rice

- Improves germination
- Improves root growth
- Increases tillering
- Increases number of panicles
- Increases yield
- Increases 1000 grain weight
- Reduces lodging

Kelpak is a natural biostimulant manufactured from the brown kelp *Ecklonia maxima*, found on the west coast of South Africa. Kelpak is produced using a cold cellular burst extraction method to preserve the delicate compounds in the cell sap. The end product significantly improves overall plant growth and increases rice yields.

A global leader in seaweed products for over forty years

UNIQUE CELLBURST PROCESS FOR CONSISTENT RESULTS

cellburst

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kelpak

Rice – California, various areas

Trial area: Various, see table 1
Conducted by: Luis Espino – Rice Farming advisor, UC
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

Recommended use on rice

For improved germination, initial root growth:

1:400 Kelpak dilution with sanitary seed soak

For improved yield and quality:

First foliar spray of 2 L/ha at start of tillering (± 25 days after emergence or ± 15 days after transplant). Repeat foliar application of 1 - 2 L/ha at start of panicle initiation