TOP 10 FOR 10 TON ALFALFA

CROPLAN®

By WINFIELD

1. **Variety Selection –** Select the best alfalfa genetics to match the ideal variety to each field and your management practices
   - Fall Dormancy (FD) and Winterhardiness (WH) - higher FD number mean higher yield potential; lower WH number mean more cold tolerance and stand persistent
   - Disease and pest resistance - important for stand survival, recovery after cutting, and good forage quality
   - Yield and quality
   - Intended use: hay, haylage, or grazing

2. **Coated Seed –** Coating helps improve stand establishment and can increase seed efficiency
   - First 30-60 days after seeding are the most critical time
   - GroZone® plus Advanced Coating® ZN 34% (CV) includes:
     - Nitrogen-fixing rhizobium bacteria
     - ApronXL® Fungicide – protect seedlings from several pathogens
     - WinField™ Ascend® PGR, growth stimulant to jumpstart each seed
     - Micronutrient package- Zinc (Zn) and Manganese (Mn)

3. **Stand Establishment –** Improve alfalfa stand establishment
   - Seedbed preparation–pack soil, apply seed, and pack soil again
   - Depth of seeding– firm seed bed helps achieve ideal planting depth of 3/8”
   - When to plant– Spring: plant seed shallower vs. Fall: plant seed deeper
   - Equipment – air flow, drills, or Brillion type seeder. Make sure seed is covered, but not buried
   - Seeding rate – do not change seeding rate for coated vs. non-coated seed, 20 lbs. / ac. in Midwest
   - Coated seed – GroZone® plus Advanced Coating® ZN 34% (CV)

4. **Reading the Stand –** Evaluating alfalfa stands and rotating them regularly will help increase total production
   - New Seeding - Plant Density > 15 plants / sq. ft. in fall of seeding year or > 6 plants / sq. ft. during 2nd production year is non-yield limiting
   - Established Alfalfa - Stem Density greater than 55 stems / sq. ft. is non-yield limiting
   - Root score of 0-2 is a healthy stand for high production
   - Nitrogen credit of stand rotation can range between 90 and 140 lbs. N per acre

5. **Insect Control –** Identify and control insects to maintain plant health and quality
   - •Alfalfa weevil– 30-40% of plants show any feeding - 1st crop concern and 2nd crop regrowth
   - •Potato Leafhopper– 1 adult in 10 sweeps in new seeding alfalfa, 2nd, 3rd, or 4th crop regrowth. June, July, and August concern
   - •Alfalfa (tarnished) plant bugs – shriveled leaves
   - •Aphids – spotted, blue, pea, cowpea aphid
   - •Additive effect of insects and environmental issues (too wet, too dry)

6. **Weed Control –** Genuity® Roudup Ready® Alfalfa (GENRR)
   - •Spring seed GENRR without cover crop – non HEL soils. Spray weeds at 3-4" tall for fast stand establishment
   - •Spring seed GENRR with oats as cover crop – harvest oatlage at boot stage and spray out weeds/oat regrowth
   - •GENRR established stands – control weeds when immature, forage yield and quality can be greatly reduced
   - •Conventional with/without cover crop – same recommendation as GENRR but use conventional chemistry at labeled rate and growth stage
   - •Summer/early fall seed GENRR alfalfa – winter annual weeds can be easily controlled in fall with RR system

7. **NutriSolutions® Tool and Soil Test –** manage macro and micro nutrients for optimum production
   - •Plant tissue test to verify need of micronutrients and secondary nutrients
   - •Verify need of Winfield™ MAX-IN® Boron, Sulfur, and Ultra ZMB®
   - •Apply WinField™ Ascend® PGR, promotes plant growth
   - •Soil test – to take inventory of the soil
   - •pH 6.8 – 7.2 (lime alfalfa ground one-two years before seeding)
   - •Potassium (Potash or K soil test) = 300 lbs or 150 ppm
   - •Phosphorous (P soil test) = 50 lbs or 25 ppm

8. **Minimize wheel traffic and soil compaction –** compacted soil can reduce yields
   - •Use lightest equipment – reduce wheel loads; 30-50% expected yield loss in tracks
   - •Minimize trips across field – use wider equipment; 80-90% of most fields covered by tracks

9. **Optimize cutting management –** harvest alfalfa for highest yield and quality potential
   - •Use PEAQ stick to estimate harvest timing. Cut at 24 -26" to provide 170-180 RFQ
   - •Cut every 28-34 days during summer growth
   - •4 + 1 cuts per year (fall cut – when you expect less than 500 heat units)

10. **Harvest and Storage management –** Minimize leaf loss from field to storage; minimize loss from storage to feedout
    - •Leaves = 400+ RFQ; Stems = < 100 RFQ
    - •Mechanically condition the stems, especially for dry hay, not required for haylage; Stems 60-70 RFV at flower and decline with maturity
    - •Use wide windrows; get to 50% moisture as fast as possible
    - •Use a forage inoculant for silage and a mold inhibitor (preservative) for dry baled hay