

01AB785 Agricultural Research Methodology
Spring AB 2018
Feedback Quiz 6: Chi-Square Test of Significance
Total Points 10

Name:

ID:

1. Frequency data is used in chi-square test to generate a statistic. (True/False)
2. Explain 'Goodness of fit'.

3. When you can use chi-square test?

4. **Exercise:** (goodness of fit test, unequal expected frequency): In an experiment in a barley cross between two varieties, the following results were reported:

Groups	Obtained No.
Hooded green	885
Hooded chlorina	310
Awned green	292
Awned chlorina	113
Total	1600

Compare the observed data to the expected data in the ratio 9:3:3:1 at 0.05 level of significance.

5. The chi square test prove that a hypothesis is correct. (Ture/False)
6. **Exercise:** In an experiment involving spraying treatment for the leaf spot in rice, leaves were selected at random and the number of leaf spots counted. The number of leaf spots per leaf was recorded. The distribution of leaf spots was noted, and the data obtained are furnished here:

No. of spots / leaf	0	1	2	3	4	5	6	7	8 or more	Total
Frequency	70	38	17	10	9	3	2	1	0	150

You need to fit the Poisson distribution to the data and apply the test of goodness of fit.