Sulutions[n]
Bringing the POWER of natural solutions to animal production

Security EF

Sulutions[n] Security EF: A natural aid in reducing the impact of tall fescue

Product Description:
Security EF is a combination product containing binders, prebiotics, and essential oils designed to counteract the effects of fescue toxicosis in beef cattle. This combination of feed additive technologies using different modes of action help mitigate the effects of tall fescue.

Background:

- Cattle suffering from acute fescue toxicity are observed to:
  - Have a dull (dead looking) brown hair coat
  - Suffer from heat stress (panting/slobbering, standing slack framed and in ponds)
  - Be gaunt and thin.
  - Develop lameness and slough hooves and have tipped ears
  - Decrease growth rate and reduce reproductive rates.
- Tall Fescue toxicosis is a result of the fungus *Neotyphodium coenophialum* that infests much of the tall fescue grown in the United States.

The Science:

- A lab study demonstrated the importance of structure and the inner lattice layer of montmorillonite clays to absorb ergot alkaloids.
- Steers fed the yeast cell wall preparation gained 0.29 lb./h/d greater than control cattle
- A 3-year study with Angus cow calf pairs grazing endophyte infected fescue pastures evaluated a hydrolyzed yeast product fed in a mineral (target 4 oz./h/d).
  - Body condition score was improved (0.34 vs. 0.06 for treated vs control; $P < 0.01$).

- Cows consuming the hydrolyzed yeast product spent more time being active than control cows ($P < 0.01$).

- Vasoconstriction results in reduced blood flow to the gastrointestinal tract leading to decreased structural integrity. Essential oils are vasodilators leading to greater blood flow throughout the body.

The key animal benefits:

- Improved cattle performance and reproduction
- Reduced symptoms of heat stress (cows standing in ponds, panting, etc.) leading to more time grazing
- Maintaining gut health leads to improved overall health and productivity

Feeding directions:

Security EF is fed at a rate of 4.54 g/h/d to beef and dairy cattle.

Supplement Feeding rate, lb./d	Cattle
	Lb. Security EF / ton supplement
0.25	80.0
0.5	40.0
1.0	20.0

Sources:

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Sulutions^n provides practical and cost-effective technologies that address real world production issues so that producers can produce wholesome, healthy animals that perform profitably.