

# FORM C - 1 Corn Maturity Code-6 Lab Determinations 2008



|                                   |  |
|-----------------------------------|--|
| YEAR, CROP, FORM, MMDD<br>(1 - 7) |  |
| 8 4 4 _ _ _ _                     |  |

|  |
|--|
|  |
|--|

Date Sample Received in Lab: \_\_\_\_\_

### EAR WEIGHT

- |  |                        |               |
|--|------------------------|---------------|
| 1. Weight of third and fourth ears and loose kernels ..... | <b>Grams to Tenths</b> | 401<br>· ____ |
| 2. Weight of remaining ears and loose kernels .....        | <b>Grams to Tenths</b> | 402<br>· ____ |

### GRAIN WEIGHT and MOISTURE DETERMINATIONS

Shell grain from the third and fourth ears. If ears are too wet to shell easily, dry them for a short period at no more than 70 degrees C, before shelling.

- |  |                              |               |
|--|------------------------------|---------------|
| 3. Weight of all grain shelled from the third and fourth ears at time of moisture test . . . . | <b>Grams to Tenths</b>       | 404<br>· ____ |
| 4. Moisture content of shelled grain .....   | <b>Percent (One Decimal)</b> | 405<br>· ____ |

***For small samples, use the formula on the back of this form for moisture percent***

5. Was the grain used for the moisture determination oven dried and/or wetted to enable processing of the sample?
- YES** – Enter code from below.       **NO** – Enter code 4.....

**1 = Sample was oven dried only**  
**2 = Sample was wetted only**  
**3 = Sample was oven dried AND wetted**

Lab Technician \_\_\_\_\_ Date Analyzed \_\_\_\_\_

MM DD

## FORM C-2: CORN

If the sample weight is too small for moisture test, sufficient grains of known moisture content (use same class and stage of maturity) will be added to the sample so that a moisture test can be made. The moisture content of the sample can then be derived using the following formula:

$$E = \frac{(A + B) D - (B \times C)}{A}$$

|       |  |        |         |
|-------|--|--------|---------|
| Where | <b>A = Weight of small corn sample</b> .....   | . ____ | Grams   |
|       | <b>B = Weight of additional grain required for moisture test</b> .....               | . ____ | Grams   |
|       | <b>C = Moisture percent of B</b> .....   | . ____ | Percent |
|       | <b>D = Moisture percent of A + B combined</b> .....                                  | . ____ | Percent |
|       | <b>E = Result : Moisture percent of small corn sample</b><br>(enter in item 4) ..... | . ____ | Percent |