

FORAGE QUALITY



MANAGE ALFALFA HARVEST TIMING TO OPTIMIZE YOUR FORAGE QUALITY AND YIELD

The relationship between alfalfa harvest stage and forage quality is well known and quite simple: Advancing stage of maturity provides more time for the accumulation of overall alfalfa yield, while forage quality declines with advancing maturity. Harvesting at more advanced maturity not only allows for increasing yield, it also allows alfalfa plants to store more carbohydrate in their taproots. More mature plants store up more energy to maintain plant health during winter and for regrowth after cutting.

Alfalfa producers can strike the balance between yield and forage quality, by harvesting at an alfalfa growth stage that consistently provides forage quality that is 'good enough' to meet the needs of their animals or the markets they produce for. Harvest management that helps maximize potential yield for a given field or production situation, while also meeting the forage quality needs of the operation or its markets, can help positively impact the profit potential associated with your alfalfa fields.

There might not be an advantage to producing higher quality hay than your animals need unless you can sell surplus forage into a market that will pay for extra forage quality and feed value. In general, the table below shows 'average' forage quality levels that you might experience from alfalfa harvested at various maturity stages.

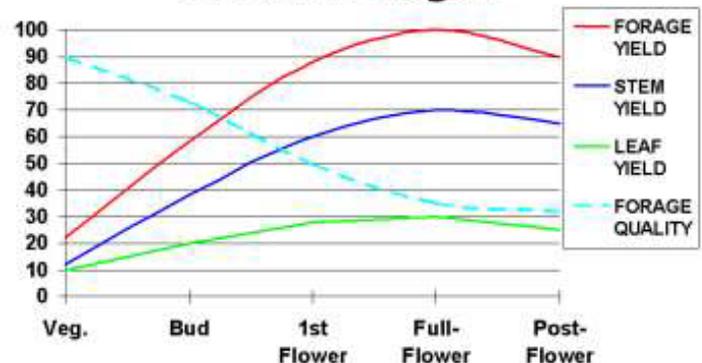
Expected Forage Quality Values as Alfalfa Advances in Maturity

Stage of Maturity	Crude Protein	Acid Detergent Fiber	Neutral Detergent Fiber	Digestible Dry Matter	Relative Feed Value Index
(----- % of dry weight -----)					
Vegetative	>22	<25	<34	>69	>188
Bud	20-22	25-31	34-41	67	166
Early Bloom	18-19	32-36	42-46	62	131
Late Bloom	16-17	37-40	47-50	60	115
Seed Pod	<16	>41	>50	<58	<108

Source: N.P. Martin and J.G. Linn, University of Minnesota

Cut alfalfa at the bud stage for best compromise between yield and quality for dairy hay. Cutting at later stages can provide more yield if forage of lesser feed quality is 'good enough' for the intended animal use and performance level.

Yield vs. Quality at Different Growth Stages



Harvest conditions can have a big impact on alfalfa hay and haylage quality as well. Wide windrows that cover most of the swath width of the mower-conditioner are best for rapid drying, to help preserve more of the highly digestible carbohydrate present in plants at the time of cutting. Cloudy days and/or rain that prolongs drying of cut fields will almost certainly decrease forage quality. Hot summer weather leading up to cutting can lead to forage quality less than expected. Some hay growers might opt to let a summer cutting go to a later maturity stage with the intention of producing dry cow or feeder hay. Always pay attention to leaf shatter. Leaf retention is a must if you wish to retain the forage quality of the alfalfa you produce. If hay becomes too dry, leaves can shatter during raking and baling, and when that happens you lose the highly digestible leaves, containing the highest concentration of protein. Growers in extreme low humidity areas often rake and bale late in the evening to take advantage of dew moisture to help reduce leaf shattering. Finally, avoid excessive soil scraping during raking and baling to avoid adding dirt/ash that is indigestible.



CHOOSE ALFALFA PARTNERS SW4107 OR SW5213 FOR PROVEN HIGH YIELD POTENTIAL

MANAGE YOUR HARVEST SCHEDULE TO AIM FOR THE FORAGE QUALITY YOU NEED