### **Growing Dry Beans in Southern Alberta.**



#### Start by managing your previous crop residue.

Apply 15-17 lbs of Edge Apply your Fertilizer: 100 lbs of N total 35 – 55 lbs of P 3-5 lbs of Zn if needed.

### Work both in as recommended.



When finished your seedbed should have a firm, level surface and yet be loose and airy.

### Best practice is to build ridges prior to planting.



Ridges warm up quickly promoting early emergence. Create a nice loose warm zone for early root growth. Save time later in June not having to hill the beans.

### **Choosing the right seed.**

 Buy good disease free seed from companies located in areas where good phytosanitary standards are in place.

• Make sure the variety is registered in Canada

• Find the earliest variety available.

• Find your market before you plant your seed.

## Use a planter for precise placement and spacing.



**Optimum planting date is between May 15 – May 25.** 

Soil is warmer for germination.



- Late enough most years to avoid late spring frost.
- Late enough to avoid flowering during the peak solar radiation levels in late June early July.
- Early enough to avoid early September frosts.

Irrigate lightly if needed immediately after planting, but <u>not</u> once the beans crack the soil. They can push a crust, but will get stuck in mud.

Good early stand establishment is very beneficial to final yields.

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If you planted without a hill, run through with a pocket ripper or cultivator to form a ridge. Spray at the 1-3 true leaf stage: Use a Viper – Basagran tank mix. Use lots of water for optimum coverage. Spray into the heat of the day, not out.



# Water sparingly during June, until the weather starts getting hot.



### Remember when irrigating.

• Beans do not like their foliage wet.

• It is not the amount of water that causes problems, but the amount of time the beans remain wet.

 Best practice is to cycle the soil moisture between wet and dry.



Late June – Early July, water use is low, but temps are rising, the bean roots are shallow, but it is time to start banking water for later in the season.



- Prior to row closure try to dry the top of the soil to dry off any sclerotia apethesia.
- Soils that are continually wet are ideal for sclerotia germination.



A combination of row closure, flowering and dry soil surface signals it is time for a fungicide application.

Follow the fungicide application with a good soaking, 2 x ¾ inches.



- Once the rows are closed, the plants will pull from deeper in the profile.
- Let them draw on the water you applied and the banked water until the soil surface is dry again.

## Without these dry cycles you risk considerable yield loss to diseases.



White mold is our most devastating disease. Too many days of wet soil and humid canopy can create the perfect environment for it to grow.

## White mold will girdle the main stem, killing the plant and reducing your yield considerably.



Bacterial blights can also be an issue, an application of Copper may needed when first signs of the disease appear.

### End of July, pods are formed and need to fill.



Plants are weakening, mold is a major threat at this time. Wait until the soil surface is dry, and apply another recommended fungicide, and another 1.5 inch of water.

Mid August, beans are starting to ripen. Mold threat is lower, but can still affect yield. Dry the canopy down, and water as needed. Usually in 1" apps.



When 80% of pods are buckskin colored, time to undercut or windrow.

A better option to reduce the risk of quality deterioration due to rain, is to spray with a recommended desiccant and leave stand until dry. Knife or windrow when the bean plants are damp, to prevent shelling, usually early morning.

## And harvest in the afternoon.

These thrashing methods are changing rapidly right now.

The trend is quickly changing to specialty thrashers.

PICKETT

## Take the time to ensure you are thrashing a good clean un-damaged product.



### Questions?