Season	Procedure	Type of population
		Two-parent cross (2-way cross)
1	Cross two parents Obtain hybrid F_1 seed	Parent 1 × Parent 2
2	Grow F_1 plant Obtain F_2 seed	F_1 Self-pollination F_2 seed
		Three-parent cross (3-way cross)
1	Cross two parents Obtain hybrid F_1 seed	Parent 1 × Parent 2
2	Grow F_1 plant Cross F_1 to third parent Obtain hybrid F_1 seed	F_1 plant × Parent 3 F_1 Self-pollination
3	Grow F_1 plants Obtain F_2 seed	F_2 seed
		Complex population
1	Make two-way crosses between parents (first intermating Obtain hybrid F_1 seed	Parents 1 × 2 3 × 4 5 × 6 7 × 8
2	Cross F_1 plants from different two-way crosses (second intermating) Obtain hybrid seed	F_1 × F_1 F_1 × F_1
3	Cross F_1 plants from different four-way crosses (third intermating) Obtain hybrid seed	F_1 × F_1 Hybrid seed
4	Begin selfing	Plants of complex population

Formation of 2-parent, 3-parent, and complex breeding populations (From Fehr 1978, 1991)