Forage Focus - EQUINE - August 2006

Horse Grazing Preference Study

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Horses have long been known to be selective grazers. Horse pastures often have uneven patches of both over-grazed and undergrazed grasses. Do horses prefer different species or varieties of grass? To answer this question, a horse grazing study was conducted in Ohio. Four different grass varieties were evaluated: 'Tetraplus' perennial ryegrass, 'Cambia' orchardgrass, 'Tekapo' orchardgrass and 'Duo' festulolium. The grasses were planted in a quadrant pattern in three replications in 1/3 acre paddocks. The goal of the study was to have spring, summer and fall grazing periods with two horses per paddock, observed for one hour in the morning and one hour in the afternoon, and recording every 5 minutes which quadrant the horses were grazing.

During June morning grazing, the horses appeared to equally graze all four varieties. During the August and October mornings, the horses preferred the orchardgrasses, followed by festuloium and perennial ryegrass. When all mornings were combined, the orchardgrass varieties tended to be preferred. During June afternoons, perennial ryegrass and festuloium were preferred, which is opposite of the June morning observations. Perhaps this is because these grasses were not grazed in the morning or there are nutritional differences in these grass species that occur throughout the day. During August afternoon grazing, the horses preferred the orchardgrass varieties followed by perennial ryegrass and festuloium. When all afternoons were combined, the horses preferred perennial ryegrass, followed by 'Cambia' orchardgrass, festuloim and finally 'Tekapo' orchardgrass. When all the data were combined, the orchardgrasses were preferred, followed by perennial ryegrass and festuloium.

	% of Five Minute Observations				
1 Hour Grazing Time	'Cambia' Orchardgrass	'Tetraplus' Perennial Ryegrass	'Tekapo' Orchardgrass	'Duo' Festuloium	
June Mornings 6/3 to 6/28	29	26 25		21	
August Mornings 8/3 to 8/23	26	15	41	18	
October Mornings 10/6 to 10/22	29	12	38	22	
Total All Mornings	28	19	33	20	
June Afternoons 6/3 to 6/28	21	37	17	24	
August Afternoons 8/3 to 8/17	32	24	25	19	
Total All Afternoons	25	32	20	22	
Total All Mornings and Afternoons	27	24	28	21	

Table 1. Equine Grazing of Orchardgrass, Perennial Ryegrass and Festuloium.