**FHB Pre-Breeding/Germplasm Development Program Summary Form**

**Name**       **Institution**

**FY21 Award:** $

**1.**  FHB-related Crosses[[1]](#footnote-1)\*

a. What % your program is dedicated to improving FHB resistance?

**2.** List the FHB resistant sources (individual lines used as parents or categories such as Chinese, European, Brazilian, native, etc.) used in your germplasm development program.

**3**. For each FHB nursery you participate in, please indicate the following: Location, total number of plots at the location, mist irrigated (yes/no), inoculation method (grain spawn, spray, none), and percentage of rows dedicated to YOUR germplasm development work (exclude mapping, commercial tests, uniform test, etc.).

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| --- | --- | --- | --- | --- |
| **Location** | **# of Plots** | **Irrigated?** | **Inoculation Method** | **Variety Development Rows (%)** |
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**4.** Number of lines tested in the greenhouse?

**5.** Are you using the USDA-ARS Genotyping Laboratories? If yes, indicate the number of lines to be tested in the year of the grant application.

Yes  No  No. of lines

**6.**  Please list your most recent germplasm releases and indicate those with FHB resistance better than your Moderate Resistant check. FHB Reaction: (R, MR, MS, S, VS)

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| --- | --- | --- | --- | --- | --- |
| **Name** | **Year** | **Release method** | **FHB reaction** | **FHB index (%)** | **DON (ppm)** |
| Check: | ------- | ------------- |  |  |  |
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Please list how many breeders requested and received the germplasm from your program in the current period.

**8.** Please list any varieties or advanced experimental breeding lines (if known) containing germplasm developed by your program.

| **Genotype Name** | **FHB Reaction** | **Is this a released variety or experimental line?** | **Name of your germplasm line** | **Percentage of contribution (by pedigree)** | **FHB resistance allele(s) present** |
| --- | --- | --- | --- | --- | --- |
| Check: |  | ------- | ------------- |  |  |
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**9.** List any challenges or concerns breeders have expressed as obstacles to incorporating your germplasm (yield, maturity, quality, etc.) and what you are doing to improve these areas.

**10.** How do you distribute new material to your cooperators, and what type of breeding material do you typically provide (original novel resistance lines, backcross lines in elite backgrounds, etc.)?

**11**. Which breeders do you cooperate with in order to choose what elite lines or varieties you will introduce new material into?

1. \* What constitutes a cross for FHB?

   1) at least one parent carrying a defined QTL;

   2) at least one parent having at least moderate FHB resistance; or

   3) in cases where 1) or 2) are not met, progeny undergo FHB evaluation such that lines with MS or worse reactions are not released. [↑](#footnote-ref-1)