

Effect of Ensiling Broiler Litter with Fermented Milk as Inoculant

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Abstract

Litter material was obtained from broiler birds, reared on chaffed straws of wheat (T1 to T4) and paddy (T5 to T8) at floor spaces of 0.15sq.m/bird (T1, T2, T5 & T6) and 0.18sq.m/bird (T3, T4, T7 & T8). The litter material was then mixed with 10% molasses (DMB). The treatment groups (T2, T4, T6 & T8) were inoculated by 1% (v/w) fermented milk on fresh weight basis whereas control groups (T1, T3, T5 & T7) were not inoculated. All the stacks were covered with polythene sheet and ensiled for 21 days. Pooled over values of crude protein in the control groups, where fermented milk was not added, averaged 24.71 % before ensiling and it reduced to 20.57 % after ensiling. The corresponding values in the treatment groups, where fermented milk was added, were 24.76 and 21.31 %, respectively, indicating significantly ($P < 0.05$) lesser losses of crude protein when ensiled with fermented milk. The pH of silage reduced from 7.6 to 6.0 in control group, whereas it reduced from 7.8 to 5.6 in the stacks in which fermented milk was added. Reduction in pH of silage is due to higher production of volatile fatty acids in the ensiled material inoculated by fermented milk, thereby indicating beneficial effect of fermented milk in silage making.

Key words: Broiler litter, Paddy straw, Wheat straw, Silage inoculation, Fermented milk.