

The mineral nutrient usually needed in the largest amount for grain sorghum is: - ANSNitrogen

The name of the bacteria responsible for nitrogen fixation in legumes and contained in the inoculum added to legume seeds at planting is: - ANSRhizobium

The oral LD50 value representing the most highly toxic pesticide is:

- a. 585 mg/kg
- b. 320 mg/kg
- c. 6200 mg/kg
- d. 27 mg/kg - ANSd. 27 mg/kg

The part of the plant cell where photosynthesis occurs is the: - ANSchloroplast

The part of the plant cell where respiration occurs is the: - ANSMitochondria

The phrase "dusting it in" when used in wheat production refers to: - ANSplanting the seed shallow into a dry soil surface hoping for a rain so it can germinate later

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The practice of no-till planting grain sorghum into the stubble of a wheat crop immediately after wheat harvest in late June is called: - ANSdouble cropping

The practice of no-till planting soybeans into the stubble of a wheat crop immediately after wheat harvest in late June is called: - ANSdouble cropping

The purpose of adding agricultural lime to soil is to: - ANSraise the pH of acidic soils

The stage of growth of wheat where the plant is elongated and the spike is fully enclosed in the last leaf is: - ANSboot

The standard test weight per bushel for corn is: - ANS56 pounds

The standard test weight per bushel for grain sorghum is: - ANS56 pounds

The standard test weight per bushel for soybean is: - ANS60 pounds

The standard test weight per bushel for wheat is: - ANS60 pounds

The stored food energy used for germination in a corn or wheat kernel is located in the: - ANSendosperm

The stored food energy used for germination in a soybean seed is located in the: - ANScotyledon

Vernalization in hard winter wheat is required for: - ANSflowering and head formation

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When would be the best time to use herbicide to manage established curly dock, dandelion, Canada thistle, and volunteer alfalfa in a no-till farming system? - ANSIn the fall

Which is a proper value for moisture content of chopped corn or sorghum forage to insure proper silage making?

- a. 15-20%
- b. 25-30%
- c. 45-50%
- d. 65-70%
- e. 85-90% - ANSd. 65-70%

Which of the following conditions would not likely be a result of using a no-till system that leaves crop residue on the soil surface versus incorporating the residue with tillage?

- a. more water infiltration
- b. less evaporation
- c. warmer soil temperature
- d. less wind erosion
- e. less water erosion - ANSc. warmer soil temperature

Which of the following conditions would not likely be result of using a no-till system that leaves crop residue on the soil surface versus incorporating the residue with tillage?

- a. more water infiltration
- b. less soil moisture lost by evaporation
- c. cooler soil temperature
- d. less wind and water erosion
- e. less overwintering of insect and disease pests - ANSe. less overwintering of insect and disease pests

Which of the following crops is used to produce a common food oil and a high protein meal (44-48% protein) commonly used for livestock feed rations?

- a. alfalfa
- b. corn
- c. wheat
- d. grain sorghum
- e. soybean - ANSe. soybean

Which of the following crops produce seeds with the highest percent protein?

- a. corn
- b. wheat
- c. soybean
- d. grain sorghum - ANSc. soybean

Which of the following crops produce seeds with the lowest percent protein?

- a. hard white wheat
- b. hard red winter wheat
- c. soybean
- d. grain sorghum - ANSd. grain sorghum

Which of the following fertilizer carriers has the highest percent nitrogen analysis?

- a. urea
- b. urea-ammonium nitrate solution (UAN)
- c. anhydrous ammonia
- d. diammonium phosphate (DAP) - ANSc. anhydrous ammonia

Which of the following fertilizer carriers has the lowest percent nitrogen analysis?

- a. urea
- b. urea-ammonium nitrate solution (UAN)
- c. anhydrous ammonia
- d. diammonium phosphate (DAP) - ANSd. diammonium phosphate (DAP)

Which of the following forage crops would produce hay with the highest protein content if cut at the optimum time and baled properly?

- a. native range
- b. smooth brome grass
- c. tall fescue
- d. sudangrass
- e. alfalfa - ANSe. alfalfa

Which of the following group of pathogens is responsible for the common diseases called "rusts," "smuts," and "mildew" that infect many different crops?

- a. fungi
- b. bacteria
- c. viruses
- d. nematodes
- e. adjuvants - ANSa. fungi

Which of the following is an advantage of sprinkler irrigation over furrow irrigation systems?

- A) less evaporation loss with sprinkler
- B) more uniform application of water with sprinkler
- C) less energy required to pump and distribute water with sprinkler