LA CROSSE SEED

FORAGE FIRST®
WHEN YIELD AND QUALITY MATTER®

NITRATE LEVELS IN FORAGE

	REPORTED METHOD (Dry Matter Basis)				COMMENTS
	Nitrate Nitrogen (NO_3-N)		Nitrate (NO_3)		
	% (Ions)	ppm	% (Ions)	ppm	
	<0.10	<1,000	<0.44	<4,400	Generally safe to feed. University of Missouri Extension states problems can already commence at 550 ppm NO3-N (2,500 ppm NO3), especially if feeding along with non-protein N sources.
	0.10 - 0.15	1,000 - 1,500	0.44 - 0.66	4,400 - 6,600	Safe for non-pregnant animals. Limit to 50% or less (DM basis) for pregnant animals. Some abortions possible at this level.
	0.15 - 0.20	1,500 - 2,000	0.66 - 0.88	6,600 - 8,800	Limit use to 50% total ration (DM basis) for all animals. Missouri Extension recommends limiting to only 25% of total ration between 1,100 - 3,400 ppm NO3-N (5,000 - 15,000 ppm NO3).
	0.20 - 0.35	2,000 - 3,500	0.88 - 1.54	8,800 - 15,400	Limit use to 35% or less of total ration (DM basis) for non-pregnant animals. DO NOT FEED to pregnant animals.
	0.35 - 0.40	3,500 - 4,000	1.54 - 1.76	15,400 - 17,600	Limit use to 25% or less of total ration (DM basis) for non-pregnant animals. DO NOT FEED to pregnant animals. Missouri Extension says anything over 3,400 ppm NO3-N (15,000 ppm NO3) should not be fed.... but if it must be fed, limit to less than 15% of total ration.
TOXIC	>0.40	>4,000	>1.76	17,600	Potentially toxic. DO NOT FEED.

REFERENCES:
University of Missouri, University of Wisconsin, University of Tennesse, North Carolina State University, South Dakota State University