Mixtures

Calculate the percentage of pure seed, other crop, weed seed, and inert matter in the following mixtures.

 Weight in grams

1. Big Bluestem 2.191

 Little Bluestem 0.976

 Other crop 0.270

 Weed Seed 0.143

 Inert matter 0.429

 Total

2. Indiangrass 1.535

 Big Bluestem 0.647

 Other Crop 0.027

 Weed Seed 0.658

 Inert Matter 1.073

 Total

3. Little Bluestem 0.538

 Big Bluestem 0.316

 Leadplant 0.315

 Indiangrass 0.18

 Other Crop 0.019

 Weed Seed 0.135

 Inert 2.592

 Total

Mixtures

1. A sample is analyzed and the following percentages are obtained (suppose you do not have the label that states the components in this mixture).

Kentucky bluegrass 68.42%

Tall Fescue 12.08% Which species are counted as other crop?

Meadow Fescue 8.31% A) None

Red Fescue 4.19% B) Red Top

Red Top 2.45% C) Red Fescue and Red Top

Weeds 0.00% D) Meadow fescue, Red Fescue, and Red Top

Inert 4.55% E) Tall Fescue, Meadow Fescue, Red Fescue, Red Top

2. A sample is analyzed and the following percentages are obtained (suppose you do not have the label that states the components in this mixture).

Alfalfa 74.75% Which species are counted as other crop?

Red Clover 13.97% A) None

Timothy 6.65% B) Alsike Clover

Alsike Clover 4.26% C) Alsike Clover and Red Clover

Weeds 0.01% D) Alfalfa, Red Clover and Timothy

Inert 0.46% E) Alsike Clover and Timothy

3. A sample is analyzed and the following percentages are obtained (use analysis tag)?

Alfalfa 74.72% Which species are counted as other crop?

Red Clover 13.97% A) None

Timothy 6.65% B) Alsike Clover

Alsike Clover 4.26% C) Alsike Clover and Red Clover

Weeds 0.01% D) Alfalfa, Red Clover, and Timothy

Inert 0.48% E) Alsike Clover and Timothy

Analysis Tag

Alfalfa 75.00%

Red Clover 14.00%

Timothy 7.00%

Alsike Clover 4.00%

Weeds 0.01%

Other Crop 0.01%

Inert 0.48%

What is the minimum weight for analysis in the following mixtures:

**Crop Percent**

Perennial Ryegrass 33.63

Creeping Red Fescue 32.43

Kentucky Bluegrass 32.34

**Crop Percent**

Timothy 29.90

Perennial Ryegrass 19.60

Orchardgrass 18.40

Alfalfa 13.13

Kentucky Bluegrass 9.80

**According to the descriptions, how would you classify the following: (pure seed, other crop, weed seeds, or inert matter)**

------ A piece of weed seed more than one half of the original size, with the embryo missing.

------ Immature or shriveled seeds and seeds that are cracked or otherwise damaged.

------ Crop kinds of legumes, conifers, and conifers with the seed coats entirely removed.

----- Pieces of broken or otherwise damaged crop seeds that are larger than one-half of the original size.

----- Pieces of broken or otherwise damaged weed seeds that are larger than one-half of the original size.

----- Seeds that have started to germinate.

-----Seeds of cucumber (Cucurbitaceae) or tomato (Solanaceae) whether or not they are filled.

----- Seed units with nematode galls or fungus bodies which are not entirely enclosed within the seed unit.

----- A piece of crop seed more than one-half the original sized, with the embryo missing.

----- A piece of crop seed exactly one-half the original size, with half of the embryo missing.

----- A wild mustard seed with the seed coat (testa) missing.

----- A soybean seed with the seed coat (testa) missing.

-----Fruiting structures of a weed seed (capsules, pods or seed heads with attached seed).

----- Wild onion bulblets which are completely devoid of husk and not damaged at the basal end which are retained through a 1/13-inch round hole sieve.

----- Wild onion bulblets that are completely devoid of husk and pass through a 1/13-inch round sieve.

----- A wild radish with the seed coat (testa) missing.

----- A soybean split between cotyledons.

----- A wheat seed without the embryo.

----- A vetch seed with apparent weevil damage (a hold drilled into the seed).

----- A seed of Silverleaf nightshade devoid of embryo endosperm.