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Common Mating Design for Hybrid Development

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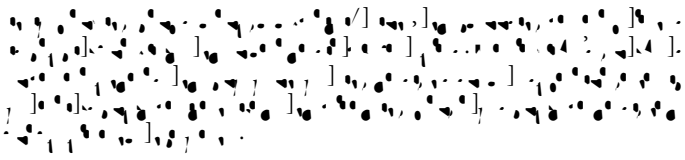
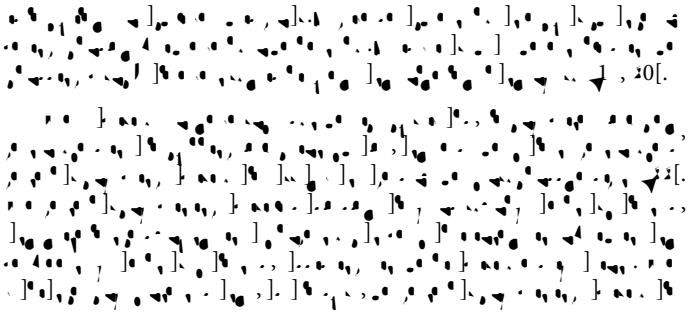
Abstract





(Table 6).

Diallel design

1/2 (+ 1), (-1), 1/2 (-1), 2013).

Method I or full diallel design: (Table 7).

Method II or half diallel design: (+1)/2 (Table 8).

Method III: (-1) (Table 9).

Method IV: (-1)/2 (Table 10).

Table 6:

Source	Df	MS	Ems
			σ + rσ
			σ + 2rσ
			σ + rσ
			σ

Table 7:

Expected mean squares					
Source	Df	SS	MS	Model I	Model II
				σ $\frac{1}{p-1}$)Σg	σ $\frac{p-1}{p}$) σ +2p σ
				σ $\frac{2}{p(p-1)}$ΣΣs	σ $\frac{p2-p+1}{p2}$) σ
ef.				σ $\frac{2}{p(p-1)}$)ΣΣr	σ + 2 σ
				σ	

Table 8:

Expected mean squares					
Source	Df	SS	MS	Model I	Model II
				σ $\frac{1}{p-1}$)Σg	σ + σ +(p+2) σ
				σ $\frac{2}{p(p-1)}$ΣΣs	σ + σ
				σ	

Table 9:

Expected mean squares					
Source	Df	SS	MS	Model I	Model II
				σ $\frac{1}{p-1}$)Σg	σ + 2 σ +2(p-2) σ
				σ $\frac{2}{p(p-3)}$ΣΣs	σ + 2 σ
Reciprocal ef.				σ $\frac{2}{p(p-1)}$)ΣΣr	σ + 2 σ
				σ	σ

Line × Tester Design

[(**Table 11**).

Conclusion

- Sleper DA, Poehlman JM (2006) Breeding feld crops.