**Breeding Plan Template**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **GENERATION OR YEAR** | **SEASON OR SITE** | **PLANT** | **ACTIVITY** | **HARVEST** |
| Year 0 | Greenhouse | 2-3 pots of each parental line staggered at 3 2-day intervals | Make 200 breeding crosses | 5-10 pods of each cross |
| Year 1 | In-season nursery | Plant ≥1 seed of each pod to grow 10+ F1 plants per cross | Self-pollination | All F2 seeds of each plant (~40 per plant); bulk by breeding population |
| Year 1a | Off-season nursery | Plant 400+ seeds of each breeding population | Advance >350 S0 plants via self-pollination | Single pod containing 2-3 seeds from each plant from >350 plants; bulk by population |
| Year 1b | Off-season nursery | Plant S1 seed bulks; >850 per population | Select 200-500 plants per population (average of 350); proportion selected ~ 50% | Harvest all seed of each plant; bulk by family (i.e. single plant) and population |
| Year 2 | In-season, home station site | 70,000 S2 families in microplots | Evaluate for seed yield, grain moisture, lodging, etc….. |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |