



# Approaching Harvest



## Plant description at maturity

Choose representative sample plants, not stressed by disease, lack of N or drought. Select grain from the tallest ears (primary tillers) and from the centre of the head length and the outside grains of each spikelet (group of 2-4 grains across). These are the most mature grains. Crops mature at 1-2% DM/day with barley being the fastest. Periods of very cool or hot weather can alter the speed of maturity by 1-4 days.

Cropping farmers may be familiar with the use of Zadock's decimal code cereal growth stages (GS) to identify the following growth stages:

### **Early** 30% DM "very late milk" stage (GS 79)

Squeezed grain has a milky liquid left and is more like thick white juice. Stem is green, lower leaves are beginning to yellow, upper 2-3 leaves are fully green. Plant is relocating resources from bottom leaves into grain, leaving yellow colour.

### **Then 2-4 days later with increasing yield (0.5-1 t/ha DM):**

### **Early** 33% DM "very soft dough" stage (GS 81)

Squeezed grain has very little milky liquid left and is very soft and pliable. Stem is green, lower leaves are partly yellow, upper 2-3 leaves are fully green.

### **Then 2-4 days later with increasing yield (0.5-1 t/ha DM):**

### **Good** 35% DM "soft dough" stage (GS 83)

Squeezed grain has almost no milky liquid left and is soft and pliable. Stem is green, lower leaves are mostly yellow, upper 2-3 leaves are fully green.

### **Then 2-4 days later with increasing yield (0.5-1 t/ha DM):**

### **Best** 38% DM "cheesy dough" stage (GS 85)

Squeezed grain firming up with no milky liquid left but still soft and pliable like good putty. Not yet crumbly like chalk. Stem is green, lower leaves are yellow, upper 2-3 leaves are mostly green but just starting to go yellow. Plant has almost finished progressively relocating stored resources from bottom leaves into grain, turning them yellow before drying off.

### **Then 2-4 days later:**

### **Good** 41% DM "firm dough" stage (GS 87)

Squeezed grain has no milky liquid left and is firm, but between pliable and crumbly. Stem is green to yellow at base, lower leaves are drying. Upper 2-3 leaves and head are yellowing.

### **Then 2-4 days later:**

### **Late** 45% DM "hard dough" stage (GS 90)

Grain will dent by thumbnail but is chalky and crumbly. Stem is green to yellow, lower leaves are mostly dry, upper 2-3 leaves are yellow. Past last real silage stage, significant compaction and quality and utilisation problems.

Consider leaving to harvest for grain at this stage.

For further information contact Agricom, your local seed retailer or Ross Hanson, Crop & Food Research, Lincoln (0274 535 507).

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