Field Botany Lab 1 (Maximum 10 Pts)
The Great Vegetative Character State Hunt

Collection phase:

Decide on a Latinized team name and write it and the names of your team members in the appropriate spaces in the Collection Table.

Collect as many example specimens as possible exhibiting the vegetative character states listed in the table below within the specified time limit and specified spatial boundaries.

Using the Sharpies and/or tape provided, mark each example specimen with the number of the character state in the table below, and place it in the collection bag for evaluation.

Put an x in the box next to each of the character states that your team has collected.

Note that more than one character state might apply to any given sample, so be sure to mark each specimen with all the character states that are present.

You will find pages 5-10 and the glossary in Grimm's *The Illustrated Book of Trees* helpful in reminding you what each character state looks like.

Evaluation phase:

Obtain the collection bag of some other team.

Record your teams name and the names of your team members as well as the name of the team you are evaluating on the appropriate lines on the evaluation sheet.

Using the numbers marked on the collected specimen samples verify that the correct character states have been identified.

If the character state has been correctly identified, then indicate this with an x in the box next to that character state in the Evaluation Table.

If the character state has NOT been correctly identified, then leave the box blank next to that character state in the Evaluation Table.

Grading:

Top two teams = 10 pts
Next two teams = 9 pts
Bottom two teams = 8 pts

Collection Table

Collection Team Name _____.

Collecting Team Members _____ _____ _____ _____	Leaf Arrangement ☐　1. Alternate ☐　2. Opposite ☐　3. Whorled	Leaf Types Blade <3/16 inch wide ☐　4. Linear ☐　5. Needle-like ☐　6. Scale-like ☐　7. Awl-like
Leaf Types Blade >3/16 inch wide Compound ☐　8. Pinnately ☐　9. Palmately	Leaf Types Blade >3/16 inch wide Simple ☐　10. Pinnately Lobed ☐　11. Palmately Lobed ☐　12. Fan-shaped	Leaf Shape ☐　13. Linear ☐　14. Oval ☐　15. Oblong ☐　16. Ovate ☐　17. Obovate ☐　18. Elliptical ☐　19. Lance-shaped ☐　20. Deltoid (Triangular) ☐　21. Heart-shaped
Leaf Tips ☐　22. Narrowly pointed ☐　23. Broadly pointed ☐　24. Bristle-tipped ☐　25. Square (Truncate) ☐　26. Rounded	Leaf Margins ☐　27. Entire ☐　28. Undulate (Wavy) ☐　29. Finely serrate ☐　30. Coursely serrate ☐　31. Doubly-toothed ☐　32. Incurved Teeth ☐　33. Bluntly Toothed ☐　34. Lobed	Leaf Bases ☐　35. Narrowly Wedge-shaped ☐　36. Broadly Wedge-shaped ☐　37. Rounded ☐　38. Heart-shaped ☐　39. Square ☐　40. Oblique

Evaluation Table

Evaluation Team _____ assessment of
Team _____'s collection.

Evaluation Team Members _____ _____ _____ _____	Leaf Arrangement ☐ 1. Alternate ☐ 2. Opposite ☐ 3. Whorled	Leaf Types Blade <3/16 inch wide ☐ 4. Linear ☐ 5. Needle-like ☐ 6. Scale-like ☐ 7. Awl-like
Leaf Types Blade >3/16 inch wide Compound ☐ 8. Pinnately ☐ 9. Palmately	Leaf Types Blade >3/16 inch wide Simple ☐ 10. Pinnately Lobed ☐ 11. Palmately Lobed ☐ 12. Fan-shaped	Leaf Shape ☐ 13. Linear ☐ 14. Oval ☐ 15. Oblong ☐ 16. Ovate ☐ 17. Obovate ☐ 18. Elliptical ☐ 19. Lance-shaped ☐ 20. Deltoid (Triangular) ☐ 21. Heart-shaped
Leaf Tips ☐ 22. Narrowly pointed ☐ 23. Broadly pointed ☐ 24. Bristle-tipped ☐ 25. Square (Truncate) ☐ 26. Rounded	Leaf Margins ☐ 27. Entire ☐ 28. Undulate (Wavy) ☐ 29. Finely serrate ☐ 30. Coursely serrate ☐ 31. Doubly-toothed ☐ 32. Incurved Teeth ☐ 33. Bluntly Toothed ☐ 34. Lobed	Leaf Bases ☐ 35. Narrowly Wedge-shaped ☐ 36. Broadly Wedge-shaped ☐ 37. Rounded ☐ 38. Heart-shaped ☐ 39. Square ☐ 40. Oblique

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