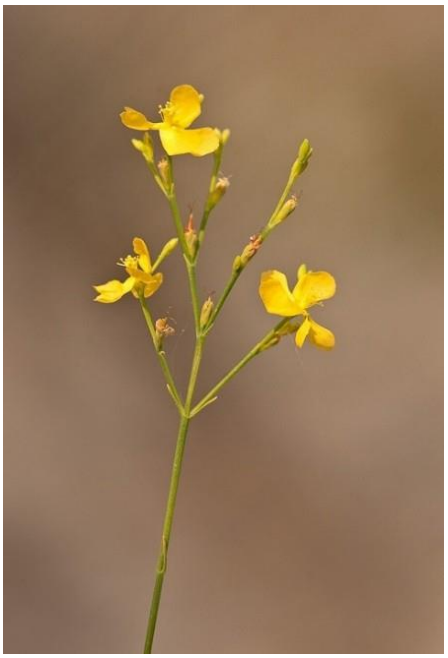
# Methods in Experimental Ecology II (PCB 6468)
# Exercise 4 - Averages



Using the script `Averages.R`, calculate for **10** sets of samples of **10** random individuals:

1. Mean height using ***frequentist*** estimates.
2. Mean height using ***Bayesian*** estimates with ***uninformed*** priors.
3. Mean height using ***Bayesian*** estimates with the same ***informed*** priors as shown in class.
4. Obtain the ***confidence and credibility intervals*** of each estimate.
5. Repeat steps 1-4 using **10** set of samples of **100** random individuals.
6. Present and plot all your results in an informative way.
7. Discuss the differences between approaches with small and large sample sizes.

**NOTE1:** Remember to use the same data to compare approaches for each set, but to change it between sets.

**NOTE2:** Please submit your paper as a single word document (1 or 2 pages). Remember to include your raw data and all the appropriate R code as appendices at the end.