Systematic Botany Labs 7–10.
Identification of North Dakota plants

October–November 2011

Background

On these four labs, we will identify plants from our herbarium collection. This is a real-world work: after identification and approval, names will go to the herbarium database, and plant will go to the designated place in the collection.

You will nedd to determine plant from our own field trips and maybe more. Photographs of summer plants are here: `http://msubiology.info/shipunov/ph` (names of folders will have the number of location in the end). Please note that numbers of labels are **not exact**, and you often will need to search the closest number.

The main source for determination is the O.A. Stevens (1963) "Handbook of North Dakota plants".

We will use so-called dichotomous keys where you will need to choose right answer on the several subsequent steps until you come to the name of plant. Please note that if you can guess the family of your plant, it is always better to skip key for families and proceed directly to genera.

Assignment

The workflow of identification:

1. Take the herbarium sheet from "Unidentified" pile
2. Identify plant, using Stevens (1963)
3. Check the name using the "Flora of Great Plains" (1986)
4. Write the description label with: (a) plant family, species name and name's author, (b) your name, (c) today's date
5. Check the determination either (a) with instructor, or (b) put the herbarium sheet into "Ready for approval" pile
6. Herbarium sheet with approved determination should go to "To the database" pile

We had five field trips and collected ≈100 herbarium sheets. Therefore, to achieve 80 points per 4 labs (labs 7–10), everybody should determine 20 sheets **minimum**. I will give 4 extra points for every additional determination. Exam 3 will check your ability to determine plants.