

# **FIELD CROPS**

Agdex: 120.50

Source: P. Pankiw Canada Agriculture Research Station Beaverlodge, Alberta

Legume Seed Production

# HARVEST AND POST-HARVEST MANAGEMENT

### Maturity

Alsike is a sure crop for seed production. It usually starts blooming in late June and finishes by late July, taking 3 1/2 to 4 weeks to mature after pollination. Harvesting may commence after the middle of August when heads are brown.

Red clover double cuts are similar in blooming period to alsike and require 4 weeks to mature. Single cuts bloom about 2 weeks later, produce more flowers and usually more seed.

Sweetclover requires 4-5 weeks after pollination for mature seed. The yellow blossomed varieties bloom at the same time as alsike, in late June and early July, and can be harvested in late August. The white blossomed variety, which bloom later, take longer to mature and are quite often damaged by frosts.

Birdsfoot trefoil requires about 4 1/2 weeks to mature and should be harvested when less than 5% of the pods shatter or when the majority of the pods are light brown or pale green.

Sainfoin requires about 4 weeks to mature and blooms in late June and early July. Swathing may commence after mid-August.

Alfalfa requires about 6 weeks to mature. It also starts bloom in early July and continues till mid-August, unless the flowers are set. Seed set after August 1 rarely matures unless September is open.

# Swathing and Combining

Alfalfa - As this crop tends to shatter the least, there is more flexibility in times of swathing and later combining. It also lends itself to straight combining after heavy frosts or about 10-12 days after defoliation. Swath when 75% of pods are dark brown or black. Red clover, alsike, white clover and sweetclover - Cut when most heads are brown or black. As mature heads tend to shatter, cut when plants are damp. Usually a week is sufficient to cure the swaths. Where stands are heavy or with many weeds and seed is a good price, defoliation may be practical, followed in about 7-10 days by straight combining.

If there is bad weather after swathing, an off-set pick-up attachment will raise the swath without much seed loss.

Birdsfoot trefoil - After swathing, combine within about 2-3 days, otherwise extensive shattering will result. As a rule, there will be a lot of green material and the seed should be spread out, dried and rough cleaned before storing in bags.

<u>Combining</u> - Wind adjustment, type and speed or reel, ground speed and cylinder speed are important factors. Too much wind will blow seed or unthreshed pods over the back of the combine. Too fast a ground speed takes in too much material and does not allow for good separation. Sieves should also be checked and cleaned. Too clean a seed in the hopper often means seed on the ground. It is better to have some chaff and to clean it out later with a fanning mill. Follow manufacturers instructions and also take samples of chaff behind the combine.

# Seed Cleaning

In the growing of pedigreed seed, seed cleaning is important to bring the seed up to standard. Most seed companies have adequate seed cleaning facilities and many cooperative seed cleaning plants are capable of cleaning forage seeds. However, having clean fields should be the major objective of seed growers.

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#### AFTER HARVEST

### Burning

Where the crop residues are heavy it may be advidable to burn, preferably in the fall. This form of sanitation often reduces disease and certain injurious insects. Spring burning has to be done early, otherwise it will retard growth and delay flowering.

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#### Fall Cultivation and Weed Control

Where row cropping is practiced, fall cultivation will destroy weeds, incorporate straw and also loosen soil for better moisture penetration. Also herbicides can be applied in the fall as the legumes (except sweetclover) can withstand the higher dosages necessary to control many weeds.

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