

Field identification: Barley Year: 2021 Crop: Barley Silage - Representative Example					
Expected Crop Yield: 14 ton/acre					
Phosphorus index results or Phosphorus application from soil test: Representative Soil Test					
Method of Land Application: Spreader Truck					
When will application occur: Post Harvest					
Nutrient Budget			Nitrogen-based Application	Phosphorus-based Application	Source of information
1		Crop Nutrient Needs, lbs/acre	224		
2	(-)	Credits from previous legume crops, or soil test lbs/ac	14		
3	(-)	Residuals from past manure production lbs/acre (if no new soil test)			
4	(-)	Nutrients from commercial fertilizer and biosolids, lbs/acre	54		
5	(-)	Nutrients supplied in irrigation water, lbs/acre			
6		= Additional Nutrients Needed, lbs/acre	156.00	0.00	
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	14		
8	(x)	Nutrient Availability factor, for Phosphorus based application use 1.0	0.60	1	
9		= Available Nutrients in Manure, lbs/ton or lbs/1000 gal	8.40	0.00	
10		Additional Nutrients needed, lbs/acre (calculated above)	156.00	0.00	
11	(/)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)	8.40	0.00	
12		= Manure Application Rate, tons/acre or 1000 gal/acre	18.571		

Comments

This is a representative nutrient budget for Buffalo Canyon Feeders LLC for spreading manure using a Nitrogen-based Application for a barley silage crop. The spreading reate of 18.57 tons/acre would be used for a one year Nitrogen application rate for barley silage production.