

Username in iNaturalist

This term you will be using iNaturalist to observe and identify plants. In iNaturalist one engages in observing wild organisms, with a focus on plants in this course. You can also help with identifying plants with which you are familiar.

iNaturalist is a citizen science project. Scientists around the world use the data entered for research. You will be helping advance science with your contributions. You will be a citizen scientist!

You will need an iNaturalist account to use iNaturalist. You can sign up either on the web site or using the app. The app will be useful for making observations of plants in the field.

Web site: <https://www.inaturalist.org>

Apps

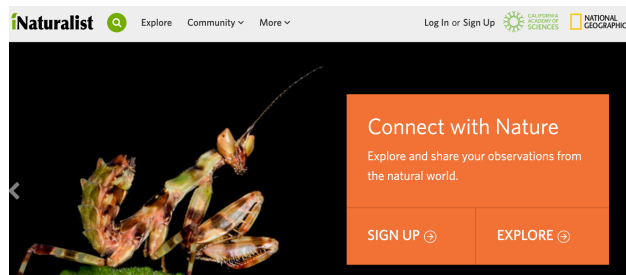
Search for iNaturalist in your app store...

Android:

<https://play.google.com/store/apps/details?id=org.inaturalist.android>

Apple iOS: <https://apps.apple.com/us/app/inaturalist/id421397028>

For the purposes of this course and to help me assist you, use your own name for your Username, either as one word or separated by an underscore. For example, danaleeling or dana_lee_ling. Alternatively you could use your first initial and last name dleeling.



Join the largest group of
naturalists in the world!

	Email
	Username
	Password
	Password confirmation

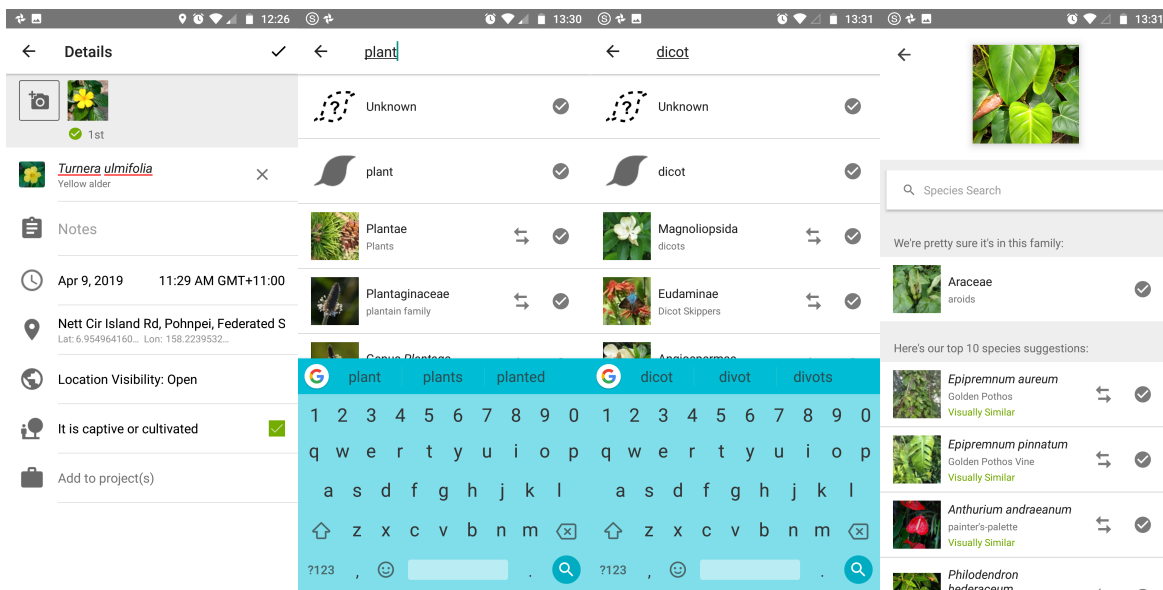
Observing with iNaturalist:

Take identifiable photos: Photos of distant trees or speck-like birds will not garner much attention because they're usually hard to identify, so make sure you fill the frame with your subject, perhaps using the phone or camera's zoom. Because smartphone cameras are designed primarily for photographing humans and landscapes (and, apparently, food), taking an in-focus photo of an insect or a plant is actually quite difficult. Using your hand to hold a flower or plant still can be helpful, but make sure the plant is not dangerous.

Take multiple photos: Many organisms, particularly plants and insects, cannot be identified to species from a single photo. Take multiple photos from different angles (top, bottom, side, front, back), and/or photos showing different features of the organism. For plants it's especially important to take pictures of **leaves, flowers, and fruit** if possible. The back of flowers are also helpful! These should be separate images in the same observation. Photos of flowers or fruit AND leaves are the most helpful. Be sure to add multiple photos of the same organism to the same observation. Use the +📷 icon to add more pictures of the same organism to the observation.

Make certain location services are turned on: Check to ensure that your GPS on your smartphone is turned on ahead of taking photographs. This allows the app to determine both the location and the accuracy of the location.

To select multiple photos of the same plant in the app, press and hold on the first photo. This activates multi-select and you can select multiple photos of the same organism. Try to avoid having more than one organism in the photos.



Mark plants that are planted by people as captive or cultivated. Do not post without some form of identification - at least select the kingdom (such as plants). If you know the plant is a monocot or dicot, that is also an identification level. If you think you can get to the family level, then identify up at the family level.

Add notes on ethnobotanical uses of the plant: Before uploading an observation you can add notes on the local name and uses of the plant you have photographed.

Take unique pictures: Try to take pictures of plants that are different from those being taken by other students. If nothing else, add your own notes on the local name and local use of the plant.

Focus on wild organisms: Many observers seem to focus on the cultivated plants they can find nearby. That is permitted, but in general, the iNaturalist community is more interested in wild organisms, and respond more to pictures of weeds and bugs than to cultivated roses and hamsters in cages. **If you do make observations of garden plants or other non-wild organisms, make sure to mark those observations as "Captive/Cultivated" before uploading them.**

DO photograph weeds: Weeds are both wild and always nearby. Take a step outside and find something growing in the cracks of the sidewalk, or a leaf that's fallen to the ground.

DO photograph hands: There's always a Homo sapiens nearby and their hands are instantly recognizable to species. This can provide a sense of scale. A ruler can also be put into the image for a sense of scale.

DO mark captive / cultivated organisms: If you do photograph organisms such as pets, zoo animals, houseplants, or garden plants, make sure you mark them as "captive/cultivated" from the app or use the Data Quality Assessment on the website to mark it as not wild.

DO delete your test observations promptly: If you have no intention of keeping them around, please delete them ASAP.

DON'T photograph people, pets, or house plants: Photograph wild plants and animals.

DON'T photograph people's faces: Especially when kids are involved. Some observers will be used to posting pictures of themselves to semi-private social media outlets, but iNaturalist is completely public, so please ensure that you respect the privacy of other people.

DON'T upload other people's photos: Photos should be taken by the observer of the actual specimen observed at that time and place. Uploading photos taken by others also usually violates iNaturalist's Terms of Service.

Teachers Guide: DON'T require students to make Research Grade observations: With some exceptions, Research Grade observations must have a community ID at the species level. This often motivates some students to blindly agree with each other's IDs, leading to inaccurate data and little actual benefit for the students. Furthermore, many organisms cannot be identified to the species level using only photographic evidence, so observations of them may never attain Research Grade. Instead, focus on exploration, discussion, and use of field guides—valuable skills for any nature enthusiast.

Teachers Guide: DON'T set excessive observation or identification requirements, or set grading conditions that have the effect of creating a "race" among students. The community does not react favorably to influxes of low-quality observations or identifications from users who are unlikely to continue using the platform when their course ends.

Observation Fields and their use

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ct/technical/ecoscience/invasive/?cid=nrcs142p2_011124 modified.

Means of establishment: Native, Introduced, Naturalized, Invasive, Managed, Cultivated

Native plant

A plant that is a part of the balance of nature that has developed over hundreds or thousands of years in a particular region or ecosystem. Note: The word native should always be used with a geographic qualifier (that is, native to Micronesia). Only plants found in Micronesia are considered native plants. Indigenous plants are native plants that are not found anywhere else.

Introduced, non-native plant (introduced, not capable of spreading on its own)

A plant introduced with human help (intentionally or accidentally) to a new place or new type of habitat where it was not previously found. In Micronesia plants introduced prior to western contact are considered native. Introduced applies only to post-western contact introductions.

Naturalized plant (introduced, spreading on its own)

A non-native plant that does not need human help to reproduce and maintain itself over time in an area where it is not native. Notes: Even though their offspring reproduce and spread naturally (without human help), naturalized plants do not, over time, become native members of the local plant community. Many naturalized plants are found primarily near human-dominated areas; and, sometimes, naturalized is used (confusingly) to refer specifically to naturally reproducing, non-native plants that do not invade areas dominated by native vegetation. However, since invasive plants also reproduce and spread without human help, they also are naturalized invasives are a small, but troublesome, subcategory of naturalized plants.

Invasive Plant (introduced, aggressively self-spreading)

A plant that is both non-native and able to establish on many sites, grow quickly, and spread to the point of disrupting plant communities or ecosystems. Note: Not all non-native, introduced plants are considered invasive. In fact, when many non-native plants are introduced to new places, they cannot reproduce or spread readily without continued human help (for example, many ornamental plants). Many naturalized plants, however, are considered invasive. Some naturalized plants, however, are not considered invasive in part because of their usefulness to people. To be invasive the naturalized plant has to spread aggressively, eliminating other native and naturalized plants.

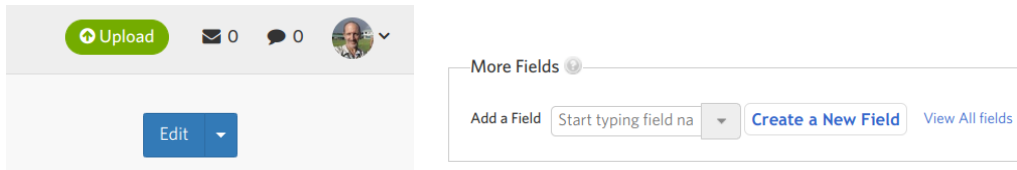
Managed

A wild plant (a plant not planted by people) but cared for and "managed" by people.

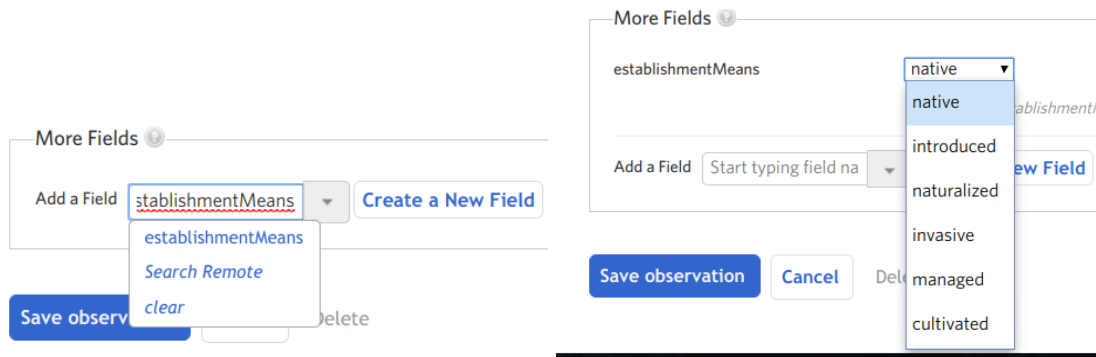
Cultivated

A plant that is planted by people, cultivated, and often captive. House plants, garden plants, agricultural crops. Called captive/cultivated in iNaturalist.

Assigning a means of establishment



Assigning a means of establishment requires going to the desktop version of the web site usually on a desktop computer. In the bottom of the edit page is the More Fields section. In the Add a Field type **establishmentMeans**.



After clicking on the name in the drop down menu, the field will appear with a drop down menu. The plant can then be assigned to the proper establishment means category.

Ethnobotanical Use

This field lets one add the ethnobotanical use of a plant.

Other useful observation fields that you can add to an observation

Common Name in Local Language

Local language used for common name

Plant news...

Congratulations to Rumihma for her observation which led to the identification of *Polygala paniculata*.

<https://www.inaturalist.org/observations/37853010>

which in turn led to a local name: *pwohmkisinpwil*

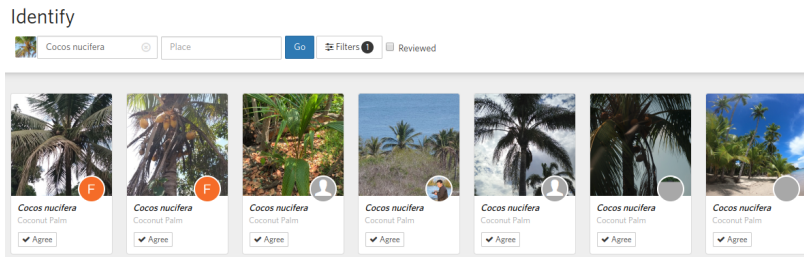
Known in English as milkwort and root beer plant.

Identifying plants in iNaturalist (on a desktop computer)

Log into iNaturalist.

On the page at http://www.comfsm.fm/~dleeling/ethnobotany/ej3/inaturalist_taxa.html pick a plant to practice identifying.

In the **Filter** you should also check "Casual" as this will also show cultivated specimens of your species. Some of these plants are usually planted/captive/cultivated plants.



Click on the first observation. That will bring up a larger image. Do not try to work from the small thumbnails.

Cocos nucifera
Coconut Palm



Needs ID



Info Suggestions Annotations Data Quality

Map

freddysantiagozentenoruiz • 583

April 26, 2019

Larecaja, La Paz, Bolivia

Bolivia

View • Follow

freddysantiagozentenoruiz suggested an ID

Leading 15h

Cocos nucifera
Coconut Palm

Agree

If the identification is correct, click on Agree. If the identification is not correct, for now do not do anything. If you are not sure, do not do anything. Later, if you get better at identifying other plants you can make suggestions as to what the plant is.

Do not agree unless you are certain. For some plants you have to see the flower to be certain. For ferns you need to see the brown/yellow lines or spots on the bottom of the leaf to be certain. Only click if you are certain that the identification is correct.

When identifying, check the map for the location of the plant. Consider the plant you are identifying: is this the range in which the plant is usually found? Coconut trees are not found outdoors in cold places!

Watch for notifications. You might need to withdraw an identification if your identification turns out to be incorrect. I might also be making comments on identifications.