## Trouble Shooting in Silage

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## Good Quality Silage

- Well fermented silage is the product of a desirable lactic acid fermentation
  - in anaerobic conditions, well fermented and sweet smelling.
- Fermentation acid smells
  - Acetic— Like vinegar
  - Butyric—Putrid, rotten
  - Propionic—Sharp sting in the nose and throat
  - Lactic- Sweet smelling, like natural yoghurt



## Tobacco /sweet caramel Smell

Likely cause	Immediate action	Future action
Prolonged aerobic phase leading to	<ul> <li>Allow for lower energy and protein values when feeding</li> </ul>	• Avoid over wilting
excessive heating	Beware of greater likelihood of	• ensure proper chop size
	Moulds	<ul> <li>Ensure bales and stacks</li> <li>are packed really tightly</li> </ul>
	• Discard mouldy silage	



## Vinegar like Smell

Likely cause	Immediate action	Future action
Acetic fermentation	• Silage will be less palatable, mix with more palatable feeds where Possible	• Use good quality silage inoculant for a faster, more efficient lactic acid fermentation

#### Putrid Smell

Likely cause	Immediate action	Future action
Clostridial activity producing butyric acid, possibly from	• Silage will have poor keeping quality, use as soon as possible	• Avoid soil and muck contamination in the bunker and on packing
soil contamination	• Very unpalatable so top dress with molasses to improve	vehicle tyres
	intakes	• Use good quality inoculant to minimize clostridial activity
		before the pH falls



## Ammonia (like bleach)

Likely cause	Immediate action	Future e action
High N content of crop or slow fermentation	• Silage could have poorer keeping quality, use as soon as possible	• Do not apply N to silage crops too close to cutting
TEI IIIEIITATIOII	• Will be unpalatable so top dress with molasses to improve intakes	• Use good quality inoculant to reduce protein breakdown

#### Alcoholic Smell

Likely cause	Immediate action	Future action
Yeast activity during the aerobic phase or	• Beware of greater likelihood of Moulds	• Do not cut crops too dry
during feed out	<ul><li> Allow for lower energy value when feeding</li><li> Use as soon as possible</li></ul>	•Ensure stacks are packed really tightly, seal straight away with a new cover and touching tyres

# Mouldy Smell

Likely cause	Immediate action	Future action
Mould growth during	• Feed out as quickly as possible	• Do not over wilt or cut crops too dry
the aerobic phase or	<ul> <li>Discard all mouldy silage for</li> </ul>	
during feed out	Compost	• Ensure bales and stacks are packed really tightly
	• Use good quality toxin binder	
	where there is a	
	risk of mycotoxins	



