

LEAF PERCENT ACCOUNTS FOR UP TO 77% OF THE VARIATION IN ALFALFA FORAGE QUALITY.



A new predictive equation to help manage and get the most out of your alfalfa stand.

Forage Genetics International (FGI) is a leader in forage innovation and recently developed the Leaves Enhance Alfalfa Forage (LEAF) test to identify and measure a major source of quality variation in alfalfa: the leaves. By developing this percent leaf prediction equation, FGI supports farmers with a novel way for them to quantify their alfalfa quality and monitor their management practices.

WHY ARE LEAF PERCENTAGES IMPORTANT?

One of the main goals for a stand of alfalfa is high quality because it's directly correlated to its performance. A beautiful field of alfalfa could get tested and the results come back lower than expected, leaving the question, "What happened?"

Leaf loss could be the answer. It's one of the major factors impacting harvested alfalfa forage quality and yield. A few leaves lost here and there can add up quickly.

Alfalfa leaves have a relative forage quality (RFQ) on average of 440, where stems are on average around 80 RFQ (FGI Research 2021).

Typically, the average leaf to stem ratio is 50:50 but when leaf percentages fall below 45%, quality and yield can be affected. The higher the percentage of leaves, the higher the RFQ. In fact, leaf percentage accounts for up to 77% of the variation in forage quality, and when growers sell their alfalfa based on RFQ, it makes leaves a big deal (FGI Research 2020). A 2% difference in leaves can affect a stand's RFQ by almost 10 units.

PUTTING LEAF TO WORK.

With the LEAF test, available through **Calibrate® High Quality (HQ) Forage analysis**, growers can identify and quantify a major source of quality variation in alfalfa. When checking leaf percentages, there are three thresholds to keep in mind.

>45%: Goal Achieved.

No action necessary.

40-45%: Caution

Some leaf loss has occurred.
Room for improvement.

<40%: Significant Leaf Loss Has Occurred.

Contact your agronomist to assist in troubleshooting.

% LEAVES	RFQ
40	132
45	150
50	172
55	196
60	224



LEAF LOSS CAUSES AND WHAT YOU CAN DO

Leaf loss can be additive throughout the season and come from multiple sources, but by narrowing down the causes of leaf loss in their stand, a grower can better manage their alfalfa and make management decisions.

CAUSES	SOLUTION
Leaf diseases , such as fungal diseases.	Fungicide applications Choosing a different variety of alfalfa with resistance.
Pests that can defoliate a stand.	Pest management Choosing a different variety of alfalfa with resistance.
Equipment settings and raking types can mechanically displace leaves during management and harvest.	Adjusting growing and harvest management practices.
Working alfalfa that is too dry i.e., less than 40% moisture, can also dislodge leaves.	Avoiding handling alfalfa when moisture is under 40%.



HOW DO I GET THE TEST?

Submit your alfalfa sample to a licensed lab for the **Calibrate® HQ analysis** available at the following labs:

SureTech® Labs
Dairyland Labs

Cumberland Valley
Rock River Labs

Dairy One

If you need a sample submission form, or for any other questions about this test, please contact labs listed above or info@calibratetechnologies.com.