NETAFIM NU UNIVERSITY

PROFESSIONAL STUDY PROGRAMS

IRRIGATION AND FERTIGATION RECOMMENDATIONS FOR ALFALFA

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Application rate ("/hr.) = $\dfrac{\text{231 x flow rate of a dripper (G.P.H.)}}{\text{spacing between lines (") x spacing between drippers (")}}$

***Crop Nutrient Requirements for 8.0 - 9.0 Tons/Acre**

	N**	P_2O_5	K_2O
Pre-plant - (lbs./Ac.)		75	150
Fertigated - (lbs./Ac.)		25	200
Total - (lbs./Ac.)		100	350

**Note: For Alfalfa establishment.*
***Note: In the case of poor establishment and inoculation, an application of 20.0 lbs./Ac. - N total is recommended between the first 2 weeks up to 3rd cutting.*

The irrigation recommendations are based on no rain. Efficiency of rain should be estimated at 80% and be deducted from the recommendations. Normally a rain of 0.15" - 0.2" or less should not be considered. Final decision should be made based on the above in addition to common sense, judgement and local experience. Soil moisture sensors or tensiometers can be very helpful tools.

If it rains such that a week has gone by without irrigation, then the system will be turned on just to fertigate the weekly scheduled amount. Such a technical fertigation should last no more than one (1) hour including filling up, injection and flushing time.

Crop Stage	Sprouting - full coverage	Full coverage - cutting
Days	0 - 7	7 - 30
Irrigation ("/day)	0.15 - 0.25	0.25 - 0.35
Intervals (days)	1	1
Fertigation (lbs./Ac/stage-K)**	2.0	2.0

**Note: For existing stand.*
***Note: The daily fertigated P should be 0.5 lbs./Ac. - P_2O_5*

The above listed guidelines are based on general assumption that the levels of Phosphorous and Potassium in the soil are medium to low.

If soil analysis is available, these recommendations should be adjusted accordingly, based on the analysis recommendations.

The same is applicable to Calcium, Magnesium, Sulfur and minor elements. All of these can be applied as pre-plant (liming) or foliar (minor elements). In case of big deficiencies, those elements can be fertigated (mainly Ca, Mg, S, B).

Under high yield conditions, short cutting intervals or low temperature and poor inoculation, small amounts of Nitrogen may be required.

Molybdenum should be added pre-plant based on soil analysis. Boron should be applied at the rate 2.0 - 4.0 lbs./Ac. - B. pH should be kept at 6.5 - 7.0.

Consult with your local fertilizer supplier or Netafim Agronomist in the adaptability of the various fertilizers to drip systems.

A liquid fertilizer at the ratio of 0:1:4+B is recommended.

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