

# APPLICATION FOR CORN INBRED LINE ELIGIBILITY

(See Attached INSTRUCTIONS)

Applicant \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_ E-mail \_\_\_\_\_

Inbred Owner \_\_\_\_\_

A. Inbred Name \_\_\_\_\_

Experimental Designation(s) \_\_\_\_\_

B. Origin and Breeding History

C. Inbred Description

D. Procedure for Maintenance of Stock Seed

E. Seed Sample

Is this inbred line a result of five successive generations? Yes \_\_\_\_\_ No \_\_\_\_\_

Has the inbred name been reviewed in appropriate name databases to avoid duplicate naming?

Yes \_\_\_\_\_ No \_\_\_\_\_

Will application be made for intellectual property protection (i.e., Plant Variety Protection, Plant Breeders Rights, Utility Patents, etc.)? \_\_\_\_\_

As Applicant I affirm that the above stated inbred line is distinct, uniform, and stable and therefore merits certification based upon the information provided with this application.

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Date

## **INSTRUCTIONS FOR APPLICATION FOR CORN INBRED LINE ELIGIBILITY**

### **A. Inbred Name**

If an inbred name has not been assigned, the application can be evaluated under the experimental designation(s).

### **B. Origin and Breeding History**

1. Use terminology as defined in any basic university level plant breeding textbook.
2. Pedigree: Breeders shall maintain records that identify all sources of germplasm used in the development of the inbred. This includes, but is not limited to, public and private inbreds, public germplasm releases, germplasm collections, germplasm received from cooperators, breeding lines or clones.
3. Breeding Methods: The breeder shall also maintain records of methods used such as mass selection, recombination (hybridization of inbred lines or clonal groups), induced mutation, or biotechnological methods. In the case of natural population development, describe efforts to maintain an unrestricted genetic representation of the intact population.
4. All pedigree and breeding methods records shall be maintained by the breeder and made available to the agency upon request.
5. The identification of variants and/or the description of traits(s) discovered during development, or found in the finished inbred, may be required to provide evidence of stability and for inbred identification purposes.

### **C. Inbred Description**

State morphological, physiological, or environmental reactions that may be utilized by certifying agencies to differentiate and identify the mature plant inbred in the field. This is not meant to be an exhaustive description of the species as a whole, but a summary on how the proposed inbred may be differentiated from other representative inbreds of the species. The Corn Inbred Characteristics Form lists desired information. This may include physiological fingerprinting such as DNA or biochemical analysis.

### **D. Procedure for Maintenance of Stock Seed**

State the procedures and location where breeder/foundation seed is to be produced, maintained, and stored for the life of the inbred. Include the company or companies that are authorized to maintain this line.

### **E. Seed Sample**

A reference sample must be available upon request that is representative of the basic or breeder seed.

# CORN INBRED CHARACTERISTICS FORM

THIS FORM MAY BE USED TO PROVIDE A MORPHOLOGICAL DESCRIPTION OF A CORN INBRED. IT IS THE RESPONSIBILITY OF THE BREEDER OR THEIR DESIGNEE TO COMPLETE THIS FORM. PLEASE PROVIDE AS COMPLETE OF INFORMATION AS POSSIBLE, ITEMS NOTED WITH AN ASTERICK ARE REQUIRED.

**PEDIGREE NAME\*** \_\_\_\_\_  
**YEAR OF INTRODUCTION** \_\_\_\_\_  
**DEVELOPING COMPANY\*** \_\_\_\_\_  
**MAINTAINER OF THIS INBRED\*** \_\_\_\_\_

**FOR OFFICE USE ONLY**

VARIETY CODE \_\_\_\_\_

**TYPE\*** DENT \_\_\_ FLINT \_\_\_ FLOUR \_\_\_ ORNAMENTAL \_\_\_ POP \_\_\_ SWEET \_\_\_  
**MATURITY (Days from emergence to 50% of plants in silk)** \_\_\_\_\_ DAYS

**PLANT HEIGHT (To tassel tip)** \_\_\_\_\_ CM  
**TILLERS** YES \_\_\_ NO \_\_\_  
**AVERAGE NUMBER OF EARS PER STALK** SINGLE \_\_\_ TWO \_\_\_ THREE \_\_\_  
**ANTHOCYANIN OF BRACE ROOTS\*** ABSENT \_\_\_ FAINT \_\_\_ MODERATE \_\_\_ DARK \_\_\_

**LEAF COLOR** LIGHT GREEN \_\_\_ MEDIUM GREEN \_\_\_ DARK GREEN \_\_\_ VERY DARK GREEN \_\_\_  
**ANGLE OF LEAF FROM STALK** <30° \_\_\_ 30-60° \_\_\_ >60° \_\_\_  
**LEAF WIDTH (Widest point of ear node leaf)** \_\_\_\_\_ CM  
**LEAF MARGIN COLOR** WHITE \_\_\_ RED \_\_\_ OTHER (Describe below) \_\_\_\_\_

**SILK COLOR (3 days after emergence)\*** GREEN \_\_\_ PINK \_\_\_ SALMON \_\_\_ RED \_\_\_  
**ANTHER COLOR\*** YELLOW \_\_\_ PINK \_\_\_ RED \_\_\_ PURPLE \_\_\_ GREEN \_\_\_  
**GLUME COLOR\*** YELLOW \_\_\_ PINK \_\_\_ RED \_\_\_ PURPLE \_\_\_ GREEN \_\_\_  
**NUMBER OF LATERAL BRANCHES ON TASSEL** \_\_\_\_\_

**EAR LENGTH (Husked ear)** \_\_\_\_\_ CM  
**NUMBER OF KERNEL ROWS** \_\_\_\_\_  
**KERNEL ROWS** STRAIGHT \_\_\_ SLIGHTLY CURVED \_\_\_ SPIRAL \_\_\_  
**EAR TAPER** SLIGHT \_\_\_ AVERAGE \_\_\_ EXTREME \_\_\_

**KERNEL LENGTH** \_\_\_\_\_ MM  
**PERICARP COLOR** COLORLESS \_\_\_ RED-WHITE \_\_\_ TAN \_\_\_ BRONZE \_\_\_ BROWN \_\_\_  
LIGHT RED \_\_\_ CHERRY RED \_\_\_ OTHER (Describe below) \_\_\_\_\_  
**ENDOSPERM TYPE\*** SWEET \_\_\_ NORMAL STARCH \_\_\_ HIGH AMYLOSE STARCH \_\_\_  
WAXY STARCH \_\_\_ HIGH PROTEIN \_\_\_ HIGH LYSINE \_\_\_ HIGH OIL \_\_\_ HARD ENDOSPERM \_\_\_

**COB COLOR\*** WHITE \_\_\_ PINK \_\_\_ RED \_\_\_ BROWN \_\_\_ OTHER (Describe below) \_\_\_\_\_

**MALE-STERILE\*** YES \_\_\_ NO \_\_\_ IF YES, DESCRIBE TYPE \_\_\_\_\_  
**TRANSGENIC** YES \_\_\_ NO \_\_\_ IF YES, DESCRIBE TRAITS \_\_\_\_\_

**DESCRIBE ANY CHARACTERISTICS THAT REQUIRE SPECIAL INSPECTION OR EVALUATION**

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**COMPLETED BY\*** \_\_\_\_\_

**DATE** \_\_\_\_\_