatain still had some residual effectiveness at the end of the trial – for the last 3 days, evaporation savings were still 45%.
- These results were achieved over a period of fairly high temperatures and some moderately high winds.
- Seepage from the dam was not measured. Had seepage been taken into account, the evaporation savings would have been greater.

CONCLUSION

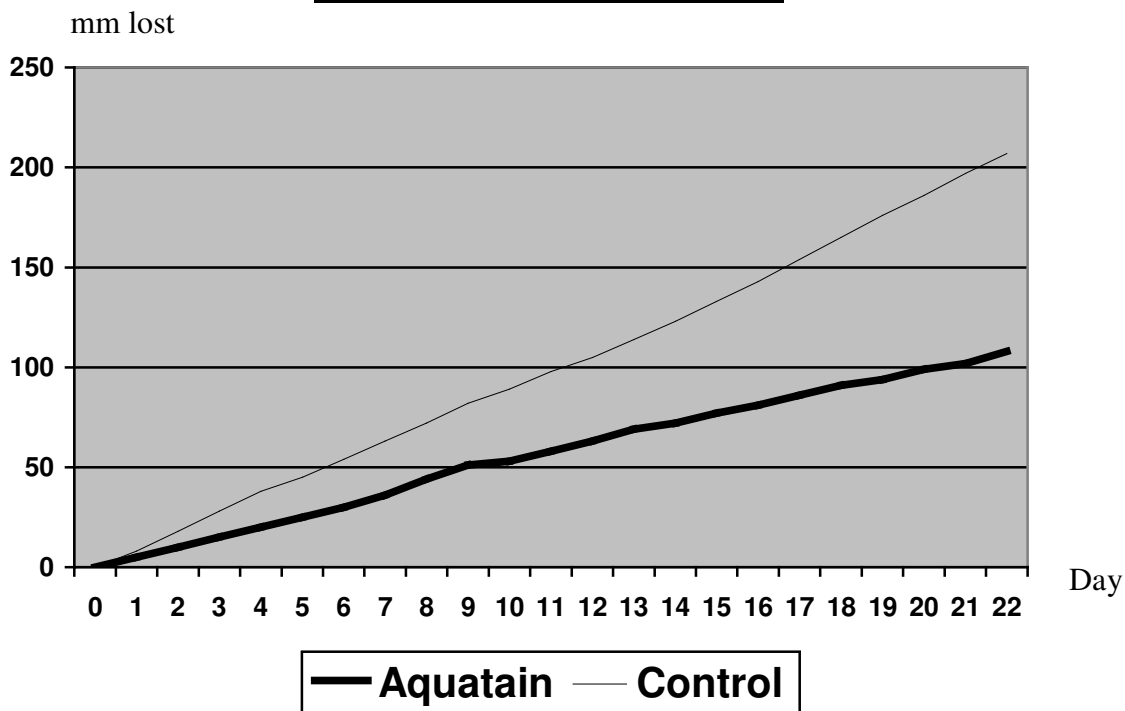
Aquatain was shown to be very effective as an evaporation retardant.

On a per-hectare basis, the saving of 99 mm over the 22 day period amounted to nearly 1 megalitre of water. This is a cost-effective result.

EVAPORATION LOSSES: AQUATAIN vs CONTROL

Day	Max Air Temp (Deg C)	Max Wind Speed (Kph)	Ave Wind Speed (Kph)	Control		Aquatain-Treated Dam		Initial Application
				Daily (mm)	Cumulative (mm)	Daily (mm)	Cumulative (mm)	
1	30	40	17	8	8	5	5	
2	28	38	12	10	18	5	10	
3	32	31	6	10	28	5	15	
4	30	37	12	10	38	5	20	
5	30	30	7	7	45	5	25	
6	32	41	12	9	54	5	30	
7	28	34	15	9	63	6	36	
8	28	36	16	9	72	8	44	
9	28	39	13	10	82	7	51	Top-Up Application
10	29	37	11	7	89	2	53	
11	30	29	9	9	98	5	58	
12	28	35	13	7	105	5	63	
13	29	35	14	9	114	6	69	
14	29	32	9	9	123	3	72	
15	31	28	6	10	133	5	77	
16	31	24	7	10	143	4	81	
17	33	40	8	11	154	5	86	
18	34	34	8	11	165	5	91	
19	35	32	11	11	176	3	94	
20	32	32	8	10	186	5	99	
21	32	24	7	11	197	3	102	
22	30	29	7	10	207	6	108	

EVAPORATION COMPARISON





Aquatain in foreground – approx half way across dam



Aquatain continuing to spread across dam