

To study the effect of mutating the MC1R gene on fish fin colors, a researcher spends 2 years generating a knock-out mutant.

He then grows 6 Wild-Type fish in one tank and 6 fish from the mutant line in a different tank.

When they get to 5cm length, he measures the fin color of each fish.

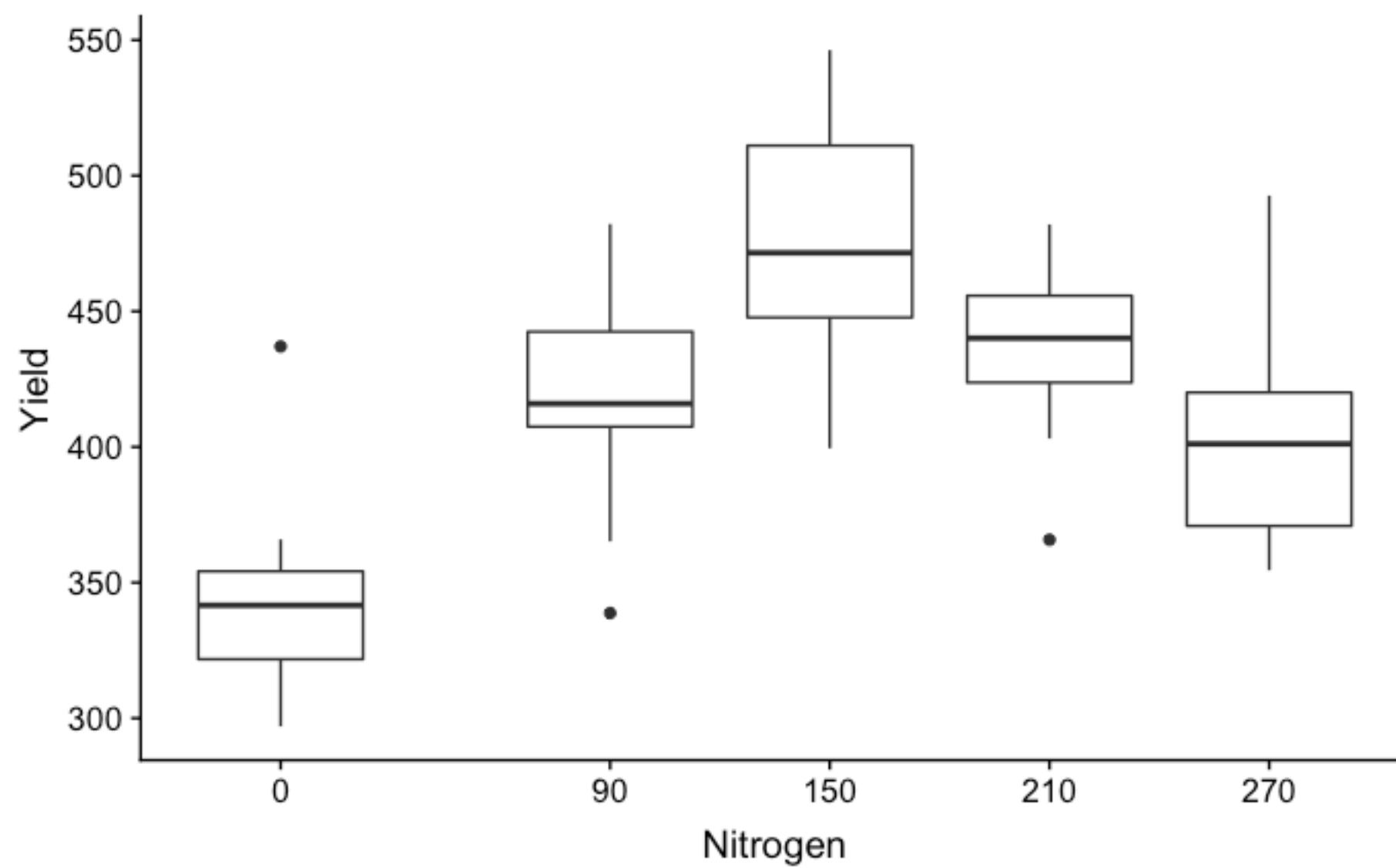
How many experimental units were included for the effect of MC1R on fin coloration?

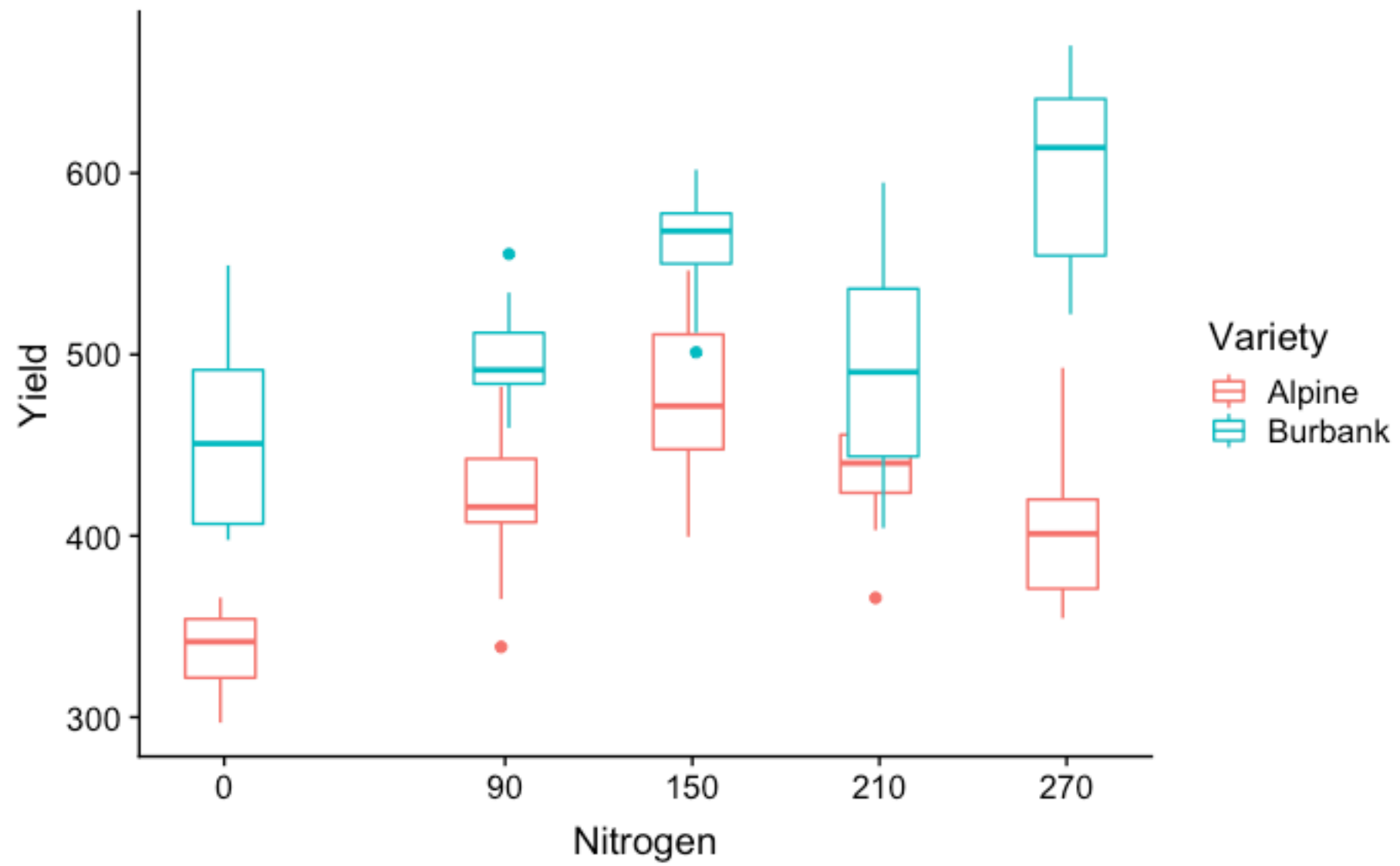
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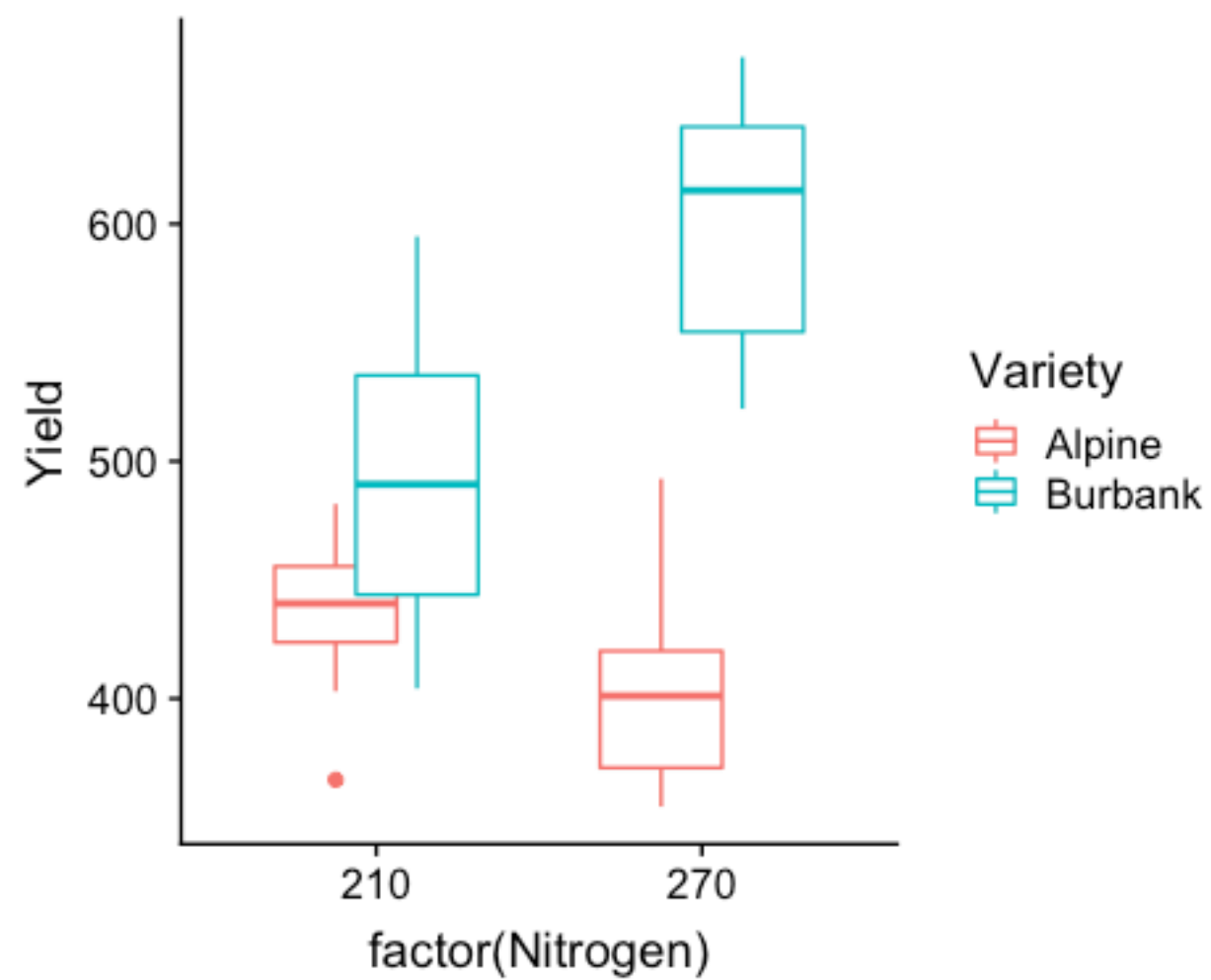
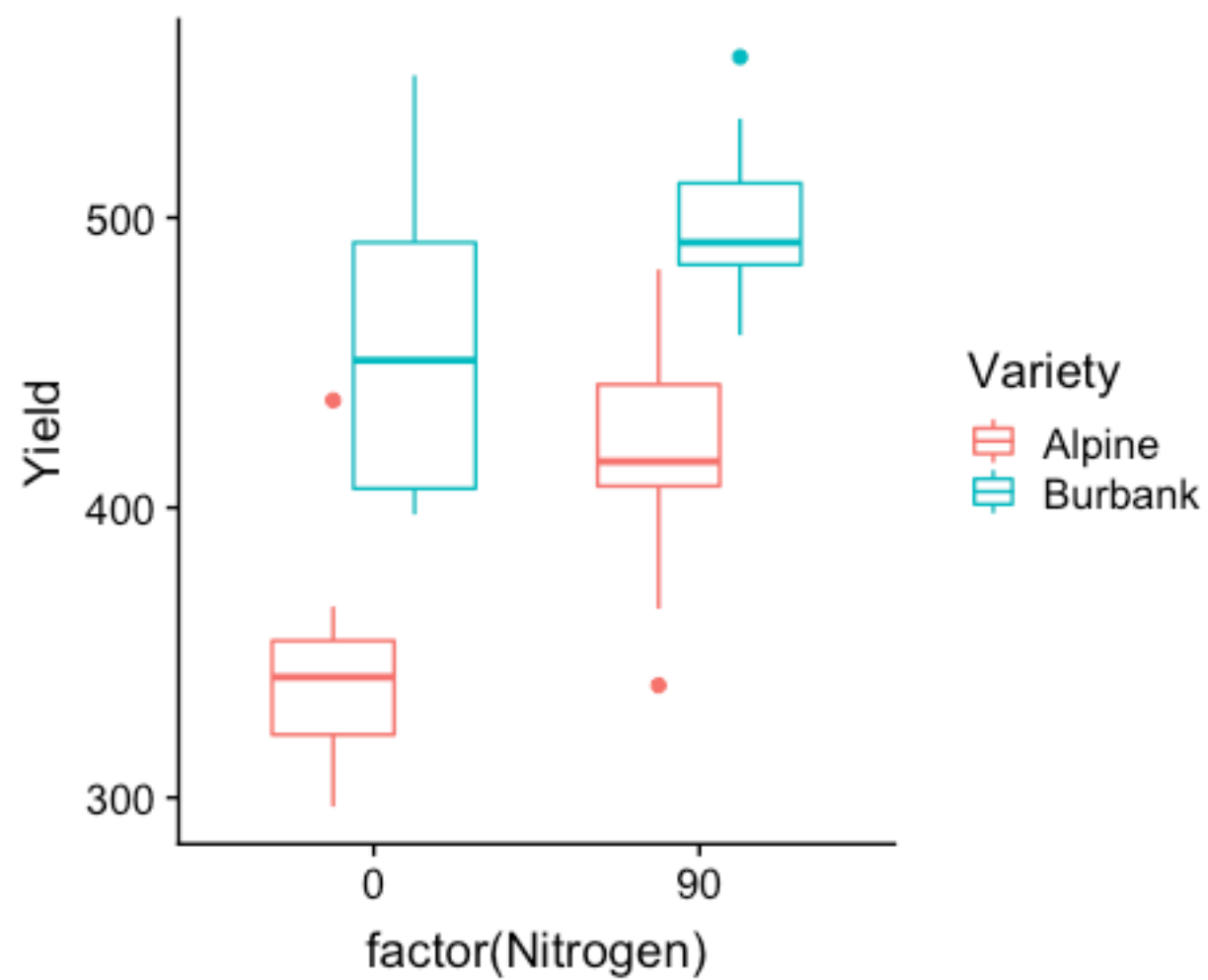
He then **TAGS 6 FISH** of each strain and grows them **ALL IN THE SAME TANK**.

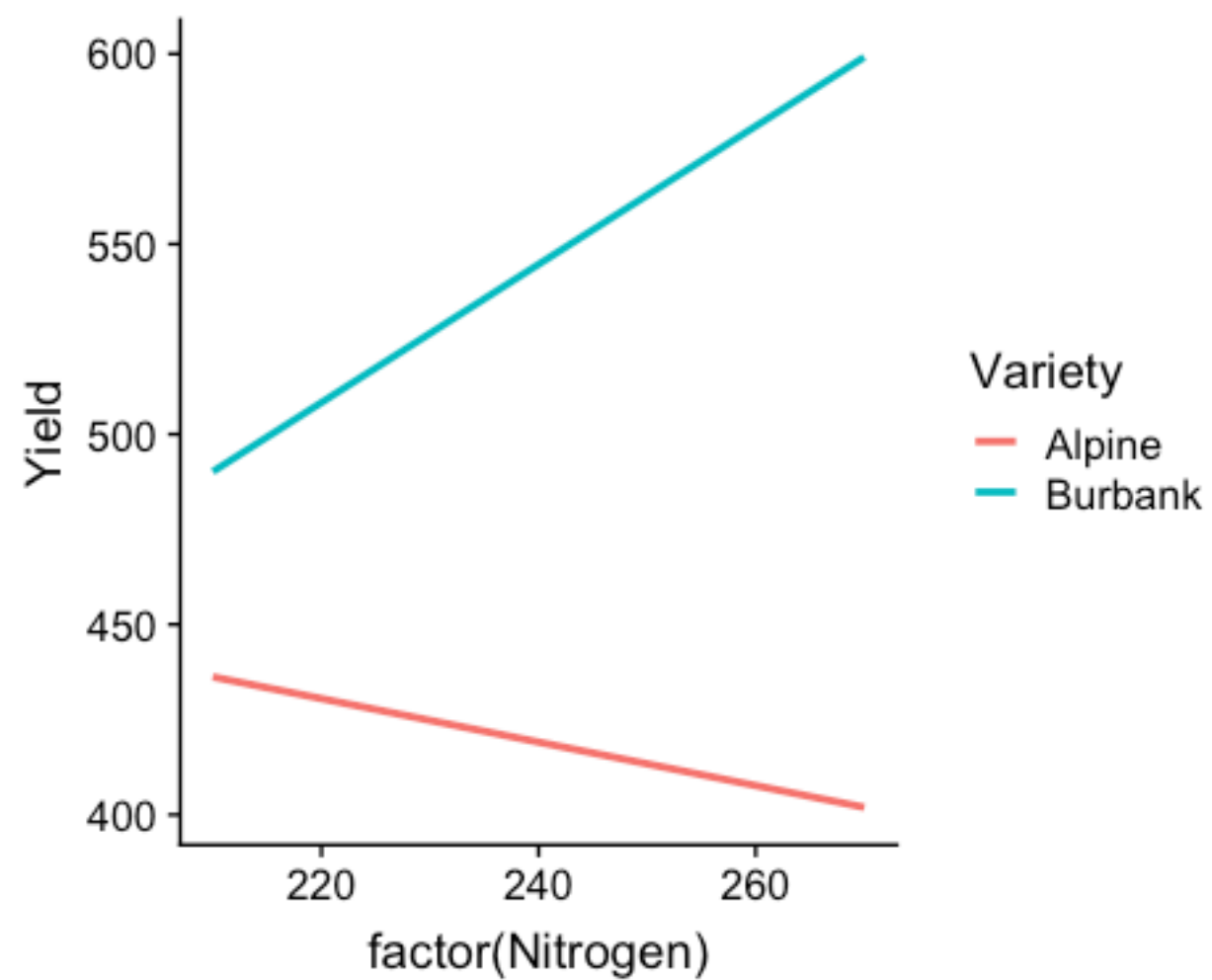
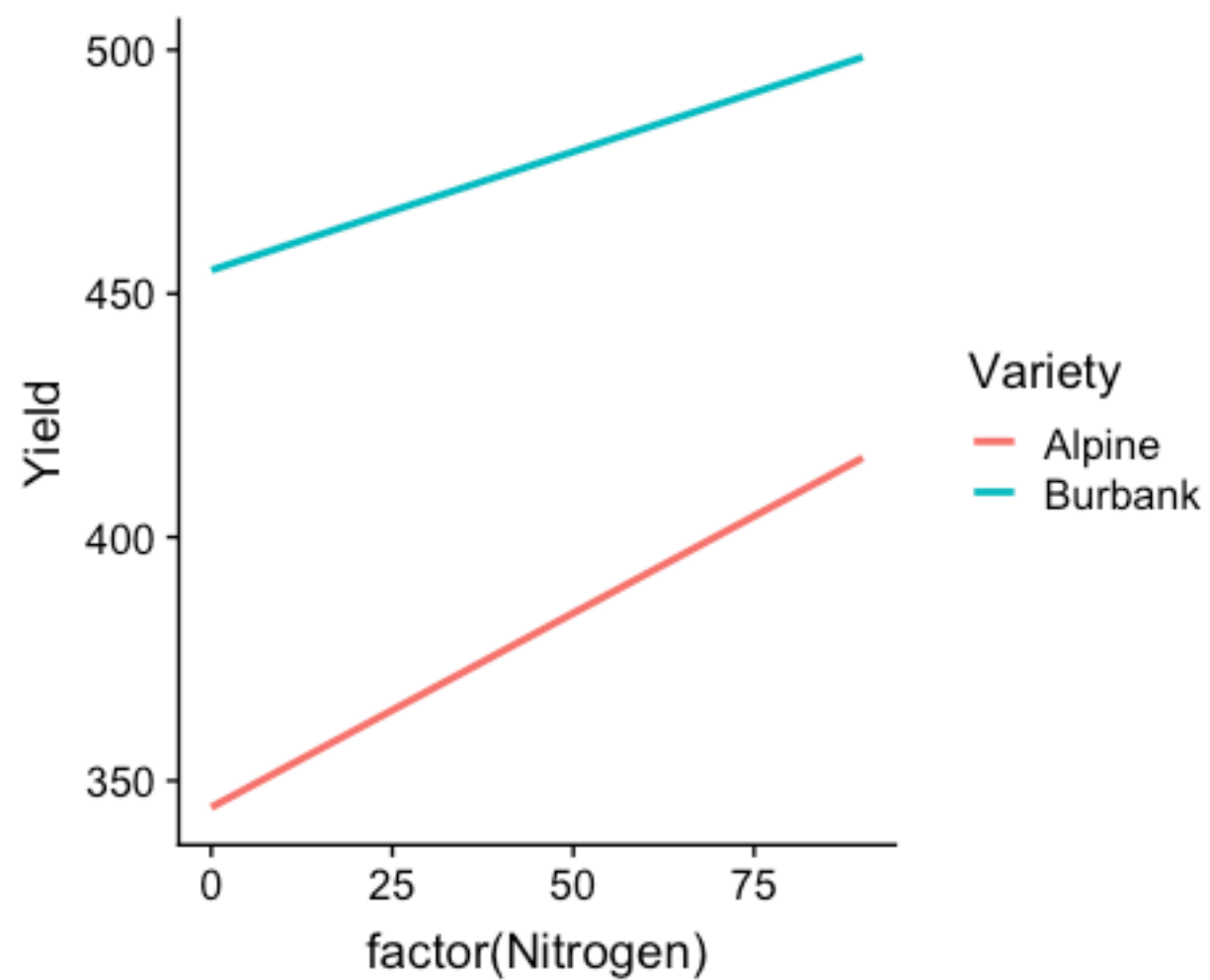
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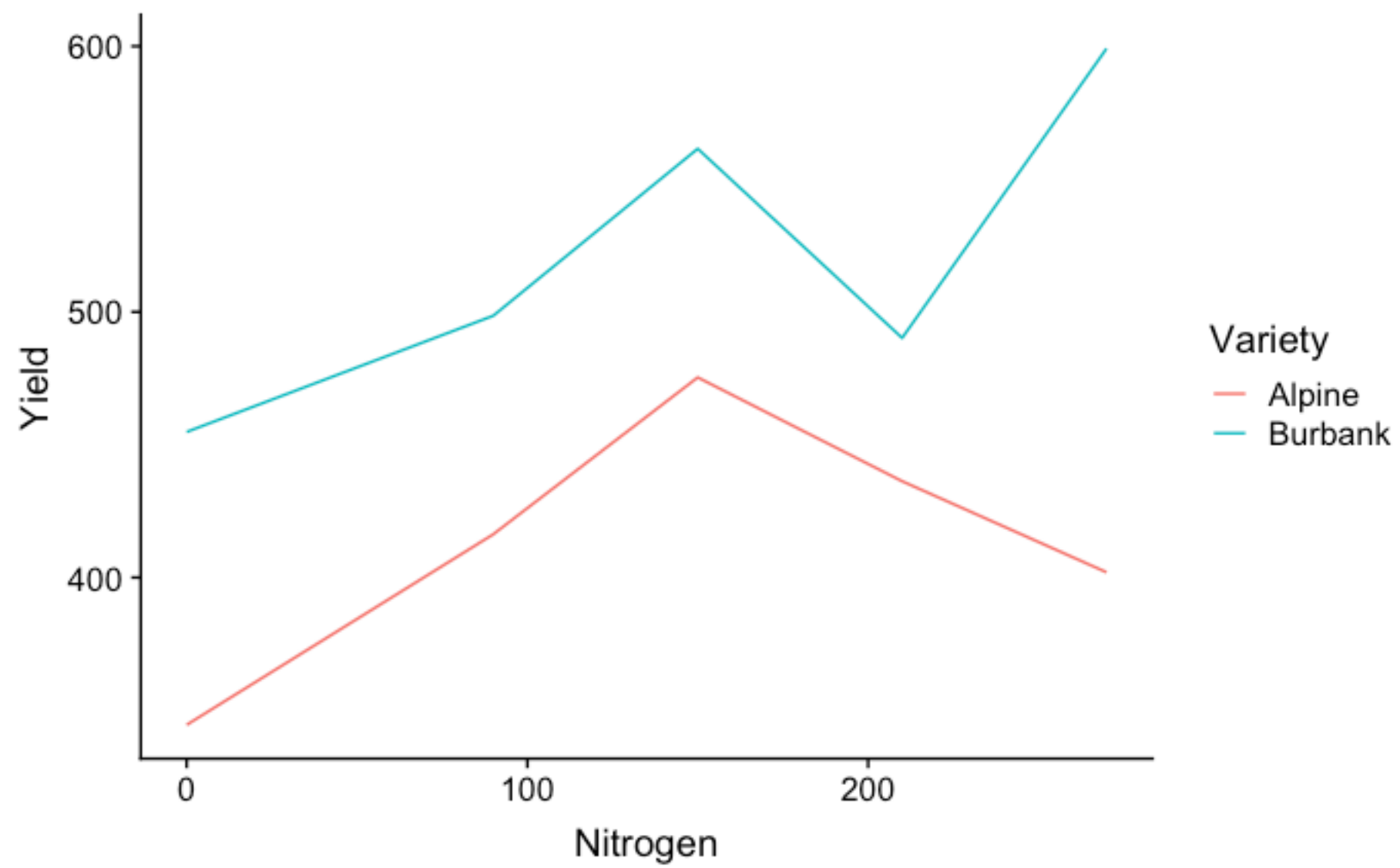
How many experimental units were included for the effect of MC1R on fin coloration?











```
## ANOVA table
```

```
```\r}
```

```
full_model = lm(Yield ~ Variety + NitrogenF + Variety:NitrogenF, potato_reps)
```

```
anova(full_model)
```

```
```\r}
```

Analysis of Variance Table

Response: Yield

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
Variety	1	280604	280604	140.7279	< 2.2e-16	***
NitrogenF	4	167984	41996	21.0617	2.790e-12	***
Variety:NitrogenF	4	60001	15000	7.5229	2.831e-05	***
Residuals	90	179456	1994			

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1