Hemp Program

APPROACH

- For over 30 years Midwestern BioAg (MBA) has been providing growers with a systems approach to improving soil health. Understanding the impact soil health has on crop quality and yield potential is MBA's foundation.
- As hemp is placed into rotation, crop quality becomes more of a priority than ever before. MBA along with Purple Cow Organics (PCO), have been your resource for providing premium inputs for improving soil health, plant health and crop quality. MBA's new "hemp program" is designed to help scale high-quality production of hemp in conventional or organic systems, providing essential inputs for successful hemp production.
- Most current information regarding hemp production is small scale pots/greenhouse (in-door) production. However, as important as that information is, taking hemp to field scale production introduces many more uncontrollable influences:
  - Weather
  - Pest infestations- weeds, insects, disease
  - Soil structure and drainage
  - Mechanical methods (tillage/planting/harvesting)
- All of these influences now need to be taken into account. MBA/PCO has provided recommendations for hemp production. These recommendations are based off previous hemp data from outside sources and experience MBA/PCO has with premium products.

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- **Pre-Plant Field Conditions**: hemp seed is small, similar to wheat so many growers can utilize a seed-drill at planting. It is important to start with proper seed bed preparation. Hemp seed requires 45-50 degree soil temperature to initiate germination.
  - Utilize Purple Cow Classic compost and/or BioCal/OrganiCal to amend soils
  - Incorporating a pre-plant custom dry blend will help balance fertility
  - Utilize starter fertilizer if possible
  - In-furrow applications of CX-1 and L-CBF will assure -
    - Uniform emergence
    - Stronger, more vigorous seedlings
    - Improved nutrient uptake, especially in cold/wet soils
- **Foliar Treatments:** in-season recommendations of CX-1 and L-CBF will help with vegetative growth and assure proper nutrition for enhanced plant health and optimized crop quality.
  - Beginning at 5th leaf-set, hemp goes into vegetative growth
    - 1:1 ratios for CX-1 and L-CBF ensure proper microbial activity
    - Optimal application every 7 days will result in increased yield and disease resistance
      - A minimum of 2 foliar treatments, one at 5th leaf set and one at bud/preflower
    - Note: Reproduction begins when the day length is at 12 hours or less
- **Post-Harvest:** hemp is a fibrous crop, if the crop is not being grown for fiber, it will need to be handled properly. The best way to expedite residue breakdown and management is to treat it before soil tillage. This can be accomplished:
  - Application of CX-1 and L-CBF will result in -
    - 1:1 ratio for proper microbial activity
    - Microbial activity initiating decomposition
    - Carbon sources stimulating microbial activity
    - Breakdown of organic matter and building soil nutrition for the next crop

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