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.

Field identification: Wheat	Year: 2021	Crop:Winter Wheat Silage/Grain - Example			
Expected Crop Yield:70 bu/ac					
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	182		
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)	0		
4	(-)	Nutrients from commercial fertilizer and biosolids, lbs/acre	35		
5	(-)	Nutrients supplied in irrigation water, lbs/acre	0		
6		**= Additional Nutrients Needed, lbs/acre**	133.00	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)	133.00	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**	15.833		

Comments

This is a representative nutrient budget for Buffalo Canyon Feeders LLC for spreading manure using a Nitrogen based application for a winter wheat silage crop. The spreading rate of 15.83 tons/acre would be used for a one year Nitrogen application rate for winter wheat silage production. The representative example would also be applicable for a winter wheat grain crop.

Field identification: Wheat		Year: 2021	Crop: Spring Wheat Silage/Grain - Example		
Expected Crop Yield: 70 bu/ac					
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	231		
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)	0		
4	(-)	Nutrients from commercial fertilizer and biosolids, lbs/acre	35		
5	(-)	Nutrients supplied in irrigation water, lbs/acre	0		
6		**= Additional Nutrients Needed, lbs/acre**	182.00	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)	182.00	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**	21.667		

Comments

This is a representative nutrient budget for Buffalo Canyon Feeders LLC for spreading manure using a Nitrogen based application for a spring wheat silage crop. The spreading rate of 21.67 tons/acre would be used for a one year Nitrogen application rate for spring wheat silage production. The representative example would also be applicable for a spring wheat grain crop.

Field identification: Alfalfa Year: 2021 Crop:80:20 Alfalfa:Grass Silage/Hay Example					
Expected Crop Yield:2.5 ton/acre DM (Approx 3 ton/acre As-Is Hay)					
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	15		
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			
5	(-)	Nutrients supplied in irrigation water, lbs/acre			
6		**= Additional Nutrients Needed, lbs/acre**	1.00	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)	1.00	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**	0.119		

Comments

This is a representative nutrient budget for Buffalo Canyon Feeders LLC for spreading manure using a Nitrogen based application for a 80:20 Alfalfa:Grass silage or hay crop. The spreading rate of 0.12 tons/acre would be used for a one year application rate for this Alfalfa:Grass silage or hay production.

Field identification: Alf_Grass Year: 2021 Crop:20:80 Alfalfa:Grass Silage/Hay Example					
Expected Crop Yield:2.5 ton/acre DM (Approx 3 ton/acre As-Is Hay)					
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	45		
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			
5	(-)	Nutrients supplied in irrigation water, lbs/acre			
6		**= Additional Nutrients Needed, lbs/acre**	31.00	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)	31.00	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**	3.690		

Comments

This is a representative nutrient budget for Buffalo Canyon Feeders LLC for spreading manure using a Nitrogen based application for a 20:80 Alfalfa:Grass silage or hay crop. The spreading rate of 3.7 tons/acre would be used for a one year application rate for this Alfalfa:Grass silage or hay production.