

## ABSTRACTS

tlx-r<sup>0</sup> EFFECT OF NITROGEN SUPPLEMENTATION ON IN VITRO DIGESTION  
 KIN-ETICS OF PERENNIAL GRASSES. D. J. R. Chemey and J. H. Chcm.y Dc<sup>of</sup>  
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Objecvnes were to assess the influence of N fertilization of reed canarygrass and timothy on fiber  
 Mi"i?i?"n'^" ^\*""- ^n|^rr^i ^""^" ^ ^ digestion were higher for grass fenilized with 214 kg of  
 N/ha (k=.06 extent=73%) than for unfertilized grass (k=.04, extent=67%) when no supplemental  
 N was added to in vitro incubations. When urea (.5gA- of buffer) was added to the incubations  
 there was no difference in extent of fiber digestion between fertilized and unfertilized grass'  
 indicating that that N limited fiber digestion of unfertilized grass in vitro (CP=9.5%) Rate of  
 tit>er digest of N/ha compared to unfertilized grass. In another study, trypticase (4g/L of buffer)  
 added to in vitro incubations increased extent of digestion of grasses by 2% compared to no N  
 supplementation, while added urea increased fiber digestion of unfertilized grass by 10% After  
 ih, urea treatment resulted in ammonia concentrations 2-fold higher, and trypticase treatment  
 ammonia concentrations 2-fold higher, than in untreated samples. It appears that trypticase did not  
 meet N requirements of rummal microorganisms for maximum fiber digestion during the first 24h  
 of digestion. Podium. ^

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