

مواد تكميلی

Supplementary Material

پيوست ۱. کد SAS استفاده شده بهمنظور اجرای تجزيه واريانس طرح آلفا لاتيس برای چند مكان

Appendix 1. The SAS code used to perform analysis of variance in an alpha lattice design for multiple locations.

```
data;
input Location$ Replication Block Genotype$ Trait;
cards;
Phenotyping data
;
proc glm;
class Location Genotype Replication Block;
model Trait = Location | Genotype Replication(Location)
Block(Replication Location)/ss2;
random Location | Genotype Replication(Location) Block(Replication
Location)/test;
lsmeans Location | Genotype;
run;
```

پیوست ۲. کد SAS استفاده شده بهمنظور برآورد اجزاء واریانس طرح آلفا لاتیس برای چند مکان

Appendix 2. The SAS code used to estimate variance parameters in an alpha lattice design for multiple locations.

```
data;
input Location$ Replication Block Genotype$ Trait;
cards;
Phenotyping data
;
proc varcomp method=reml;
class Location Genotype Replication Block;
model Trait = Location | Genotype Replication(Location)
Block(Replication Location);
run;
```