

FORM C 1 CORN OBJECTIVE YIELD - 2022

OMB No.: 0535-0088
 Approval Expires: xx/xx/20xx
 Project Code: 104
 Survey ID: 3225



**United States
 Department of
 Agriculture**



**NATIONAL
 AGRICULTURAL
 STATISTICS
 SERVICE**

Date sample received in lab: _____

EAR WEIGHT

1. Weight of third and fourth ears and loose kernels.....
2. Weight of remaining ears and loose kernels.....

| | |
|--|------------------------|
| | 401 |
| | Grams to Hundredths |
| | . ____ |
| | . ____ |
| | 402 |
| | Grams to Hundredths |
| | . ____ |
| | . ____ |

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.....
4. Moisture content of shelled grain..... Percent (One Decimal)

| | |
|--|------------------------|
| | 404 |
| | Grams to Hundredths |
| | . ____ |
| | . ____ |
| | 405 |
| | Percent (One Decimal) |
| | . ____ |

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

| |
|-----|
| 410 |
|-----|

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

Lab Technician(s) _____ Date Analysis Completed _____

MM DD

FORM C-1: CORN

^{1/}If 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 A = Weight of small sample | . ____ ____ | Grams |
| B = Weight of additional grain required for moisture test | . ____ ____ | Grams |
| C = Moisture percent of B | . ____ | Percent |
| D = Moisture percent of A + B combined | . ____ | Percent |
| E = Result: Moisture percent of small sample (<i>enter in item 4</i>) | . ____ | Percent |