



# Judging Seed Samples

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We grow crops for several purposes:

- as seed for next year's crop
- as feed for livestock
- to process as food

The suitability of crops for each type of usage depends upon several factors. By judging crop samples, you can learn to identify major differences in crop type and to recognize high quality products.

When judging seed samples, keep in mind what the seed is used for: to produce a vigorous, even stand of plants which will give a high yield of good quality crop. If seed is to grow properly, it must be uniform, fully mature and free of damage from weather, insects, diseases or machinery.

## Maturity

- Mature kernels are plump and of normal colour.
- Green or shriveled seed shows that the crop was not mature when harvested.
- Moisture content should allow for safe storage.

## Machinery Damage

- Shows up as cracked or broken kernels.
- Over-drying will turn grain from yellow to dark brown.

## Weather Damage

- Reduces the length of time needed for the germination of the seed.
- Sprouted kernels and bleached seed indicates damage.

## Insect Damage

- Can be identified by holes in the seed and by the presence of flour-like material in the sample.

## Disease

- Signs include mouldy seeds, discoloured seeds and the presence of sooty looking spores (black spots) on the seed.

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## Impurities

- Reduce the amount of good seed in the sample and cause difficulties in seeding.
- Includes: seeds from other crops, straw, chaff, mud, weeds or other foreign materials.

More information on judging seed samples is also available in the fact sheet “Judging Horticulture”.

Sections of the Judging Fact Sheets were adapted from the 4-H Ontario Judging Toolkit with the permission of the Ontario 4-H Council.

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## Manitoba 4-H Contact Information

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1129 Queens Avenue Brandon, MB R7A 1L9  
Ph: (204) 726-6613 Fax: (204) 726-6260  
4h@gov.mb.ca  
www.manitoba.ca/agriculture/4-h  
www.4h.mb.ca