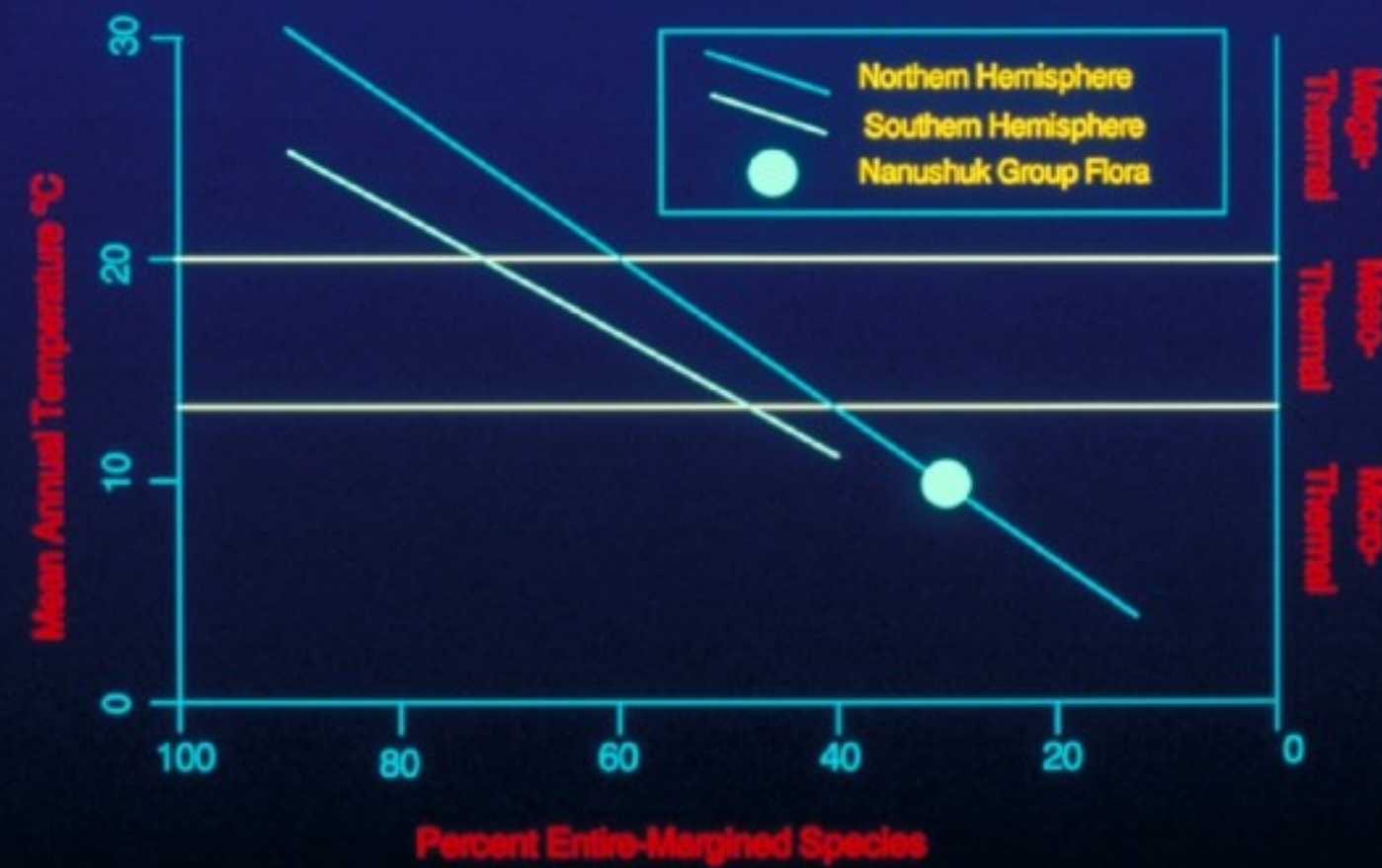


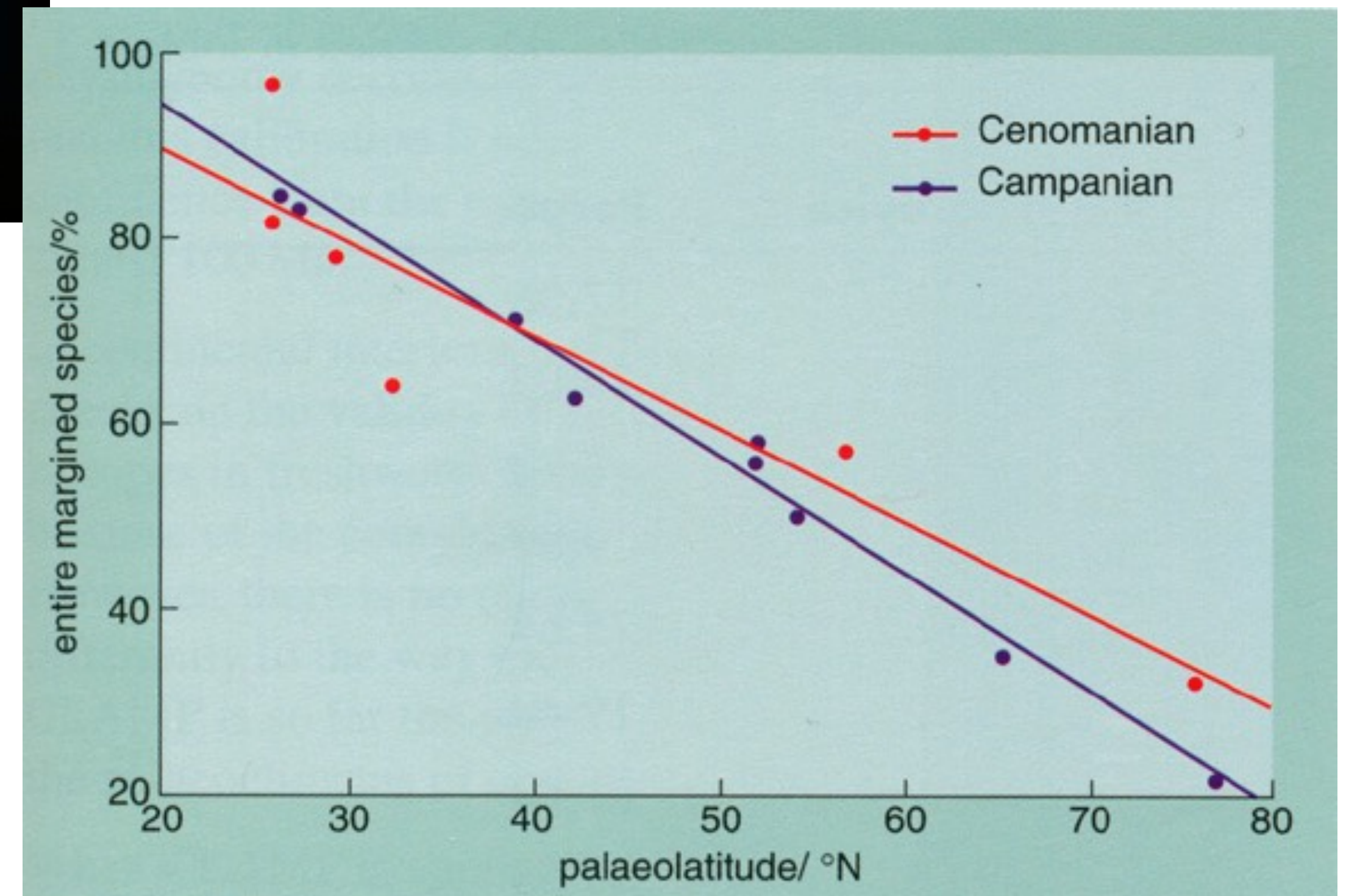
Leaf Margin Type and Temperature

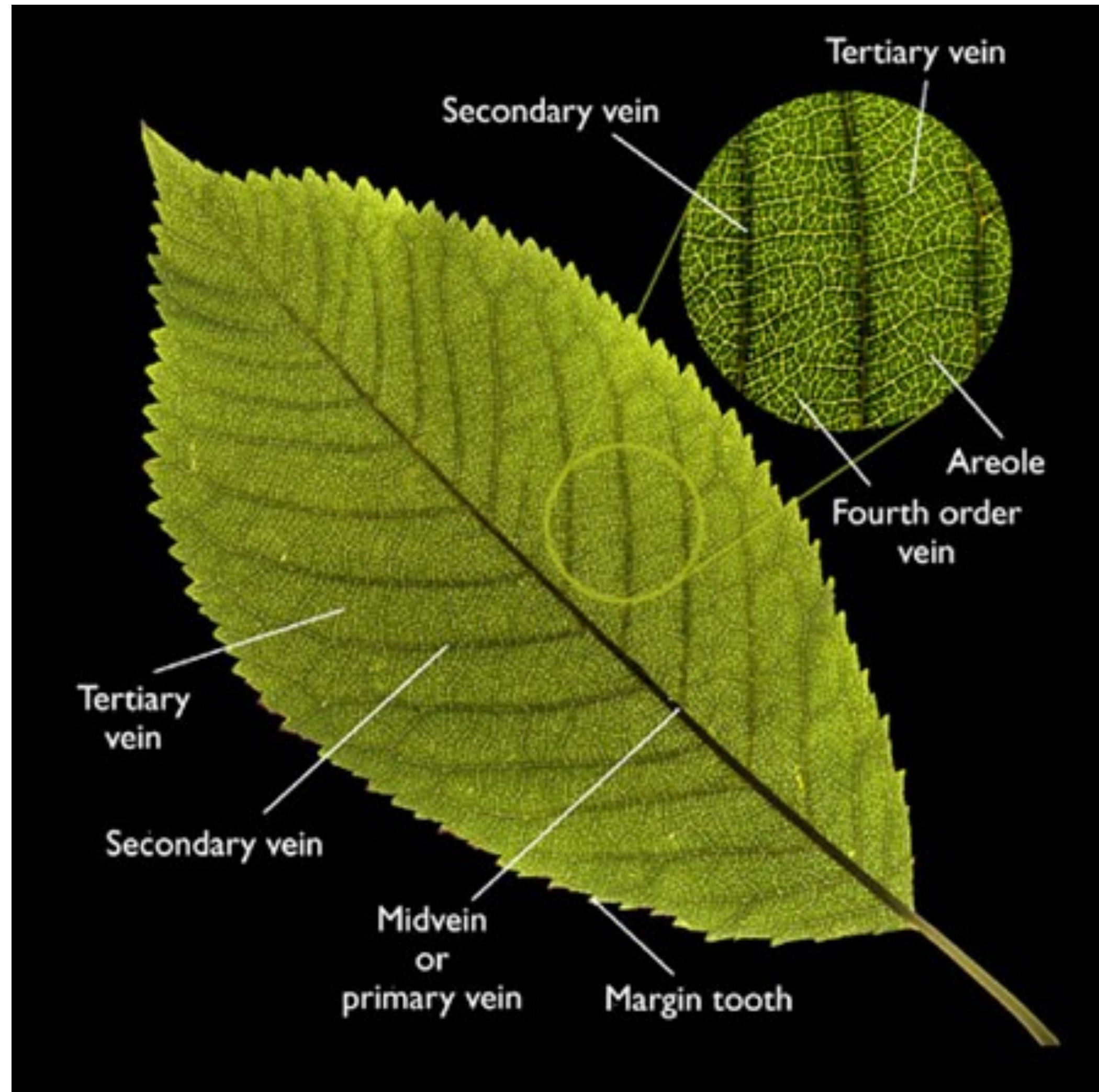


Wolfe also noted that the relationship, as evidenced by the slope of the regression line, differs between Northern and Southern Hemispheres.

When tested using fossil floras Wolfe also noted that the percentage of entire margined taxa when plotted against palaeolatitude tracks changes in equator-to-pole temperature gradients (and global mean surface temperature).

There appears to be no change in slope associated with the polar light regime ($>66^\circ$).





Wolfe surmised that if leaf size was primarily related to water loss and margin characteristics were primarily related to mean annual temperature, then it was likely that many other leaf architectural characteristics might carry environmental signals.

However single architectural (physiognomic) features do not relate to separate environmental parameters (variables). All leaf characters operate in concert and combinations of these characters correlate with several climate variables simultaneously. After all, all climate variables are inter-related through the laws of thermodynamics. For example the moisture content of air is related to temperatures: evaporation leads to cooling, condensation to heating.