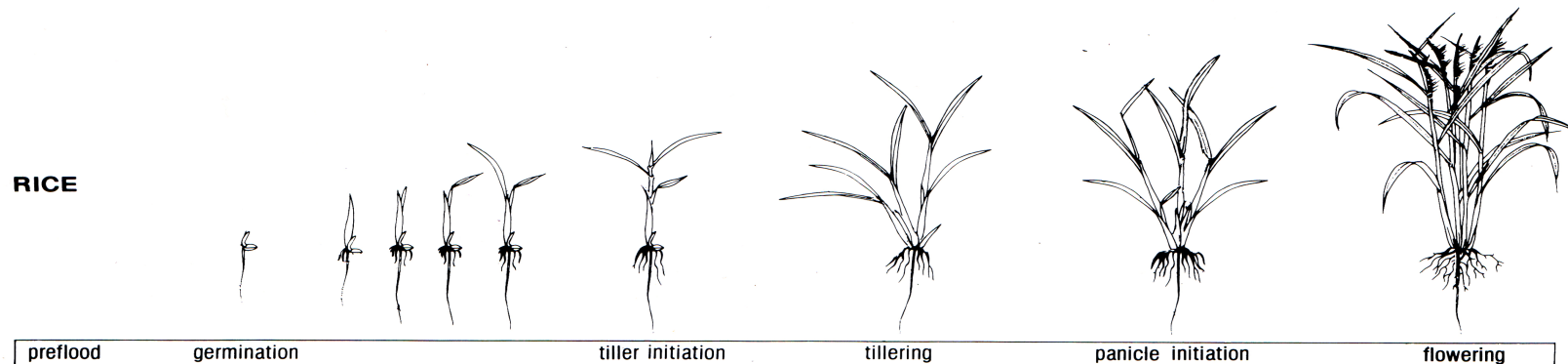


## LIST OF PESTICIDES USED ON CALIFORNIA RICE

### RICE GROWTH STAGES



*California produces medium and short grain rice on a total of 553,000 acres harvested/ 223,965 hectares in the Sacramento Valley.*

### Production Timeline

Early Season (March-April)		Mid Season (May-June)		Late Season (June-July)	
Pre-flood	Germination	Tiller Initiation	Tillering	Panicle Initiation	Flowering

### Herbicides - Only 16 allowed for use in California

**USAGE: ONE treatment of One to Two of the following materials used (as needed) according to the application timing noted below.**

ACTIVE INGREDIENT/ COMMON TRADE NAME <sup>1</sup>	APPLICATION TIMING	NUMBER OF TIMES USED	TREATED ACRES/HECTARES) (CA PUR 2009) <sup>2</sup>	PERCENT (%) TREATED (CA PUR 2009) <sup>2</sup>
2,4-D, Dimethylamine salt	Mid-season	Once or less	13,571 Acres (5,496 Hectares)	2.5%
Bensulfuron-methyl/ Londax	Early-season	Once	52,052 Acres (21,081 Hectares)	9.4%
Bispyribac-sodium/ Regiment	Mid-season	Once	93,783 Acres (37,982 Hectares)	17.0%
Carfentrazone-ethyl/ Shark	Early-season; Mid-season	Once	10,967 Acres (4,442 Hectares)	2.0%

<sup>1</sup>Common Trade Name does not include all trade names

<sup>2</sup>California Department of Pesticide Regulation, 2010 Pesticide Use Report (PUR)

## LIST OF PESTICIDES USED ON CALIFORNIA RICE

<b>Herbicides (continued) - Only 18 allowed for use in California</b>				
<i>USAGE: ONE treatment of One to Two of the following materials used (as needed) according to the application timing noted below.</i>				
ACTIVE INGREDIENT/ COMMON TRADE NAME <sup>1</sup>	APPLICATION TIMING	NUMBER OF TIMES USED	TREATED ACRES/HECTARES (CA PUR 2009) <sup>2</sup>	PERCENT (%) TREATED (CA PUR 2009) <sup>2</sup>
Clomazone/ Cerano	Early-season	Once	205,176 Acres (83,096 Hectares)	37.0%
Cyhalofop-butyl/ Clincher	Mid-season	Once	90,180 Acres (36,523 Hectares)	16.3%
Fenoxaprop-p-ethyl/ Whip	Mid-season	Once	7,236 Acres (2,931 Hectares)	1.3%
Glyphosate/ Round-up	Pre-season (pre-plant)	Once	6,090 Acres (2,466 Hectares)	1.1%
Halosulfuron-methyl/ Sanda	Early-season	Once	4,340 Acres (1,756 Hectares)	0.78%
Orthosulfamuron/ Strada	Early-season	Once	5,305 Acres (2,149 Hectares)	0.96%
Paraquat dichloride/ Graxamone	Pre-season	Once	772 Acres (313 Hectares)	0.14%
Pendimethalin/ Prowl, Harbinger	Early-season (drill seeding pre-emergent)	Once	12,894 Acres (5,222 Hectares)	2.3%
Penoxsulam/ Granite	Early-season	Once	128,850 Acres (52,184 Hectares)	23.3%
Propanil/ Stam, Riceshot	Early-season; Mid- season	Once or Twice	392,929 Acres (159,136 Hectares)	71.0%
Thiobencarb/ Bolero, Abolish	Early-season	Once	75,172 Acres (30,445 Hectares)	14.0%
Triclopyr, TEA/ Grandstand	Mid-season	Once	322,605 Acres (130,655 Hectares)	58.3%

<sup>1</sup>Common Trade Name does not include all trade names

<sup>2</sup>California Department of Pesticide Regulation, 2010 Pesticide Use Report (PUR)

## LIST OF PESTICIDES USED ON CALIFORNIA RICE

<b>Insecticides – Only 7 allowed for use in California</b>				
<i><b>USAGE: ONE treatment of ONE of the following materials used (as needed) according to the application timing noted below.</b></i>				
ACTIVE INGREDIENT/ COMMON TRADE NAME <sup>1</sup>	APPLICATION TIMING	NUMBER OF TIMES USED	TREATED ACRES/HECTARES (CA PUR 2009) <sup>2</sup>	PERCENT (%) TREATED (CA PUR 2009) <sup>2</sup>
Carbaryl/ Sevin	Mid-season	Once or twice; spot treatment	248 Acres (100 Hectares)	0.04%
Copper sulfate (pentahydrate)* / Bluestone	Mid-season	Once	70,126 Acres (28,401 Hectares)	12.7%
Cyhalothrin, lambda/ Warrior	Early-season; Late- season	Once or twice; spot treatment	97,877 Acres (39,640 Hectares)	17.7%
(s)-cypermethrin/ Mustang	Early-season; Late- season	Once or twice; spot treatment	25,963 Acres (10,515 Hectares)	4.7%
Diflubenzuron/ Dimilin	Early-season	Once	1,463 Acres (593 Hectares)	0.3%
Malathion	Early-season	Once	0 Acres (0 Hectares)	0%
Parathion, methyl/ Penn- cap	Mid-season	Once	0 Acres (0 Hectares)	0%

<sup>1</sup>Common Trade Name does not include all trade names

<sup>2</sup>California Department of Pesticide Regulation, 2010 Pesticide Use Report (PUR)

\*Used on both conventional and organic rice as an algaecide and insecticide

<b>Fungicides – Only 4 allowed for use in California</b>				
<i><b>USAGE: ONE treatment of ONE of the following materials used (as needed) according to the application timing noted below.</b></i>				
ACTIVE INGREDIENT/ COMMON TRADE NAME <sup>1</sup>	APPLICATION TIMING	NUMBER OF TIMES USED	TREATED ACRES/HECTARES (CA PUR 2009) <sup>2</sup>	PERCENT (%) TREATED (CA PUR 2009) <sup>2</sup>
Azoxystrobin/ Qaudris	Mid-season	Once	196,265 Acres (79,487 Hectares)	35.5%
Sodium Carbonate Peroxyhydrate*/GreenClean	Mid-season	Once	3,599 Acres (1,458 Hectares)	0.65%
Propiconazole/ Stratego	Mid-season	Once	13,101 Acres (5,306 Hectares)	2.4%
Trifloxystrobin/ Stratego	Mid-season	Once	13,101 Acres (5,306 Hectares)	2.4%

<sup>1</sup>Common Trade Name does not include all trade names

<sup>2</sup>California Department of Pesticide Regulation, 2010 Pesticide Use Report (PUR)

\*Bio-pesticide primarily for algae control

## LIST OF PESTICIDES USED ON CALIFORNIA RICE

<b>Fumigants</b>				
<i><b>USAGE: Non-commodity applications for post harvest (PH) fumigation of structures, containers and transportation vehicles.</b></i>				
ACTIVE INGREDIENT/ COMMON TRADE NAME <sup>1</sup>	APPLICATION TIMING	NUMBER OF TIMES USED	TREATED UNITS (CA PUR 2009) <sup>2</sup>	% UNITS TREATED (CA PUR 2009) <sup>2</sup>
Aluminum phosphide/ Phostoxin	Post-harvest; pre- storage; pre-shipment	Once	2,582,717 C 288,421 T	N/A
Magnesium phosphide/ Magtoxin	Post-harvest; pre- storage; pre-shipment	Once	1,645,950 C 1,000 U	N/A
Methyl bromide	Post-harvest; pre- storage; pre-shipment	Once	237,500 C	N/A
Phosphine/ Eco2Fume	Post-harvest; pre- storage; pre-shipment	Once	3.00 U	N/A
Sulfuryl fluoride/ Profume	Post-harvest; pre- storage; pre-shipment	Once	1,931,250 C 23,150 T	N/A

<sup>1</sup>Common Trade Name does not include all trade names

<sup>2</sup>California Department of Pesticide Regulation, 2010 Pesticide Use Report (PUR)

<b>Seed Treatment</b>				
<i><b>USAGE: Non-commodity applications for pre-plant, seed treatment used during seed soaking.</b></i>				
ACTIVE INGREDIENT/ COMMON TRADE NAME <sup>1</sup>	APPLICATION TIMING	NUMBER OF TIMES USED	TREATED UNITS (CA PUR 2009) <sup>2</sup>	% OF UNITS TREATED (CA PUR 2009) <sup>2</sup>
Sodium hypochlorite/ Clorox	Seed treatment; seed soak	Once	30,736 U 924,050 P 5,634 C	N/A

<sup>1</sup>Common Trade Name does not include all trade names

<sup>2</sup>California Department of Pesticide Regulation, 2010 Pesticide Use Report (PUR)

**Unit type – The amount listed in this column is one of the following:**

**C** = Cubic feet (of commodity treated)

**P** = Pounds (of commodity treated)

**T** = Tons (of commodity treated)

**U** = Miscellaneous units (e.g., number of tractors, trees, tree holes, bins, etc.)