**Plant Taxonomy Lab Spring 2011 ~ Floral Morphology I**

* Follow the instructions for observing and drawing the lily flower parts listed below.
* Be sure to refer to **FAMILY drawing in Zomlefer** (also, there is an excellent *index* in the book!)
* Depending on flower availability for the class and class size, the class will be divided into at least 3 teams: whole flower parts, longitudinal section of the pistil and cross section of the ovary. The class will share flower parts and dissections.
* Be careful using the razor blades – they are sharp! Always use a **fresh** (new) blade – used blades are dull and increase the chances of slippage and injury (to the human).
* Do **NOT** cut flowers with the razor blades on the **table top**! Use the glass stage of the microscope stand or cutting boards.

**Lab Assignment:**

Compose the floral formula (a) and draw the following flower parts (b – h) for the flower provided by your TA. Note the terms and questions with each part. Ask your TA for help as needed!

*Lilium* (Liliaceae) – to refer to **FAMILY drawing in Zomlefer**

**a. floral formula**

What is the symmetry of the flower?

**b. one outer tepal** = petaloid sepal

What do the sepals like in a typical flower?

**c. one inner tepal** = true petal

What is the collective term for the tepals?

**d. stamen from bud –** dorsifixed, versatile

**e. pistil** = stigma, style, and ovary

**f. close-up of stigma –** Note number of lobes

How many carpels are there?

**g. cross section of ovary –** axile placentation; NOTE OVULES!!!!

Can you see the number of carpels?

What is the locule?

What are ovules?

**h.** longitudinal section of ovary showing position

What is the ovary position?

**Goals:**

* Hands-on introduction to floral morphology!
* Introduction to Floral Formulas.