Effects of Soybean Hull Feeding on the Feed Intake, Chewing Time and Milk Production

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Soybean Hull (SH) is by-product of soybean oil or powder processing. SH contains high content of easily degradable fiber. So, it can be expected that SH could be used for dairy cattle rations successfully. In the present study, effects of SH feeding on the feed intake, chewing time and milk production were investigated. Three rations A:55% concentrate, 45% second cut hay B:55% concentrate, 25%, SH 20% second cut hay, C:55% concentrate, 10% SH, 35% rice straw were formulated. These three rations were allotted to 3×3 Latin square design using 3 dairy cows (1 period 14 days). Then feed intake, chewing time and milk production were measured. Significant (p<0.05) higher values of feed intake, milk production were observed in 25%SH feeding than in only hay feeding. Adversely, chewing time and milk fat content showed significantly (p<0.05) lower values in 25% soybean hull feeding than in only hay feeding. Combined feeding of SH and rice straw caused the increment of feed intake compared with the hay only feeding or hay +SH feeding. Chewing time milk production, milk fat showed similar values in combined feeding of SH and rice straw to 25% SH feeding. With all above results, it can be concluded that SH can be used to dairy cattle ration and that combination feeding with rough forage is much beneficial.

Key Words: Soy bean hull, Feed intake, Chewing time, Milk production