Using Simulated Rainfall Techniques to Estimate Dry Matter Losses and Changes in Nutritive Value for Wilting Orchardgrass Forages. (C06-coblentz110925-Poster)

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Abstract:

A study was initiated to investigate the effects of simulated rainfall on concentrations of fiber components, N, and estimates of ruminal DM degradability for wilting orchardgrass hay. Concentrations of NDF increased linearly ($P < 0.022$) with simulated rainfall, regardless of the moisture content at the time that rain damage occurred. However, the magnitude of change generally was larger when the forage was dry at the time it received rain damage. Effects of drying method (oven-dried at 50 C or air-dried) on concentrations of NDF were always significant ($P < 0.020$). However, NDF was greater for air-dried forage when rainfall occurred immediately after cutting, but was higher for oven-dried forage when forage moisture contents were desirable for baling or excessively dry. Concentrations of other fiber components generally followed similar trends in response to rain damage. Conversely, estimates of ruminal DM degradability always decreased ($P < 0.036$) as simulated rainfall increased. Nitrogen content was only marginally affected by rainfall. These data indicate that rain damage increased concentrations of fiber components and decreased ruminal DM degradability for wilting orchardgrass hay.

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