Botany 401   **Name:** _____

Vascular Flora of Wisconsin
Exam 2 – take home portion
[20 points out of 90 total]

Choose 2 of the following 3 questions to answer – 10 points each. Keep each answer concise but complete (around 250-300 words each). Please type the answers and place the printed copy in Ken Sytsma's mailbox on the first floor of Birge Hall by the Botany Department office. **This exam can be handed in anytime over the next 10 days – but is due on Friday, April 22**.

1. Compare and contrast the two families Ericaceae (in the broad sense) and Orchidaceae. Features to include: worldwide distribution, habitats in Great Lakes, habit or growth form, specialized ecological interactions, floral structure, and unusual pollination systems.

2. Choose one of any of the 66 species in Wisconsin's Invasive Plants Species List http://www.ipaw.org/TheProblem/IPAWsPlantList.aspx. Do not choose one that was discussed in class. Determine its distribution in Wisconsin *and* elsewhere in North America. Provide the most likely reason on how it was introduced into Wisconsin. In your answer, define "weed" in your own words.

3. Besides the Asteraceae, indicate how three other families of Asterids in Wisconsin produce "head-like" inflorescences. Images attached to your answer would be helpful, but not essential.

Besides lecture notes, some websites that might be of interest or utility include:

http://www.botany.wisc.edu/wisflora/
> [Wisconsin State Herbarium species list, distributions]

http://plants.usda.gov/java/
> [USDA list of North American species with distribution maps]

http://www.bonap.org/genera-list.html
> [Biota of North America Program with species maps]

http://www.mobot.org/MOBOT/Research/APweb/welcome.html
> [Family characteristics and geographical distributions]

http://dnr.wi.gov/topic/Invasives/
> [Wisconsin DNR Invasive Plant Information]

http://www.invasivespeciesinfo.gov/plants/main.shtml
> [USDA National Invasive Species Information Center]