Can They Eat It? Creating an Eco and Livestock Friendly Hay String

Gruntmeir, Allison (School: Central Lee High School)

When cattle or other livestock eat hay wrap or hay string it causes the animal to die because the string is a filler and is not digestible so the animal thinks they are not hungry because their stomach is “full” but they is and that causes the animal to starve to death without knowing it, because of its strength and long-life, twine does not easily decompose and will last indefinitely, so I wondered, how could I create a biodegradable and edible hay wrap for livestock? To determine which twine would be the most effective to use when using it to hold together hay or straw or what product would be the best to digest and decompose I had to do five trials of testing the strength and the amount of twine that was being digested within three days of sitting in hydrochloric acid with a pH of 2.5 and morality of 8.0 and since the twine gets stuck in the cattle rumen I chose to use hydrochloric acid because it was the closest acid level. Since it takes three days for the cattle’s stomach to completely digest the twine sat in the acid for those three days while being agitated every few hours to make my process the most accurate. My project is important to the world because a biodegradable, edible, durable, hay twine has not been made, it could save many animals' lives if they ate it and it wouldn’t harm the soil or the animal. I hypothesize that the mixed twine with coconut oil will be the strongest. The hemp twine will be the most digestible and all the twines will be able to biodegrade. The reason I think they will all be able to biodegrade is because they are all natural materials. The reason I chose the hemp twine is that it was digested the most last time. The reason I chose the mixed twine is because it was with the two stronger twines. My hypothesis was upheld, the hemp hay twine was the most digestible, all twines would be able to biodegrade, and the mixed twine was the strongest with coconut oil.

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