Frequencies

	Location A	Location B	Total
Absent	8	20	28
Sparse	22	14	36
Abundant	26	10	36
	56	44	100

Frequencies Calculation

	Location A	Location B
Absent	15.68	12.32
Sparse	20.16	15.84
Abundant	20.16	15.84

Cell	Calculation	Value
Absent, A	$(8-15.68)^2/15.68$	3.78
Absent, B	$(20-12.32)^2/12.32$	4.81
Sparse, A	$(22-20.16)^2/20.16$	0.17
Sparse, B	$(14-15.84)^2/15.84$	0.21
Abundant, A	$(26-20.16)^2/20.16$	1.69
Abundant, B	$(10-15.84)^2/15.84$	2.15

Total χ^2 = 3.78 + 4.81 + 0.17 + 0.21 + 1.69 + 2.15 = **12.81**

Results Summary Table

Metric	Value	Threshold	Conclusion
Chi-square (χ^2)	12.81	-	-
p-value	0.0017	< 0.05	**Significant**
Cramer's V	0.36	0.3=medium	Medium association

Significant difference in heather prevalence between locations ($\chi^2(2)=12.81$, p=0.002).
Location A has more abundant heather (26 vs. 10 in B).
Location B has more absent heather (20 vs. 8 in A).
Medium effect size (Cramer's V=0.36).