



## Pioneer® brand forage additives: Crop-specific options using patented, proprietary bacterial strains

	Nutrivail™ Feed Technologies			Inoculants					
	Corn Fiber Technology	Alfalfa Fiber Technology	Grass/Cereal Fiber Technology	Corn Silage	Alfalfa Silage	Grass/Cereal	High-Moisture Corn		Multi-Crop
	11CFT	11AFT	11GFT	11C33	11H50	11G22	11B91	1189	1174
	Contains <i>Lactobacillus buchneri</i>	Contains <i>Lactobacillus buchneri</i>	Contains <i>Lactobacillus buchneri</i>	Contains <i>Lactobacillus buchneri</i> Includes new Rapid React™ aerobic stability† technology		Contains <i>Lactobacillus buchneri</i> Includes new Rapid React aerobic stability technology	Contains <i>Lactobacillus buchneri</i> Includes new Rapid React aerobic stability technology		
<b>Key benefits and recommended product usage</b>	<p>Improves nutrient conservation and fiber digestibility</p> <p>Reduces dry matter loss by rapidly lowering corn silage pH</p> <p>Contains a proprietary <i>L. buchneri</i> strain to significantly improve bunklife and reduce aerobic losses at feed-out</p> <p>Excellent choice for high-production animals fed high levels of corn silage</p> <p>Allows for higher forage inclusion rates, reducing the need for supplemental protein and energy sources in the ration</p>	<p>Improves nutrient conservation and fiber digestibility</p> <p>Reduces dry matter loss and protein degradation by rapidly lowering alfalfa silage pH</p> <p>Contains a proprietary <i>L. buchneri</i> strain to significantly improve bunklife and reduce aerobic losses at feed-out</p> <p>Excellent choice for high-production animals fed high levels of alfalfa forage</p> <p>Allows for higher forage inclusion rates, reducing the need for supplemental protein and energy sources in the ration</p>	<p>Improves nutrient conservation and fiber digestibility</p> <p>Reduces dry matter loss by rapidly lowering grass or cereal silage pH</p> <p>Contains a proprietary <i>L. buchneri</i> strain to significantly improve bunklife and reduce aerobic losses at feed-out</p> <p>Excellent choice for high-production animals fed high levels of cereal or grass forage</p> <p>Allows for higher forage inclusion rates, reducing the need for supplemental protein and energy sources in the ration</p>	<p>Improves corn silage nutritional value by rapidly lowering pH to conserve sugar and starch</p> <p>Significantly improves bunklife as a result of the inclusion of a proprietary <i>L. buchneri</i> strain</p> <p>Provides improved bunklife and stable feed in 7 days</p>	<p>Improves alfalfa silage nutritional value by rapidly lowering pH to conserve sugars</p> <p>Significantly reduces protein degradation in alfalfa silages</p>	<p>Improves grass and cereal silage nutritional value by rapidly lowering pH to conserve sugar and starch</p> <p>Significantly improves bunklife as a result of the inclusion of a proprietary <i>L. buchneri</i> strain</p> <p>Provides improved bunklife and stable feed in 7 days</p>	<p>Combines the benefits of 1189 with significantly improved bunklife as a result of the inclusion of a proprietary <i>L. buchneri</i> strain</p> <p>Provides improved bunklife and stable feed in 7 days</p>	<p>Rapidly reduces pH and increases the starch digestibility in high-moisture corn, snaplage or earlage</p> <p>Helps improve feed efficiency and rate of gain in animals fed high-moisture shelled corn, snaplage or earlage</p>	<p>Basic fermentation product which rapidly lowers silage pH, conserving valuable crop sugars while reducing protein degradation</p>
<b>Improves fermentation and reduces dry matter loss</b>	X	X	X	X	X	X	X	X	X
<b>Improves nutrient conservation</b>	X	X	X	X	X	X	X	X	X
<b>Improves fiber digestibility</b>	X	X	X						
<b>Significantly improves bunklife</b>	X	X	X	X		X	X		
<b>Significantly improves bunklife and offers feed stability sooner</b>				X		X	X		

† Improved aerobic stability and reduced heating is relative to untreated silage. Actual results may vary. The effect of any silage inoculant is dependent upon management at harvest, storage and feedout. Factors such as moisture, maturity, chop length and compaction will determine inoculant efficacy.

**IMPORTANT:** Information and ratings are based on relative comparisons with other Pioneer® brand forage additives within each specific crop, not competitive products. Information and ratings are assigned by DuPont Pioneer Forage Additive Research, based on average performance across area of use under normal conditions, over a wide range of both environment and management conditions, and may not predict future results. Product responses are variable and subject to any number of environmental and management conditions. Please use this information as only part of your product positioning decision. Refer to [www.pioneer.com/products](http://www.pioneer.com/products) or contact a Pioneer sales professional for the latest and most complete listing of traits and scores for each Pioneer brand product and for product placement and management suggestions specific to your operation and local conditions.

**Fermentation** — Rate and extent of pH decline and the composition of fermentation acids occurring in silage. **Nutrient conservation** — Retaining more sugar/starch and reducing protein degradation by rapidly reducing silage pH. **Fiber digestibility** — The digestibility of neutral detergent fiber (NDF) by the ruminant animal expressed as a percentage of the total NDF. **Bunklife** — Relative heat development compared to ambient temperature. Bunklife considers both how quickly silage begins to heat and the amount of heat generated while remaining above ambient temperature.