

## Probability Table for Chi Squared Test

Good Fit Between Ear & Data							Poor Fit	
	P Values							
df	.90	.70	.60	.50	.20	.10	.05	.01
1	.02	.15	.31	.46	1.64	2.71	3.85	6.64
2	.21	.71	1.05	1.39	3.22	4.60	5.99	9.21
3	.58	1.42	1.85	2.37	4.64	6.25	7.82	11.34
4	1.06	2.20	2.78	3.36	5.99	7.78	9.49	13.28

$$\chi^2 = \sum \frac{(Obs - Exp)^2}{Exp}$$

Corn Genetics:

1. Count a monohybrid ear of corn that is the result two heterozygous parents.
2. Calculate the Expected Ratio's using Punnet Squares for all possible crosses
3. Follow the Example used in class.
4. Determine the ratio of Purple to Yellow.
5. Calculate the  $\chi^2$  from the data.
6. Use the Table above to determine if the ratio observed is accepted as the actual ratio.
7. Complete same for the Dihybrid Cross.