Rice – California, various areas

Trial area: Various, see table 1
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Crop and cultivar: Rice M-206 and M209
Application: Rate per product (Table 2)

Introduction

Several seaweed products are used in rice production. The aim was to determine the effect of the most popular seaweed products on rice yield in California. Fields with various stress conditions were chosen in five areas in the rice producing region of California. This report serves as a summary of the five trials that evaluated all the products mentioned below.

Table 1. Trial site descriptions

Area	Variety	Plant date	Harvest date	Timing 1 (DAS)	Timing 2 (DAS)	Condition
Biggs low	M-206	31/5	122/10	42 (PI)	71 (LB)	Low seed density
Biggs high	M-206	31/5	22/10	42 (PI)	71 (LB)	High seed density
Biggs late	M-206	9/7	22/10	43 (PI)	69 (LB)	Late planting
Woodland	M-206	3/5	1/10	52 (PI)	91 (EH)	Cool temperatures
Glenn	M-209	7/5	8/10	44 (PI)	93 (EH)	Cold water

DAS=days after seeding; PI=panicle initiation; LB=late boot; EH=early heading

Table 2. Seaweed products evaluated with application rates

Product	Variety	Rate/Acre
Acadian	*Ascophyllum nodosum*	Low seed density
Kelpak LSC	*Ecklonia maxima*	High seed density
Triggrr	*Kelp and other ingredients*	Late planting
Symspray	Ascophyllum nodosum	Cool temperatures
Headset	Ascophyllum nodosum	Cold water

Table 3. The effect of 5 seaweed products on rice yield (lb/Acre) - California

Product	Biggs Low	Biggs High	Biggs Late	Woodland	Glenn	Average	% increase above control
Control	8437	8854	7290	8732	5945	7852	–
Acadian	8302	8889	7420	9189	6633	8087	3.0
Kelpak	8854	8778	7462	9748	6418	8252	5.1
Triggrr	8633	8616	7839	9274	6346	8142	3.7
Symspray	8481	8798	7503	9179	6115	8015	2.1
Headset	8806	8784	7631	9360	6573	8231	4.8

In these trials, Kelpak LSC was applied later than the product's recommended application timing at start of tillering and again at the start of panicle initiation. Regardless of this later than normal application, Kelpak LSC still gave the best result over all trial sites with an average yield improvement of 5.1%. Kelpak LSC also performed the best in the trials with a low seeding rate and where cold temperatures were experienced and second best in the trial with late planting.

Conclusion

Kelpak LSC has the ability to improve yields of rice grown under stress condition and is a valuable tool in rice production.