Forage Focus - DAIRY - April 2004

## **EFFECT OF LAST FALL'S ALFALFA RESIDUE ON FIRST CUTTING YIELDS & QUALITY**

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The Columbia Forage Council conducted a study in which 20 varieties of alfalfa were planted and after the second year, half of each plot was mowed in the fall, leaving fall growth on the other half. In the spring of 1990, they clipped the forage on four varieties and sent them in for analysis, where the residue from new growth was hand separated and analyzed (see table).

Forage quality of new growth, residue, and harvested forage (new growth with residue) is presented. Note that residue accounted for only 6.5% of the harvested forage when there had been about 1 ton dry matter of forage left in the field the previous fall. This amount of residue lowered crude protein by 0.7% and raised ADF by 1.6% and NDF by 1.9%.

When difference in forage yield and quality is run through milk/acre calculations, the quality change lowers return/acre by about \$7.00. This amount is too small to justify doing any clipping or harrowing to remove last fall's residue before new growth begins, especially when stand damage from driving over the field is considered.

Residue looks much worse than the problem really is; it is recommended that fields not be clipped or harrowed to remove the previous year's residue prior to the beginning of spring growth.

Factor	% Residue*	% CP	% ADF	% NDF
New growth		21.8	32.8	39.4
Residue	6.5	10.3	57.3	68.7
Harvested Forage		2 1.1	34.4	41.3
Change		- 0.7	1.6	1.9
* Residue as percent of total forage dry weight				

## Effect of Previous Year's Residue on First Cut Forage Quality, Wisconsin