

Nitrogen Evaluation Packets

Interpreting Your Nitrogen Use Evaluation

Definitions

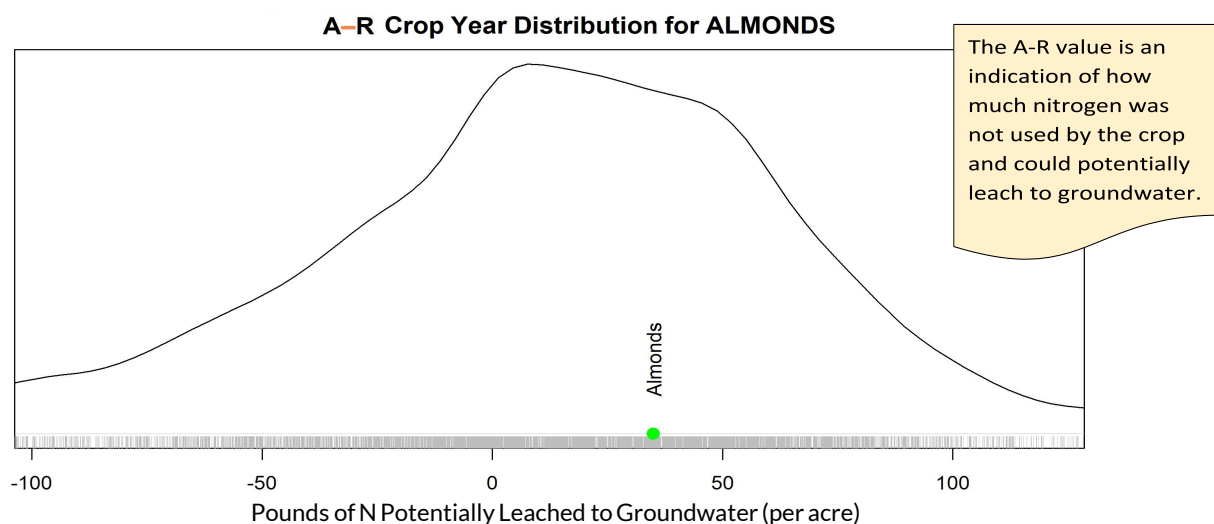
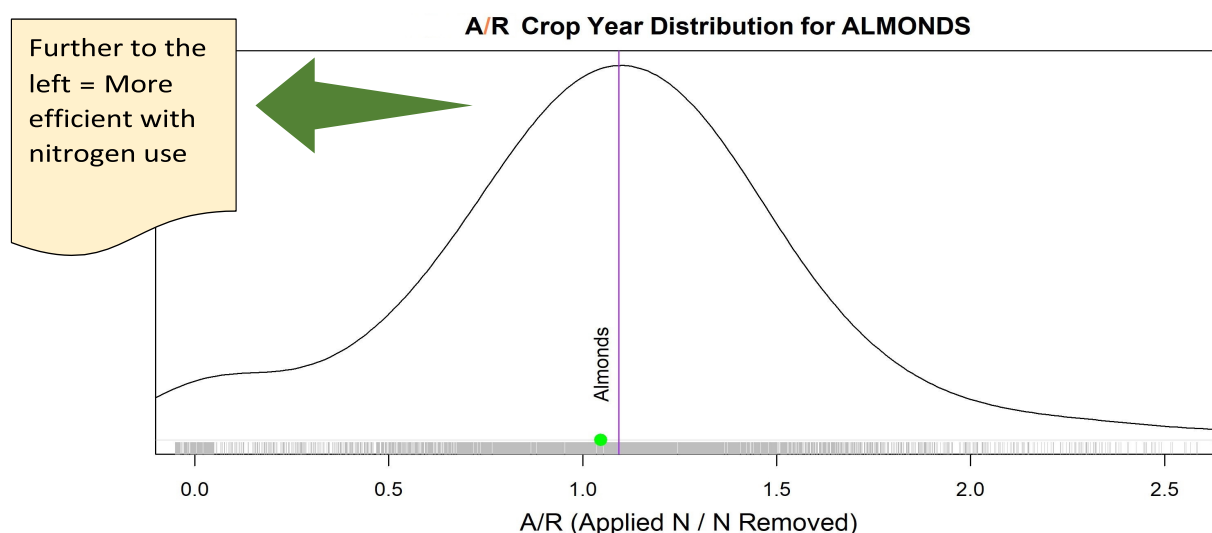
R (Removed) – An estimate of how much nitrogen the crop used based on the reported yield. Calculated using Crop-Specific Nitrogen Coefficients and your reported yield.

A/R (N Applied/ N Removed) – The pounds of nitrogen applied divided by pounds of nitrogen removed. A/R ratio is used to compare agronomic efficiency and is reported to the Regional Board.

A-R (N Applied – N Removed) – The pounds of nitrogen applied minus the pounds of nitrogen used by the crop. This value estimates the amount of nitrate that could potentially leach to groundwater.

Bell Curves

The bell curve illustrates a crop year distribution of A/R and A-R values for all members growing almonds. The peak of the bell indicates the most commonly reported values.



Crop-Specific Nitrogen Coefficients

What is a Crop-Specific Nitrogen Coefficient?

The crop-specific nitrogen coefficients are numbers developed by agronomic scientists with the University of California that estimates the amount of nitrogen used by the crop to produce a pound of yield. The Coalition uses crop-specific nitrogen coefficients to calculate the amount of nitrogen removed from the soil by a crop and transported out of the field (or stored in permanent tissue for trees and vines). The resulting N Removed (R) value is then compared to the amount of N Applied.

Since the R value is only as accurate as the nitrogen coefficient used to calculate it, the Coalition has assessed each available crop-specific nitrogen coefficient to determine if they are:

Good – sufficiently accurate to provide good removed estimates

Reasonable – could be improved but likely to produce reasonable removed estimates

Poor - need further development to produce accurate removed estimates

Estimate of Coalition Acreage with Crop Coefficients



Overall, most of the high acreage crops in the Coalition region are considered to have good nitrogen coefficients.

See how the crop-specific coefficients compare!



Crops listed in order of declining acreage

Good	Reasonable	Poor	Not Available
ALMONDS	GRAPES, RAISINS	GRAPES, WINE	PASTURE
PISTACHIOS	WHEAT, SILAGE	CORN, GRAIN	OATS, FORAGE
CORN, SILAGE	GRAPES, TABLE	FIGS	NOT RECORDED
SWEET POTATOES	CITRUS, TANGELO	TOMATOES, FRESH MARKET	NURSERY, BARE ROOT
WALNUTS	OLIVES	CHERRY	WHEAT, HAY
PRUNES	LETTUCE	PEPPERS, BELL	COVER CROP
ALFALFA, HAY	CITRUS, CLEMENTINES	FORAGE GRASS, HAY	GRASS, SOD
WHEAT, GRAIN	GRAPES, NR	MELONS, WATERMELON	FORAGE GRASS, SILAGE
TOMATOES, PROCESSING	MUSTARD, GREENS	SQUASH, WINTER	FORAGE GRASS, FORAGE
OATS, SILAGE	KALE	OATS, GRAIN	STRAWBERRIES
CITRUS, ORANGES	GREENS, COLLARD	CITRUS, TANGERINES	HERBS, FRESH CUT
CITRUS, MANDARINS	CHARD	APPLES	WHEAT, GREENCHOP
PEACHES, PROCESSING	CUCUMBERS	BEANS, DRY, BLACK-EYED	RADICCHIO
OATS, HAY	SORGHUM/SUDAN, SILAGE	GARLIC	RICE
SMALL GRAIN (EXCL WHEAT AND OATS), GRAIN	BEANS, DRY	PEARS	WHEAT, FORAGE
KIWIFRUIT	BEANS, DRY, LIMA	PUMPKINS	OATS, GREENCHOP
PEACHES, FRESH MARKET	SPINACH	APRICOTS	TURNIP GREENS
COTTON	BEANS, GREEN	POTATOES	CLOVER, FORAGE
COTTON, UPLAND	PEAS, GREEN	ONIONS, BULB	NURSERY, POTTED
ALFALFA, GREENCHOP		SQUASH, SUMMER	BEETS
PEACHES, NR		PEPPERS, CHILE	SORGHUM/SUDAN, FORAGE
POMEGRANATES		MELONS, CANTALOUPE	FORAGE GRASS, NR
ALFALFA, HAYLAGE			LEEKS
PECANS			BOK CHOY, BABY