

Cut Alfalfa + Rain Fall

What happens?
Now, what do I do?

Alfalfa Supplies

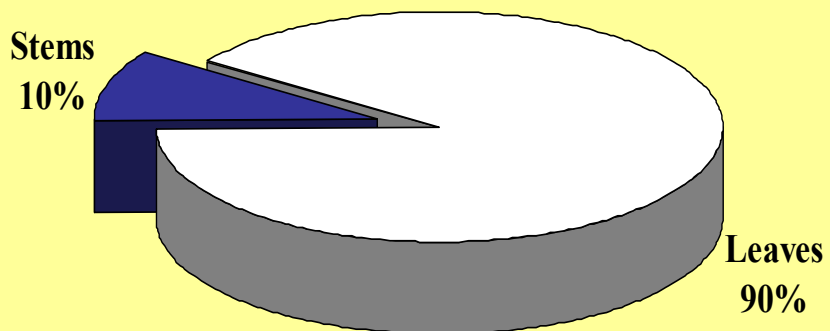
- Energy
- Fiber
- Protein
- Vitamins
- Minerals

Alfalfa Components

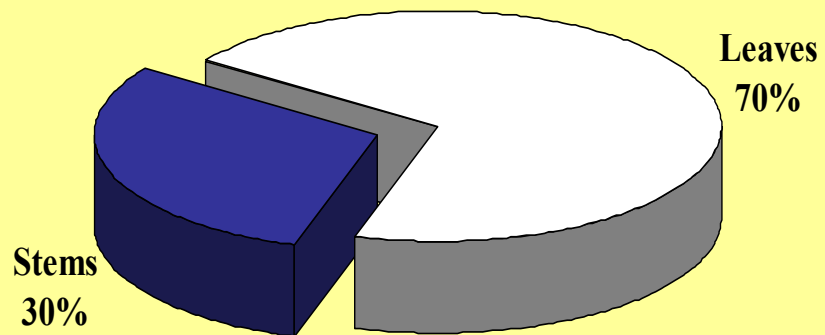


- Leaves
 - 25-35% Protein
 - 18-28% Fiber
- Stems
 - 10-20% Protein
 - 35-70% Fiber

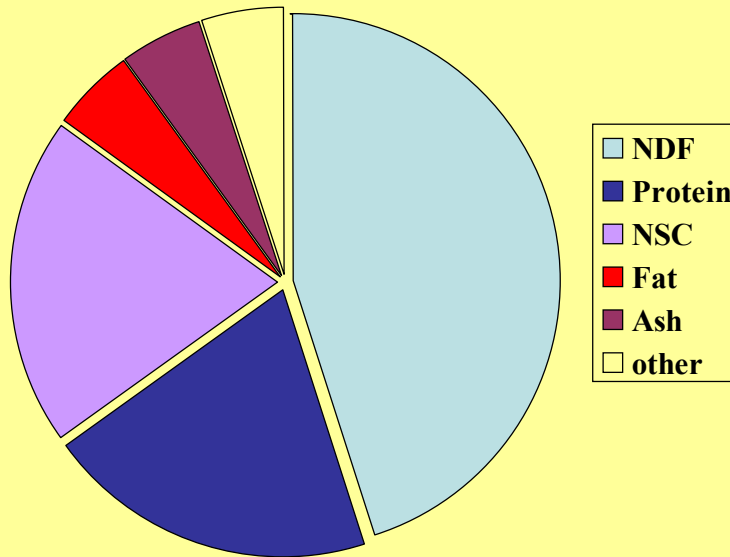
Vitamins & Minerals Produced



Crude Protein Production

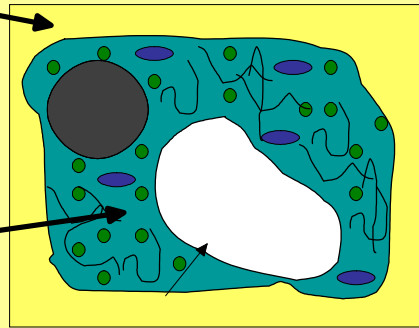


Alfalfa Forage Quality Plant Composition



Alfalfa Forage Quality Plant Composition

- Cell Wall – NDF
 - Cellulose
 - Hemi-cellulose
 - Lignin
- Cell Contents
 - Proteins
 - Non Fiber Carbohydrate (NFC)
 - Fats
 - Other



Alfalfa Losses Due To Rain

- Alfalfa in a windrow
 - Both yield and quality are reduced by
- Research varies
 - 1 inch = 22% DM loss
 - How long has the hay cured
 - The drier the hay the more severe the damage
- Color is bleached

Alfalfa Leaf Loss Due To Rain

- No definitive research to estimate leaf loss due to rainfall
- Rain damaged alfalfa
 - More leaf shatter as it dries
 - Due to additional raking or tedding of windrows

Alfalfa Plant Reaction Upon Cutting

- Standing alfalfa is 80% moisture
 - Upon cutting it begins immediate respiration
 - Normal dry matter losses are 3-4%
 - Respires down until 30% level
 - Breakdown of soluble carbohydrates by plant enzymes
 - Each time cut forages are wetted
 - Respiration is prolonged or begins again

Nutrient Losses Upon Cutting

- Leaching of soluble carbohydrates
- Protein
 - Rain has least impact on protein
- Minerals
- Leaf shatter & loss
- Microbial activity
- Color bleaching

Plant Components Lost in Rain

- Readily available carbohydrates
 - Makes up 50% of nutrients leached by rain
 - Highly digestible
 - Soluble carbohydrates
 - Soluble nitrogen
 - Minerals
 - Lipids

Equal Rain Amounts Different Intensity

- Low intensity
 - More leaching
- High intensity
 - Less leaching
- Prolonged rainfall causes more damage

Forage quality needs of animals

