Comparative Seed Manual: FABACEAE

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This seed manual consists of photos and relevant information on plant species housed in the Integrative Subsistence Laboratory at the Anthropology Department, University of California, Santa Barbara. The impetus for the creation of this manual was to enable UCSB graduate students to have access to comparative materials when making in-field identifications. Most of the plant species included in the manual come from New World locales with an emphasis on Eastern North America, California, Mexico, Central America, and the South American Andes.

Published references consulted[1]:

1998. Moerman, Daniel E. *Native American ethnobotany*. Vol. 879. Portland, OR: Timber press.

2009. Moerman, Daniel E. *Native American medicinal plants: an ethnobotanical dictionary*. OR: Timber Press.

2010. Moerman, Daniel E. *Native American food plants: an ethnobotanical dictionary*. OR: Timber Press.

Species included herein:

Acmispon glaber

Arachis hypogaea

Canavalia ensiformis

Crotalaria incana

Crotalaria pallida

Crotalaria stipularia

Desmodium adscendens

Desmodium barbatum

Desmodium cuneatum

Desmodium hassleri

Desmodium incanum

Desmodium nicaraguense

Desmodium tortuosum

Desmodium uncinatum

Erythrina rubinervia

Gleditsia triacanthos

Gliricidia sepium

Indigofera suffruticosa

[1] **Disclaimer**: Information on relevant edible and medicinal uses comes from a variety of sources, both published and internet-based; this manual does **NOT** recommend using any plants as food or medicine without first consulting a medical professional.

Indigofera suffruticosa var anil de pasto

Inga sp. Vaina

Leucaena esculenta

Leucaena leucocephala

Lupinus albifrons

Phaseolus acutifolius var blue speckled

Phaseolus acutifolius var Mitla

Phaseolus acutifolius var sonoran gold bush

Phaseolus coccineus

Phaseolus dumosus

Phaseolus lunatus

Phaseolus lunatus from Guatemala

Phaseolus vulgaris

Phaseolus vulgaris var black flaco

Piscidia piscipula

Pithecellobium calostachys

Pithecellobium recordii

Prosopis spp.

Strophostyles helvola

Strophostyles leiosperma

Tamarindus indica

Trifolium albopurpureum

Trifolium alexandrinum

Trifolium amabile

Trifolium ambiguum

Trifolium andersonii

Trifolium arvense

Trifolium barbigerum

Trifolium beckwithii

Trifolium bifidum

Trifolium ciliolatum

Trifolium cyatherum

Trifolium glomeratum

Acmispon glaber

Family: Fabaceae
Common Names: Deerweed, California broom, Coastal deer weed, Western bird's-foot trefoil, Deervetch, *Lotus scoparius* (previous name)
Habitat and Growth Habit: Deerweed is native to California, but it can be found in dry areas of Arizona and Mexico as well. Its habitat includes coastal environments, chaparral, Joshua tree woodland, and roadsides.
Human Uses: Deerweed is used for landscaping including erosion control, restoration, and nitrogen fixing.
Sources Consulted:
https://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=11280, accessed November 18, 2019.
http://www.laspilitas.com/nature-of-california/plants/403--lotus-scoparius, accessed November 18, 2019.
https://plants.usda.gov/core/profile?symbol=LOSC2, accessed November 18, 2019.
http://calscape.org/Acmispon-glaber-(), accessed November 18, 2019.

Arachis hypogaea

Family: Fabaceae
Common Names: Peanut, Groundnut, Earthnut, Goober
Habitat and Growth Habit: This species is native to South America and can be found in tropic and sub-tropic regions. This species is also found in North America and Central America.
Human Uses: The peanut is famous for its edible seeds. It is not a true nut, but rather a legume. The peanut has been documented as a Native American food plant by Moerman (2010). For example, the Huron have used the roots combined with acorns as a starvation food. There is also unspecified documentation of this species as a food for the Seminole. Furthermore, some medicinal properties are noted by Duke and Wain (1981) and List and Horhammer (1969-1979). Medicinal properties include the seed as an anti-inflammatory, aphrodisiac and decoagulant. In addition, the alcoholic lipoid extracted is said to have acetylcholine-like affects to frog hearts. Lastly, it is important to note this specie's use in landscaping as a soil enriching crop and nitrogen fixing bacteria.
Sources Consulted:
Moerman 2010
http://eol.org/pages/641309/overview, accessed November 18, 2019.
https://plants.usda.gov/core/profile?symbol=arhy, accessed November 18, 2019.
http://pfaf.org/user/Plant.aspx?LatinName=Arachis+hypogaea, accessed November 18, 2019.
https://www.hort.purdue.edu/newcrop/duke_energy/Arachis_hypogaea.html, accessed November 18, 2019.
https://www.britannica.com/plant/peanut, accessed November 18, 2019.

Canavalia ensiformis

Family: Fabaceae

Common Names: Jack bean, Mole bean, Pearson bean, Chickasaw lima bean, Sword bean, One eye bean, Coffee bean, Giant-stock bean, Horse bean

Habitat and Growth Habit: This species is native to the southern region of the United States. Jack bean can be found in North America and South America in tropical and subtropical regions.

Human Uses: The bean is edible and is often boiled when young. There is a noted possible toxicity with consuming large quantities of the bean. Other uses besides as human food include livestock feed, soil bio-fumigant, and as a commercial crop.

Sources Consulted:

https://plants.usda.gov/core/profile?symbol=caen4, accessed November 18, 2019.
http://edis.ifas.ufl.edu/mv020, accessed November 18, 2019.
https://plants.usda.gov/plantguide/pdf/pg_caen4.pdf, accessed November 18, 2019.

Crotalaria incana

Family: Fabaceae
Common Names: Rattle pod, Shakeshake
Habitat and Growth Habit: This species is native to parts of North America. It can be found in Africa and India in tropical and subtropical regions. Some habitats include deciduous bushland, grasslands, and moist soils.
Human Uses: This species has been used in Paraguay medicine as an abortifacient. As well, Rattle pod has been used in Colombian folk medicine as a treatment for Gonorrhea and disinfectant for wounds.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=CRIN5, accessed November 18, 2019.
http://tropical.theferns.info/viewtropical.php?id=Crotalaria+incana, accessed November 18, 2019.
https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=26571#null, accessed November 18, 2019.

Crotalaria pallida

Family: Fabaceae
Common Names: Smooth rattlebox
Habitat and Growth Habit: This species is native to tropical Africa, Asia, and Southeast United States. It is found in sandy soils, riverbanks, along edges of lakes, and grasslands.
Human Uses: This species is used in agroforestry, agriculture, food, and traditional medicine. The seeds are fermented making a product called "dage." In medicine, the plant is used to treat urinary disorders and to reduce fevers. Notably, there are toxins associated with this plant.
Sources Consulted:
http://publish.plantnet-project.org/project/riceweeds_en/collection/collection/information/details/CVTMU, accessed November 20, 2019.
http://tropical.theferns.info/viewtropical.php?id=crotalaria+pallida, accessed November 20, 2019.
https://plants.usda.gov/core/profile?symbol=CRPA10, accessed November 20, 2019.
http://tropical.theferns.info/viewtropical.php?id=crotalaria+pallida, accessed November 20, 2019.

Crotalaria stipularia

Family: Fabaceae
Common Names: Cascabelillo alado
Habitat and Growth Habit: This species is found in South America and the Caribbean.
Human Uses: Human uses of this species are not well known at the time.
Sources Consulted:
http://www.discoverlife.org/mp/20q?search=Crotalaria+stipularia&guide=Hawaii_flora&flags=gleaan:&mobile=close, accessed November 20, 2019.
https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=501810#null, accessed November 20, 2019.
http://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:488910-1, accessed November 20, 2019.

Desmodium adscendens

Family: Fabaceae
Common Names: Amor seco, Pega pega, Srongback herb, Beggar lice, Tick-Clover, Hard man, Amor do campo
Habitat and Growth Habit: This species is found in tropical, forests and pastures. It is seen in the Western Hemisphere, Australia, and South Africa. Furthermore, amor seco is native to the Amazon rainforest of Peru, other South American countries, and on the west coast of Africa.
Human Uses: This species is important for tribal and herbal medicine. It is used by natives where the plant grows to treat a wide variety of ailments including liver, lung, muscle, allergy, and asthma. Research findings demonstrate relaxation of smooth muscle, bronchial dilation, anti-histamine affects, and the effect of normalizing liver enzyme levels when heightened.
Sources Consulted:
https://herbpathy.com/Uses-and-Benefits-of-Desmodium-Adscendens-Cid4404, accessed November 20, 2019.
https://www.conua.com/desmodium-adscendens?language=en, accessed November 20, 2019.
http://wholeworldbotanicals.com/desmodium-a-desmodium-adscendens/, accessed November 20, 2019.
http://www.rain-tree.com/amorseco.htm#.WeeMUbVrx9M, accessed November 20, 2019.

Desmodium barbatum

Family: Fabaceae
Common Names: Hairy beggarweed, Zarzabacoa peluda
Habitat and Growth Habit: This species can be found in salt marshes, grasslands, forests, and highway margins of Costa Rica, Nicaragua, and South America.
Human Uses: This plant is used in traditional medicine to treat asthma, coughs, colds, pain, menstruation complications, cramps, stomachache, hemorrhage, heart problems, and to prevent miscarriage.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=DEBA5, accessed November 20, 2019.
http://tropical.theferns.info/viewtropical.php?id=Desmodium+barbatum, accessed November 20, 2019.

Desmodium cuneatum

Family: Fabaceae
Common Names: Unknown at this time
Habitat and Growth Habit: This species is distributed in South America, South Brazil, Paraguay, Bolivia, Central and subtropical Argentina and Uruguay. It is also found in rocky soils and savannas.
Human Uses: This species is cultivated and used as a cover crop. As well, this specie is grown as a green manure crop in Argentina
Sources Consulted:
https://books.google.com/books?id=10IMFSavIMsC&pg=PA678&lpg=PA678&dq=Desmodium+cuneatum&source=bl&ots=7HbTs2MW6X&sig=wNBr2r-hAUJvhcIuFQiay7mvBAo&hl=en&sa=X&ved=0ahUKEwiwoc-m2vrWAhVW1mMKHS73CJMQ6AEIYTAP#v=onepage&q=Desmodium%20cuneatum&f=false, accessed November 20, 2019.
https://plants.usda.gov/core/profile?symbol=DECU3, accessed November 20, 2019.

Desmodium hassleri

Family: Fabaceae
Common Names: Unknown at this time
Habitat and Growth Habit: This species is native from east Bolivia to northeast Argentina and is found in Brazil and Paraguay.
Human Uses: Human uses of this species are not well documented.
Sources Consulted:
http://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:78441-2, accessed November 20, 2019.
https://npgsweb.ars-grin.gov/gringlobal/taxonomydetail.aspx?id=13637, accessed November 20, 2019.

Desmodium incanum

Note: Photo illustrates the outer shell of *Desmodium incanum* and is not the actual seed

Family: Fabaceae

Common Names: Creeping beggarweed, Spanish clover/tick-trefoil, Kaimi clover, Zarzabacoa comun, Kaimi

Habitat and Growth Habit: This species is found in North, Central, and South America in pine and oak forests.

Human Uses: *Desmodium incanum* is used for local medicine. The whole plant is used to treat hemorrhages. Also, the plant can be combined with *Cecropia* species and/or *Leonotis nepetifolia* to treat kidney ailments. When combined with *Asclepias curassavica and phyllanthus amarus*, the plant can also be used to treat womb ailments. Lastly, the plant can be applied to cuts and wounds topically for treatment.

Sources Consulted:

http://www.cabi.org/isc/datasheet/109200, accessed December 2, 2019.
https://plants.usda.gov/core/profile?symbol=Dein3, accessed December 2, 2019.
http://tropical.theferns.info/viewtropical.php?id=Desmodium+incanum, accessed December 2, 2019.
http://www.plantwise.org/KnowledgeBank/Datasheet.aspx?dsid=109200, accessed December 2, 2019.

Desmodium nicaraguense

Family: Fabaceae
Common Names: Barajillo
Habitat and Growth Habit: This species can be found in Central and South America in forests and along rocky hillsides.
Human Uses: This plant is used for animal fodder.
Sources Consulted:
http://www.hear.org/pier/species/desmodium_nicaraguense.htm, accessed December 2, 2019.
https://npgsweb.ars-grin.gov/gringlobal/taxonomydetail.aspx?id=13654, accessed December 2, 2019.

Desmodium tortuosum

Family: Fabaceae
Common Names: Florida beggarweed, Dixie ticktrefoil
Habitat and Growth Habit: This plant is found in North, Central and South America on roadsides, along cultivated land, in woodlands, and in grasslands.
Human Uses: This plant is used as a nitrogen enricher, to make green manure, and as a cover crop.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=DETO, accessed December 2, 2019.
http://www.zimbabweflora.co.zw/speciesdata/species.php?species_id=130890, accessed December 2, 2019.
http://tropical.theferns.info/viewtropical.php?id=Desmodium+tortuosum, accessed December 2, 2019.

Desmodium uncinatum

Family: Fabaceae
Common Names: Spanish clover, Silverleaf desmodium, Silverleaf Spanish clover, Silverleaf
Habitat and Growth Habit: This plant can be found in tropical and sub-tropical regions. It is distributed in Central and South America on roadsides, lawns, and disturbed areas.
Human Uses: This plant is used as fodder, cropping, and for nitrogen fixation.
Sources Consulted:

http://www.zimbabweflora.co.zw/speciesdata/species.php?species_id=130910, accessed December 2, 2019.
http://www.tropicalforages.info/key/Forages/Media/Html/Desmodium_uncinatum.htm, accessed December 2, 2019.
https://www.feedipedia.org/node/299, accessed December 2, 2019.
https://weeds.brisbane.qld.gov.au/weeds/silverleaf-desmodium, accessed December 2, 2019.

Erythrina rubinervia

Family: Fabaceae
Common Names: Amasisa, Wayruru, Chochos, Peronio
Habitat and Growth Habit: This plant is found in Belize, Panama, Venezuela, Bolivia, Ecuador, Peru, and Colombia.
Human Uses: This species is cultivated and has some edible uses. The flowers and buds can be eaten cooked. As well, young leaves can be added to soups. Even more, this plant has agroforestry uses. The species is used to create live hedges and living fence posts. The wood of the plant is also very light and is used ornamentally.
Sources Consulted:
https://npgsweb.ars-grin.gov/gringlobal/taxonomydetail.aspx?id=15764, accessed December 2, 2019.
http://tropical.theferns.info/viewtropical.php?id=Erythrina+rubrinervia, accessed December 2, 2019.

Gleditsia triacanthos

Family: Fabaceae
Common Names: Honey locust, Thorny locust, Sweet bean tree
Habitat and Growth Habit: This species is found in North America as well as central and southern Europe. It can be found in river valleys, humid and sub-humid climate regions, tropical and subtropical regions, roadsides, forests, and river banks.
Human Uses: This species has several uses. Notably, it has ornamental purposes, used as traditional food by Native Americans, cultivated for timber, used in landscaping for shade, drank as a coffee substitute, and consumed as a drink, medicine, and gum. Furthermore, southeastern indigenous people make a sweetener out of the pods from the plant.
Sources Consulted:
Moerman 1998
https://plants.usda.gov/core/profile?symbol=GLTR, accessed December 2, 2019.
http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=a871, accessed December 2, 2019.
https://selectree.calpoly.edu/tree-detail/gleditsia-triacanthos-inermis-shademaster, accessed December 2, 2019.
https://www.wildflower.org/plants/result.php?id_plant=gltr, accessed December 2, 2019.
https://gobotany.newenglandwild.org/species/gleditsia/triacanthos/, accessed December 2, 2019.
http://www.hort.uconn.edu/plants/detail.php?pid=194, accessed December 2, 2019.
http://www.pfaf.org/User/Plant.aspx?LatinName=Gleditsia+triacanthos, accessed December 2, 2019.

Gliricidia sepium

Family: Fabaceae
Common Names: Tree of iron, St. Vincent plum, Mexican lilac, Mother of cocoa, Quickstick, Gliricidia, Nicaraguan cocoa
Habitat and Growth Habit: This species is found in coastal sand dunes, river banks, and floodplains of North and South America.
Human Uses: This plant is used for honey production (forage), fodder, timber, firewood, medicine, fences, green manure, dye, and shade.
Sources Consulted:
https://www.hort.purdue.edu/newcrop/duke_energy/Gliricidia_sepium.html, accessed December 2, 2019.
https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=502803#null, accessed December 2, 2019.
http://www.cabi.org/isc/datasheet/25380, accessed December 2, 2019.

Indigofera suffruticosa

Family: Fabaceae
Common Names: Guatemalan indigo, Small-leaved indigo, Wild indigo, Anil indigo
Habitat and Growth Habit: This plant is found in subtropical and tropical regions along roadsides, in sandy soils, and within fallow fields of Argentina, Paraguay, Mexico, and Florida.
Human Uses: This specie is used as indigo dye, for medicine, erosion control, and creating green manure. Some medicinal uses include domestic medicine in Guatemala, insect sting treatment for pain and inflammation, the roots combined with the plant seeds and rum are used as a tincture for a vermifuge, dried and powdered seeds are used to treat ulcers, and plant juice can be drank to treat diarrhea.
Sources Consulted:
http://www.cabi.org/isc/datasheet/28611, accessed December 2, 2019.
http://tropical.theferns.info/viewtropical.php?id=Indigofera+suffruticosa, accessed December 2, 2019.
http://www.stuartxchange.org/Tayum.html, accessed December 2, 2019.

Indigofera suffruticosa var anil de pasto

Family: Fabaceae
Common Names: Wild indigo, Anil de Pasto, Bengal indigo, Ceylon indigo, Ye qing shu
Habitat and Growth Habit: This plant can be found in tropical and subtropical regions, particularly in Central and South America.
Human Uses: This species is used in medicine, as a dye, and cover crop.
Sources Consulted:
http://www.discoverlife.org/mp/20q?search=Indigofera+suffruticosa, accessed December 2, 2019.
https://www.gbif.org/species/2971774, accessed December 2, 2019.
http://www.stuartxchange.org/Tayum.html, accessed December 2, 2019.

Inga spp.

Family: Fabaceae
Common Names: Ice-cream bean, Joaquiniquil, Cuaniquil, Guama, Guaba
Habitat and Growth Habit: This specific seed was found in Veracruz and Tabasco. Most species in this genus are found in Mexico and South America.
Human Uses: This plant has been used for shade, subsistence, timber, medicine, and the creation of alcoholic beverages via fermentation.
Sources Consulted:
https://en.wikipedia.org/wiki/List_of_Inga_species, accessed December 2, 2019.
https://en.wikipedia.org/wiki/Inga_edulis, accessed December 2, 2019.

Leucaena esculenta

Family: Fabaceae
Common Names: Guaje rojo, Guaje colorado, Guaje
Habitat and Growth Habit: This species is found in forests in China, Mexico, Honduras, Taiwan, and the United States (California).
Human Uses: Seeds are gathered for food. The plant is also used for fodder, fuel, timber, gum, shade, and its nitrogen fixing properties.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=LEES2, accessed December 2, 2019.
http://www.worldagroforestry.org/treedb/AFTPDFS/Leucaena_esculenta.PDF, accessed December 2, 2019.
http://tropical.theferns.info/viewtropical.php?id=Leucaena+esculenta, accessed December 2, 2019.

Leucaena leucocephala

Family: Fabaceae
Common Names: White leadtree, Jumbay, River tamarind, White popinac, Wonder tree
Habitat and Growth Habit: This species is found in Asia in tropical and subtropical areas. It is also found in forests of Central America, specifically the Yucatan Peninsula of Mexico. It is also native to several region in the United States.
Human Uses: This plant is used for firewood, fodder, food, green manure, shade, and landscaping.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=lele10, accessed December 2, 2019.

Lupinus albifrons

Family: Fabaceae
Common Names: Silver bush lupine, White-leaf bush lupine, Evergreen lupine, Silver lupine
Habitat and Growth Habit: This species is found in California and Oregon in chaparral, sagebrush scrub, yellow pine forests, and oak woodlands. This species is also found in Northern Baja.
Human Uses: This plant is used for ornament, nitrogen fixation, and bee attraction.
Sources Consulted:
http://www.laspilitas.com/nature-of-california/plants/404--lupinus-albifrons, accessed December 2, 2019.
https://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=5097, accessed December 2, 2019.
http://calscape.org/Lupinus-albifrons-(Silver-Lupine)?srchcr=sc572e197bcfed1, accessed December 2, 2019.

Phaseolus acutifolius var blue speckled

Family: Fabaceae
Common Names: Tepary bean
Habitat and Growth Habit: This species is found in the southwestern United States and Mexico. Its habitat includes desert and semi-desert areas.
Human Uses: Tepary bean is used in cultivation and agriculture. The dried beans are edible.
Sources Consulted:
https://www.fireflyforest.com/flowers/3492/phaseolus-acutifolius-var-tenuifolius-tepary-bean/, accessed December 2, 2019.

Phaseolus acutifolius var Mitla

Family: Fabaceae
Common Names: Tepary bean, Mitla black
Habitat and Growth Habit: This species is native to southwestern United States and Mexico. Notably, the species is native to the arid Mitla region of Oaxaca, Mexico. This plant can grow in desert and semi-desert areas.
Human Uses: This species is harvested. The seeds are high in protein and are often soaked first then boiled or baked to add to many different food dishes.
Sources Consulted:
http://edis.ifas.ufl.edu/document_mv025, accessed December 2, 2019.
https://www.redwoodseeds.net/products/mitla-black-tepary-bean, accessed December 2, 2019.
https://onegreenworld.com/product/black-mitla-tepary-phaseolus-acutifolius/, accessed December 2, 2019.

Phaseolus acutifolius var *sonoran gold bush*

Family: Fabaceae
Common Names: Tepary bean
Habitat and Growth Habit: This plant is native to Southwestern United States and Mexico. It is found in the Sonoran desert and semi-desert areas.
Human Uses: this species is cultivated for food and fodder. This species has been used as a dry soup bean and has been a large source of protein for many peoples.
Sources Consulted:
http://www.digthedirt.com/plants/30391-beans-phaseolus-acutifolius-sonoran-gold-bush, accessed January 15, 2020.
https://www.redwoodseeds.net/products/sonoran-gold-tepary-bean, accessed January 15, 2020.

Phaseolus coccineus

Family: Fabaceae
Common Names: Runner bean, Scarlet runner bean, Multiflora bean, Dutch runner bean, Snap bean, Pole bean
Habitat and Growth Habit: This species' native range includes South and Central America and the Eastern United States. Its habitat includes mountains.
Human Uses: Runner bean is used for many human purposes that include ornament, cultivation, agriculture, and the attraction of wildlife. Young seed pods can be eaten cooked or raw. Mature seeds are rich in protein and are often stored dried. The root can be cooked as well as young leaves, which are prepared like most vegetables. Lastly, the seeds can be ground and added to baked commodities such as bread to increase nutrients and more specifically protein content.
Sources Consulted:
http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=280328&isprofile=0&, accessed January 15, 2020.
http://www.pfaf.org/USER/Plant.aspx?LatinName=Phaseolus+coccineus, accessed January 15, 2020.
https://plants.usda.gov/core/profile?symbol=phco6, accessed January 15, 2020.
https://wimastergardener.org/article/scarlet-runner-bean-phaseolus-coccineus/, accessed January 15, 2020.
https://floridata.com/Plants/Fabaceae/Phaseolus+coccineus/791, accessed January 15, 2020.

Phaseolus dumosus

Family: Fabaceae
Common Names: Year-long-bean
Habitat and Growth Habit: This species is native to Northern America (Southern Mexico, Chiapas), Southern America, Central America (Guatemala, Alta Verapaz, Quetzaltenango, Sacatepéquez, San Marcos, and Soloa). *Phaseolus dumosus* is cultivated in Southern America (the Caribbean and Costa Rica.) Other areas of habitation include Colombia, Ecuador, and the West Indies.
Human Uses: This species is cultivated for food and is involved as a gene source for disease resistance.
Sources Consulted:
https://books.google.com/books?id=88vqAtuZ8VMC&pg=PA170&lpg=PA170&dq=Phaseolus+dumosus&source=bl&ots=QQDl1dYZVg&sig=QRnp3sBXycrLOXe5S-YZ6-cv1ls&hl=en&sa=X&ved=0ahUKEwit4bDVvvHYAhUC5GMKHZ8ZBkcQ6AEIZDAN#v=onepage&q=Phaseolus%20dumosus&f=false, accessed January 15, 2020.
https://npgsweb.ars-grin.gov/gringlobal/taxonomydetail.aspx?id=27569, accessed January 15, 2020.
https://www.botany.one/2016/11/genepool-year-long-bean-crop-phaseolus-dumosus/, accessed January 15, 2020.
https://academic.oup.com/aob/article/118/5/957/2196090, accessed January 15, 2020.

Phaseolus lunatus

Family: Fabaceae
Common Names: Lima Bean, Butterbean, Seiva bean, Butter-pea, Sugar bean, Madagascar bean
Habitat and Growth Habit: This species is found in Central and South America as well as Southeastern United States. Its habitat includes semi tropical landscapes.
Human Uses: This species is cultivated and used in agriculture, as fodder, in medicine, and as a cover crop. Interestingly, the seeds have been used in traditional medicine to be incorporated as a food for people with fevers.
Sources Consulted:
http://eol.org/pages/645300/details, accessed January 15, 2020.
http://eol.org/pages/645300/overview, accessed January 15, 2020.
https://plants.usda.gov/core/profile?symbol=phlu2, accessed January 15, 2020.
http://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:513918-1, accessed January 15, 2020.
http://www.pfaf.org/User/Plant.aspx?LatinName=Phaseolus+lunatus, accessed January 15, 2020.

Phaseolus lunatus from Guatemala

Family: Fabaceae
Common Names: Lima bean, Butterbean, Seiva bean, Butter-pea, Broad bean
Habitat and Growth Habit: This variation can be found in Central (Guatemala) and South America. *Phaseolus lunatus* is native to North America.
Human Uses: This variety is cultivated and used for agricultural purposes
Sources Consulted:
https://www.gbif.org/species/5350438, accessed January 15, 2020.

Phaseolus vulgaris

Family: Fabaceae

Common Names: The common bean, String bean, Garden bean, Green bean, Snap bean, Wax bean, Caraota, Feijao, Poroto, Frijol

Habitat and Growth Habit: The geographic distribution includes the Americas, semi-tropical regions, the Caribbean, and the South Pacific. In temperate regions, this bean is among the most cultivated.

Human Uses: Some uses of this species include food for domesticated animals, food for humans, and medicine. Even more, immature pods are cooked and consumed. Mature or ripe pods are very often cooked and are referred to as navy beans, white beans, northern beans, and pea beans. As well, in lower latitudes dried beans are a great source of protein for many people. Lastly, in Java it is noted that young leaves are consumed as a salad.

Sources Consulted:

http://eol.org/pages/645324/overview, accessed January 15, 2020.
https://www.hort.purdue.edu/newcrop/duke_energy/Phaseolus_vulgaris.html, accessed January 15, 2020.
http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=280470&isprofile=0&pt=1, accessed January 15, 2020.
https://floridata.com/Plants/Fabaceae/Phaseolus+vulgaris/716, accessed January 15, 2020.
https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=26857#null, accessed January 15, 2020.

Phaseolus vulgaris var black flaco

Family: Fabaceae
Common Names: Black turtle bean, Black bean
Habitat and Growth Habit: This species is distributed throughout North, Central, and South America.
Human Uses: See *Phaseolus vulgaris*.
Sources Consulted:
https://www.feedipedia.org/node/266, accessed January 17, 2020.
See *Phaseolus vulgaris*.

Piscidia piscipula

Family: Fabaceae
Common Names: Jaimaica-dogwood, Florida fishpoison tree, Fishfuddle
Habitat and Growth Habit: This species is native to the state of Florida in North America. It has been documented to occur in Texas, the Caribbean, and in Latin America. This species is distributed among coastal regions.
Human Uses: There are many uses of this species with human value which include medicinal, cultivation, lumber, and fishing purposes. What's more, some ethnobotanical use by Native Americas is noted that the bark, leaves, roots, and twigs of the plant have been used to catch fish by sedation.
Sources Consulted:
http://www.regionalconservation.org/beta/nfyn/plantdetail.asp?tx=Piscpisc, accessed January 17, 2020.
https://plants.usda.gov/core/profile?symbol=PIPI3, accessed January 17, 2020.
http://www.fnps.org/plants/plant/piscidia-piscipula, accessed January 17, 2020.
http://florida.plantatlas.usf.edu/Plant.aspx?id=3732, accessed January 17, 2020.

Pithecellobium calostachys

Family: Fabaceae
Common Names: Monkeypod
Habitat and Growth Habit: This species is found in Central America, northern South America, India, Bangladesh, and the Philippines.
Human Uses: This species had food and medicinal uses, yet there is limited information on the specifics of medicinal or subsistence use at this time.
Sources Consulted:
http://www.sernecportal.org/portal/taxa/index.php?taxon=212845, accessed January 17, 2020.

Pithecellobium dulce

Family: Fabaceae
Common Names: Florida keys black-bead, Monkey pod (previously known as *Pithecellobium recordii)*
Habitat and Growth Habit: This species is documented to occur in Florida, Brazil, Belize, Mexico, and Guatemala.
Human Uses: Human uses are unknown or poorly recorded at this time for this particular species.
Sources Consulted:
http://www.tropicos.org/Name/13012773?tab=distribution, accessed January 17, 2020.
http://florida.plantatlas.usf.edu/Plant.aspx?id=166, accessed January 17, 2020.

Prosopis spp.

Family: Fabaceae
Common Names: Burdock, Mesquite
Habitat and Growth Habit: This species is found in the Americas and Western and South Asia. Its habitat includes tropical and subtropical regions.
Human Uses: *Prosopis* has been used by humans for shade, fodder, and medicine. Modern biopharmaceutical research demonstrates the effects of this genus for particular medicinal and pharmaceutical purposes. It is important to acknowledge that traditionally, species of this genus have been made into pastes, gums, and smoked for anticancer, antidiabetic, anti-inflammatory, and antimicrobial properties. Furthermore, *Prosois* species provide some resistance towards pathogenic bacteria that are harmful to humans. For example, P. *juliflora* has demonstrated antibiotic activity towards S. *aureus* and *Escherichia coli.* Moreover, the compounds actual responsible for this activity against those pathogens are believed to be myo-inositol-4c-methyl and *N*-β-chloropropionyltryptamine.
Sources Consulted:
http://www.sciencedirect.com/science/article/pii/S1021949816301697, accessed January 17, 2020.
https://plants.usda.gov/core/profile?symbol=PROSO, accessed January 17, 2020.

Strophostyles helvola

Family: Fabaceae
Common Names: Amberique-bean, Trailing fuzzybean, Wild bean, Trailing wild bean, Annual woolly bean, Sand bean
Habitat and Growth Habit: This species is found in eastern North America in meadows, sandy soil, open woods, coastal beaches, forest edges, and woodlands.
Human Uses: Human uses of this species include Native American medicine, wildlife food, and nitrogen fixation.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=sthe9, accessed January 17, 2020.
https://www.minnesotawildflowers.info/flower/wild-bean, accessed January 17, 2020.
http://www.illinoiswildflowers.info/savanna/plants/mo_fzbean.htm, accessed January 17, 2020.
https://davesgarden.com/guides/pf/go/73126/, accessed January 17, 2020.
http://pages.wustl.edu/peblabguide/articles/1137, accessed January 17, 2020.

Strophostyles leiosperma

Family: Fabaceae
Common Names: Small fuzzy bean, Slick-seed fuzzy bean, Smooth-seed wild bean
Habitat and Growth Habit: This species is native to North America and is found in rocky woodlands, sandy woodlands, and in sandy fields.
Human Uses: This species is cultivated by humans. Exact human uses beyond gardening are unknown and/or poorly documented at this time.
Sources Consulted:
http://www.illinoiswildflowers.info/prairie/plantx/sm_fuzzybean.htm, accessed January 17, 2020.
https://www.minnesotawildflowers.info/flower/trailing-pea, accessed January 17, 2020.
https://plants.usda.gov/core/profile?symbol=stle6, accessed January 17, 2020.
https://www.wildflower.org/plants/result.php?id_plant=stle6, accessed January 17, 2020.

Tamarindus indica

Family: Fabaceae
Common Names: Tamarind, Tamarind tree
Habitat and Growth Habit: The distribution of this species includes the South Pacific. It can be found in wooded grasslands and is said to be found in Africa and Asia. It was introduced to Florida. Environments include tropical and subtropical regions.
Human Uses: This species is used as an agricultural commodity, fodder, apiculture, fuel, timber, dye, medicinal uses, pharmaceutical uses, ornamental uses, oil production, laxative use, and for honey purposes. Research biopharmaceutical research demonstrates the effects of Tamarind components as a treatment for many digestive and intestinal ailments including abdominal pain, diarrhea, parasitic and bacterial infection, dysentery, constipation, inflammation, and wound healing. Studies have demonstrated spasmolytic effects where smooth muscles are relaxed by calcium channel blocking. This is one form of evidence on its traditional use against diarrhea. The antibacterial properties are against many different human pathogenic bacteria species (*Burkholderia pseudomallei, Klebsiella pneumoniae, Salmonella paratyphi*, *Bacillus subtilis*, *Salmonella typhi*, *Escherichia coli* and *Staphylococcus aureus*.) It is also notable that the World Health Organization explains that tamarind fruit contains all but one essential amino acids (tryptophan lacking.) As well, seeds are a very accessible protein source.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=TAIN2, accessed January 17, 2020.
http://www.sciencedirect.com/science/article/pii/S2221169115300885, accessed January 17, 2020.
http://eol.org/pages/639027/overview, accessed January 17, 2020.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3210002/, accessed January 17, 2020.

Trifolium albopurpureum

Family: Fabaceae
Common Names: Rancheria clover, Branched Indian clover
Habitat and Growth Habit: This species is native to California. It is also native to a few other western North American states. It is found in woodlands, grasslands, wet meadows, open slopes, disturbed areas, roadsides, oak chaparral, pine woodlands, and coastal prairies.
Human Uses: The leaves and seeds are edible either raw or cooked. Often the seeds are sprouted or dried and ground into a powder to add to cereals, bread, and soups. There are no known medicinal uses of this plant. However, the species is commonly used in bee gardens. Lastly, Rancheria clover has a symbiotic relationship with nitrogen fixing bacteria in the soil, which could open up more human uses relating to sustainable gardening.
Sources Consulted:
Moerman 2010
https://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=8043, accessed January 22, 2020.
https://plants.usda.gov/core/profile?symbol=TRAL5, accessed January 22, 2020.
http://swbiodiversity.org/seinet/taxa/index.php?taxon=1696, accessed January 22, 2020.
http://calscape.org/Trifolium-albopurpureum-(), accessed January 22, 2020.
http://www.ssseeds.com/plant-database/trifolium-albopurpureum/, accessed January 22, 2020.
http://www.pfaf.org/user/Plant.aspx?LatinName=Trifolium+albopurpureum, accessed January 22, 2020.

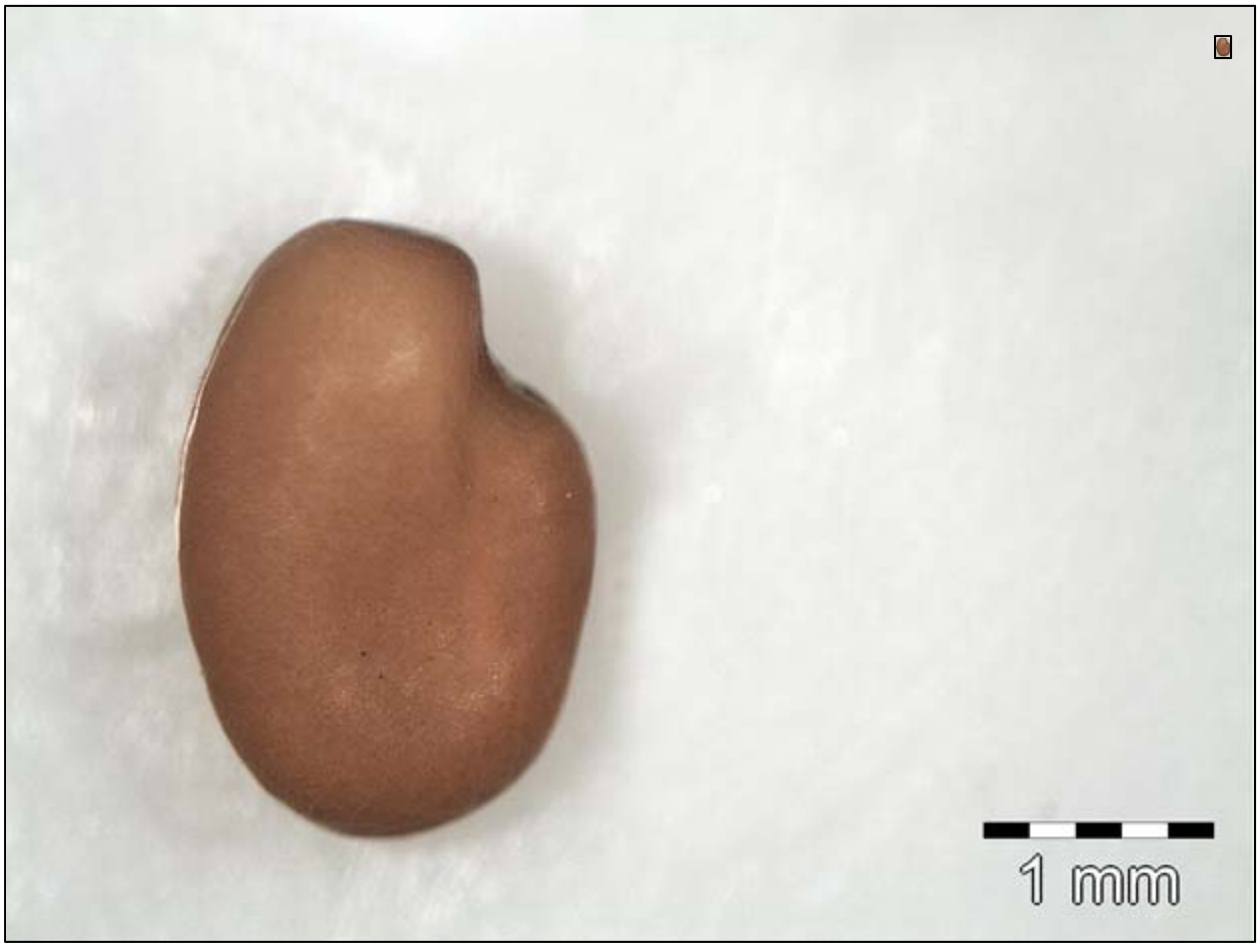
Trifolium alexandrinum

Family: Fabaceae
Common Names: Egyptian clover, Berseem clover, “King of forage crops”
Habitat and Growth Habit: This species is native to California. It is noted, however, that there are differences in the belief of the exact origin. Some researchers argue that Egyptian or berseem clover originated in Syria. However, this species was domesticated in Egypt and later spread to India, and Pakistan. As well, this species is used in large livestock systems where there are mild winters. These regions include the Americas, Europe, and Australia. Berseem clover prefers neutral or alkaline soils.
Human Uses: This species is important in animal husbandry as fodder and for soil fertility maintenance. For example, this species is important in nitrogen fixation.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=TRAL6, accessed January 22, 2020.
http://www.fao.org/3/a-i3500e.pdf, accessed January 22, 2020.

Trifolium amabile

Family: Fabaceae
Common Names: Aztec Clover
Habitat and Growth Habit: Aztec clover is native to Arizona (USA). As well, the species is found in Central and South America. Some regions in particular include Argentina, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Peru, and many Mexico states. Aztec clover is distributed in forests, mountains environments, grasslands, and in moist sandy soil.
Human Uses: This species is believed to be used as food by Native Americans. There is little documentation the how this plant is consumed and who consumed/consumes it, however.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=TRAM2, accessed January 22, 2020.
https://www.iucnredlist.org/species/19892797/20154255#habitat-ecology, accessed January 22, 2020.

Trifolium ambiguum



Family: Fabaceae
Common Names: Caucasian clover, Kura clover, Pellet clover, Honey clover
Habitat and Growth Habit: Caucasian crop is native to Georgia, Armenia, Azerbaydzhan, the Black Sea Coast of Ukraine, eastern Turkey, and northern Iran. It was introduced to the United States of America, and it is documented by the USDA to occur in Ohio. Other regions where this species has been noted include Europe, Asia, Australia, and North America. One of the ecological niches this species is distributed in include poorly drained lowlands of Chernozen steppes.
Human Uses: This species is said to have a promising future in cultivation. It is notable that this species is not cultivated in its indigenous lands, however. It has potential to be a superior grazing crop due to its extensive rhizome and root formation.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=TRAM15, accessed January 22, 2020.
https://www.sciencedirect.com/science/article/pii/S0065211308602436, accessed January 22, 2020.

Trifolium andersonii

Family: Fabaceae
Common Names: Five leaf clover, Beatley's clover, Anderson's clover
Habitat and Growth Habit: This species is native to the western United States. Some of the states that this species occurs in include California, Oregon, Nevada, and Idaho. Ecologies that five leaf clover occurs in include rocky slopes, sagebrush scrub, meadows, northern juniper woodland, and yellow-pine forests.
Human Uses: Human uses are not well understood or documented at this time.
Sources Consulted:
http://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Trifolium+andersonii, accessed January 22, 2020.
https://plants.usda.gov/core/profile?symbol=TRAN, accessed January 22, 2020.
http://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=53226, accessed January 22, 2020.
http://swbiodiversity.org/seinet/taxa/index.php?taxon=Trifolium%20andersonii, accessed January 22, 2020.
https://eol.org/pages/414985, accessed January 22, 2020.

Trifolium arvense

Family: Fabaceae
Common Names: Rabbitfoot clover, Haresfoot clover, Hairy clover, Stone clover, Oldfield clover
Habitat and Growth Habit: This species originated in Eurasia. It was introduced to the United States where, according to the USDA, this plant is found in a substantial amount of states. Notably, because its origin this species is found in, in particular Finland. Ecological niches this species is found in include dry sandy soils, fields, sand dunes, dry meadows, rocky outcrops, and road and field banks. It is reported as an invasive species by Haleakala National Park (Hawaii.)
Human Uses: Notably, this species is a nitrogen fixer. As well, there is some documentation that Rabbitfoot clover has been used to medicinally treat humans and animals.
Sources Consulted:
https://plants.usda.gov/core/profile?symbol=TRAR4, accessed January 22, 2020.
https://www.minnesotawildflowers.info/flower/rabbit-foot-clover, accessed January 22, 2020.
http://www.luontoportti.com/suomi/en/kukkakasvit/hares-foot-clover, accessed January 22, 2020.
https://www.invasiveplantatlas.org/subject.html?sub=6540, accessed January 22, 2020.

Trifolium barbigerum

Family: Fabaceae
Common Names: Bearded clover
Habitat and Growth Habit: This species is known to be native to California and is endemic, or limited to, California. However, other resources state that this plant is also native to Oregon. Habitats include wet meadows and open, disturbed areas.
Human Uses: The human uses of this plant are not well documented at this time.
Sources Consulted:
http://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Trifolium+barbigerum, accessed January.
https://plants.usda.gov/core/profile?symbol=TRBA, accessed January 22, 2020.
http://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=47049, accessed January 22, 2020.
http://sernecportal.org/portal/taxa/index.php?taxon=103931&clid=4309, accessed January 22, 2020.

Trifolium beckwithii

Family: Fabaceae
Common Names: Beckwith's clover
Habitat and Growth Habit: This species is native to California, Oregon, Nevada, Utah, Montana, and South Dakota. It is confined to the western United States. Habitats with Beckwith's clover include yellow pine forests, red fir forests, mountain meadows, and wetland-riparian areas.
Human Uses: The human uses of this species are either unknown or poorly documented at this time.
Sources Consulted:
http://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Trifolium+beckwithii, accessed January 24, 2020.
http://eol.org/pages/640568/overview, accessed January 24, 2020.
https://calscape.org/Trifolium-beckwithii-(), accessed January 24, 2020.
https://plants.usda.gov/core/profile?symbol=TRBE2, accessed January 24, 2020.

Trifolium bifidum

Family: Fabaceae
Common Names: Notch-leaf clover, Pinole clover
Habitat and Growth Habit: This plant is found in the western United States and occurs in mixed evergreen forests, coastal prairies, grassy fields, and open woodlands.
Human Uses: Moerman (2010) explains that this species is used as food by Mendocino Native Americans. The seeds act as a staple and are eaten as a pinole. There is also some documentation of leaves being eaten raw and/or cooked.
Sources Consulted:
Moerman 2010
http://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Trifolium+bifidum, accessed January 24, 2020.
https://plants.usda.gov/core/profile?symbol=TRBI, accessed January 24, 2020.
http://pfaf.org/user/Plant.aspx?LatinName=Trifolium+bifidum, accessed January 24, 2020.

Trifolium ciliolatum

Family: Fabaceae
Common Names: Foothill clover, Tree clover
Habitat and Growth Habit: This species is found in western North America in grasslands, open grassy places, chaparral, and mountains environments.
Human Uses: This plant can be eaten raw and cooked. Moerman (2010) documented that Miwok Native Americans steam the clover and dry it to eat later. As well, the clover is consumed raw or steamed. Lastly, leaves and flowers are eaten alone or in combination with salt or peppernut cakes (Pomo, Kashaya).
Sources Consulted:
Moerman 2010
http://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Trifolium+ciliolatum, accessed January 24, 2020.
http://eol.org/pages/640575/overview, accessed January 24, 2020.
http://www.sharnoffphotos.com/nature/wild_plants/wild_plantsTZ/trifolium_ciliolatum.html, accessed January 24, 2020.

Trifolium cyathiferum

Family: Fabaceae
Common Names: Cup clover, Bowl clover
Habitat and Growth Habit: This plant is native to western North America.
Human Uses: Moerman (2010) explains that Mendocino Native Americans have eaten the flowers as unspecified food. As well, other sources explain that leaves and flowers can both be eaten raw or cooked.
Sources Consulted:
Moerman 2010
https://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=8066, accessed January 24, 2020.
https://plants.usda.gov/core/profile?symbol=TRCY, accessed January 24, 2020.
http://swbiodiversity.org/seinet/taxa/index.php?taxon=103958, accessed January 24, 2020.
https://pfaf.org/user/Plant.aspx?LatinName=Trifolium+cyathiferum, accessed January 24, 2020.

Trifolium glomeratum

Family: Fabaceae
Common Names: Clustered clover, Bush clover, Ball clover, Burr-clover, Bristly clover, Flat headed clover
Habitat and Growth Habit: This plant is found native to Africa, *possibly* western Asia, and parts Europe. Some sources elaborate and explain that this plant is found in other regions such as the middle-east. This plant is found in the United States, however, it is not native to the US or California (widely naturalized.)
Human Uses: Some have documented that this plant is used as fodder. It is possible that this species has other human uses but they are poorly documented at this time.
Sources Consulted:
http://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Trifolium+glomeratum, accessed January 24, 2020.
https://www.inaturalist.org/taxa/61021-Trifolium-glomeratum, accessed January 24, 2020.
https://keyserver.lucidcentral.org/weeds/data/media/Html/trifolium_glomeratum.htm, accessed January 24, 2020.
http://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=47087, accessed January 24, 2020.
https://npgsweb.ars-grin.gov/gringlobal/taxonomydetail.aspx?40235, accessed January 24, 2020.