#### **Comparative Seed Manual: ASTERACEAE**

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(Completed, April 17, 2019)

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<sup>1</sup>:

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:

Achillea lanulosa Achillea millefolium Ambrosia chamissonis Ambrosia deltoidea Ambrosia dumosa Ambrosia eriocentra Ambrosia salsola Artemisia californica Artemisia douglasiana Baccharis pilularis Baccharis spp. Bidens aurea Coreopsis lanceolata Helianthus annuus

<sup>&</sup>lt;sup>1</sup> **<u>Disclaimer</u>**: 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.



**Common Names:** Yarrow, California Native Yarrow, Common Yarrow, Western Yarrow, Mifoil **Habitat and Growth Habit:** This plant is distributed throughout the Northern Hemisphere. It is native in temperate areas of North America. There are both native and introduced species in areas creating hybrids.

**Human Uses:** This plant has a positive fragrance making it desired in gardens. In addition, this plant has traditional medical uses including its ability to break a fever by increasing perspiration. Other traditional medical uses include treating hemorrhages and being applied as a topical ointment to reduce inflammation of skin rashes. The leaves also have been boiled to make a tea used for treating stomach disorders.

## **Sources Consulted:**

<u>http://ucjeps.berkeley.edu/eflora/eflora\_display.php?tid=678</u>, accessed February 8, 2019. <u>http://www.ssseeds.com/plant-database/achillea-millefolium-ssp-lanulosa/</u>, accessed February 8, 2019.

https://www.wildflower.org/plants/result.php?id\_plant=acmi2, accessed February 8, 2019.



**Common Names:** Yarrow, Common yarrow, Nosebleed plant, Thousand-leaf, Devil's nettle, Milfoil, Soldier's woundwort, Bloodwort, Sanguinary

**Habitat and Growth Habit:** Species of this plant can be found in temperate regions of Asia, Europe, North America, and Western Asia. It can also be found in hot climates, moist rich soil, forests, and meadows.

**Human Uses:** There are many medicinal and ornamental uses pertaining to particular species. Some varieties can be made into a drinkable tea for medicinal uses. There are also edible parts as well. The medicinal uses vary and include use as an astringent, antidiarrheal perscription, an antiseptic, and an antispasmodic. Also this species has a history of use to stop blood flow and treat menstrual pain. In recent studies, certain species of this plant have been found to contain anti-inflammatory agent azulene. Research has confirmed chemical compounds in azulene to inhibit actions of the immune system making it a choice to reduce inflammation and allergy symptoms. It is possible this compound has a future as an immune suppressant but further study needs to be conducted to understand toxic properties of some compounds found in the plant.

## Sources consulted:

http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=b282, accessed February 8, 2019.

<u>https://www.calflora.org/cgi-bin/species\_query.cgi?where-calrecnum=61</u>, accessed February 8, 2019.

<u>http://www.pfaf.org/USER/Plant.aspx?LatinName=Achillea+millefolium</u>, accessed February 8, 2019.

https://www.sciencedirect.com/topics/medicine-and-dentistry/azulene, accessed February 8, 2019.

#### Ambrosia chamissonis



Family: Asteraceae

**Common Names:** Silver Burweed, Greene, Silver burr ragweed, Beach bur

**Habitat and Growth Habit:** This plant can be found in sandy coastal habitats along the Western North America coast from Alaska and Canada to Baja California. It is also found on California's Channel Islands.

**Human Uses:** This plant has a traditional medicinal usages among the Makah of the Pacific Northwest. For instance, it is used as a medicine to strengthen and heal. In addition to medicine, this plant is used as a toy for children seen in the Hesquiat. The stems would secrete out a liquid substance that resembled the color of blood (used in playing.) Other human uses include the stabilization of dunes and erosion control.

#### **Sources Consulted:**

Moerman, 1998.

<u>http://www.calflora.org/cgi-bin/species\_query.cgi?where-taxon=Ambrosia+chamissonis</u>, accessed February 8, 2019.

http://calscape.org/Ambrosia-chamissonis-(), accessed February 8, 2019.

https://www.pnwflowers.com/flower/ambrosia-chamissonis accessed February 8, 2019.

#### Ambrosia deltoidea



**Family:** Asteraceae

**Common Names:** Triangle burr ragweed, Triangleleaf bursage, Rabbitbush, Estafiate **Habitat and Growth Habit:** This species can be found in desert shrub and dessert grasslands ranging from Southwest Arizona, United States to Sonora and Baja California, Mexico. **Human Uses:** Due to its attractiveness and ability to increase livelihood of other plants, this species is used in restoration and desert revegetation.

#### **Sources Consulted:**

https://www.desertmuseum.org/books/nhsd\_ambrosia.php, accessed February 15, 2019. https://www.fs.fed.us/database/feis/plants/shrub/ambdel/all.html, accessed February 15, 2019.

#### Ambrosia dumosa



#### **Family:** Asteraceae

**Common Names:** Bursage, Burrobush, White burro bush, Bur Sage, Burro weed, Desert ragweed, White bursage

**Habitat and Growth Habit:** This species is native to North America. It is found in the Great Basin province in the Unite and Inyo Mountains as well as East of Sierra Nevada. It is also found in desert regions in Desert Mountains and grasslands of the Mojave Desert and the Sonoran Desert. Outside of California, this species is found on the southwest portion of Utah, Arizona, and Northwestern Mexico. **Human Uses:** This plant is often used in landscaping. It is not particularly aesthetically pleasing yet has many capabilities. It is often used as a filler plant in desert restoration projects.

## **Sources Consulted:**

<u>http://ucjeps.berkeley.edu/eflora/eflora\_display.php?tid=823#MAP</u>, accessed February 15, 2019. <u>https://eol.org/pages/468208/names</u>, accessed February 15, 2019.

http://www.public.asu.edu/~camartin/plants/Plant%20html%20files/ambrosiadumosa.html, accessed February 15, 2019.

<u>https://www.wildflower.org/plants/result.php?id\_plant=AMDU2</u>, accessed February 15, 2019. <u>https://calscape.org/Ambrosia-dumosa-()</u>, accessed February 15, 2019.

#### Ambrosia eriocentra



**Family:** Asteraceae

**Common Names:** Woollyfruit burr ragweed, Ragweed, Woolly bursage

**Habitat and Growth Habit:** This plant is native to California, but it is found in other portions of Western North America (Arizona, Utah, and Nevada.) It is found in desert and pinyon-juniper habitats and sandy soils.

**Human Uses:** Mostly known for its ecological uses, this plant has also been used in traditional medicine. The leaves have been made into a tea to help alleviate inflammation, vomiting, intestinal irritation and bowel cramps, and treatment of the common cold. The plant has also been made into a skin salve to treat sores.

## **Sources Consulted:**

<u>http://www.calflora.org/cgi-bin/species\_query.cgi?where-taxon=Ambrosia+eriocentra</u>, accessed February 15, 2019.

http://southwestdesertflora.com/WebsiteFolders/All\_Species/Asteraceae/Ambrosia\_eriocentra.htm ], accessed February 15, 2019.

<u>https://plants.usda.gov/core/profile?symbol=AMER</u>, accessed February 15, 2019. <u>http://ucjeps.berkeley.edu/eflora/eflora\_display.php?tid=824</u>, accessed February 15, 2019. <u>http://www.newworldencyclopedia.org/entry/Ragweed</u>, accessed February 15, 2019.



Common Names: Cheesebush, White burrobush, Burrobush, Pearlbush, Desert pearl

**Habitat and Growth Habit:** This plant is native to California. It is found in the Southwest United States as well as Northern Mexico. The habitats of this species include sand, gravel, rocky slopes, and saline soils.

**Human Uses:** The Seri tribe use *Ambrosia salsola* twigs and weeds along with *Koeberlinia spinosa* twigs to make a boiled tea used in treating skin rashes. Burrobush tea has also been used by the Seri to treat skin lung and tracheal pain, as an anti-inflammatory, and used to treat rheumatism.

# **Sources Consulted:**

http://calscape.org/Ambrosia-salsola-(Cheesebush)?srchcr=sc5884f3e3da847, accessed February 15, 2019.

<u>http://www.calflora.org/cgi-bin/species\_query.cgi?where-taxon=Ambrosia+salsola</u>, accessed February 15, 2019.

http://southwestdesertflora.com/WebsiteFolders/All\_Species/Asteraceae/Ambrosia\_salsola.html, accessed February 15, 2019.

https://www.fs.fed.us/database/feis/plants/shrub/hymsal/all.html, accessed February 15, 2019.



**Common Names:** California sagebrush, Coastal sagebrush, California sagewort, California mugwort **Habitat and Growth Habit:** Native to Central and Southern California and is found in Baja California, Mexico. Habitats include coastal sage scrub, chaparral, coastal strand, and central oak woodland.

**Human Uses:** The dried leaves of this plant have been combined with tobacco for smoking. Fresh leaves have been chewed. Some ethnobotanical uses of the leaves include the use to treat menstrual problems, treating asthma by application on the back, alleviation of tooth pain and wounds, use to take away pain from childbirth, to bath colds, and to treat rheumatism and coughs. Other uses include restoration of disturbed sites in gardens and groundcover use.

## **Sources Consulted:**

http://www.laspilitas.com/nature-of-california/plants/93--artemisia-californica, accessed February 15, 2019.

http://www.smgrowers.com/products/plants/plantdisplay.asp?plant\_id=3886, accessed February 15, 2019.

https://plants.usda.gov/core/profile?symbol=arca11, accessed February 15, 2019. https://plants.usda.gov/plantguide/pdf/pg\_arca11.pdf, accessed February 15, 2019.



Common Names: California mugwort, Douglas' sagewort

**Habitat and Growth Habit:** This plant can be found all over California. Other major areas of distribution include the Western United States and Northwestern Mexico. This plant can be found in forest, chaparral, grassland, and riparian.

**Human Uses:** Used by many Native Americans in ceremonies and for medical usages. Some usages include relieving joint pain and headaches, treating abrasions and rashes, and treating minor injuries. Other usages include restoration projects and erosion control.

# **Sources Consulted:**

<u>http://www.calflora.org/cgi-bin/species\_query.cgi?where-calrecnum=708</u>, accessed February 22, 2019.

http://calscape.org/Artemisia-douglasiana-(), accessed February 22, 2019.



**Common Names:** Coyotebrush, Chaparral broom, Pigeon Point, Bush baccharis, Dwarf coyote brush

**Habitat and Growth Habit:** Coyotebrush is native to California and can be found in canyons and coastal regions. This plant can however be found outside the boundaries of California in Baja California, Mexico, Oregon, and Washington.

**Human Uses:** The Ohlone on the Northern California Coast had ethnobotanical usages of this plant, using it as a general remedy for disease. As well, Chumash of Santa Ynez, California used the leaves of this plant to make an ointment to treat the rash from poison oak. Natives to the Mendocino county region had used the stems to make arrows. Current usages include habitat restoration, erosion control, and for ornamental purposes

## **Sources Consulted:**

https://www.calflora.org/cgi-bin/species\_query.cgi?where-calrecnum=1031, accessed February 22, 2019.

http://www.smgrowers.com/products/plants/plantdisplay.asp?plant\_id=4109, accessed February 22, 2019.

https://plants.usda.gov/plantguide/pdf/pg\_bapi.pdf, accessed February 22, 2019.



Common Names: Baccharises, Brooms, Groundsel bush, Carqueja

**Habitat and Growth Habit:** Generally species of this plant can be found in South America and in warmer regions.

**Human Uses:** Generally species of this plant have been used for windbreak for plantations, kept by beekeepers, and in traditional medicine. Notably, there are many species with different uses.

## **Sources Consulted:**

http://www.naturallivingcenter.net/ns/DisplayMonograph.asp?StoreID=b571dewxvcs92jj200akhmc cqa7w8v75&DocID=bottomline-carqueja, accessed February 22, 2019.



**Common Names:** Arizona beggar ticks, Apache Beggarticks, Railway beggar's tick, Bur Marigold **Habitat and Growth Habit:** This plant can be found in Mexico, Arizona, and the Southern United States to Guatemala, but is native to Arizona. This plant is found in sunny locations and growing in moist soil along streams.

**Human Uses:** The leaves can be used edible in making a drinking tea. There are also some ornamental uses for this plant. There are multiple traditional medical usages of this plant, however, the effects are species specific and should be used with caution.

## **Sources Consulted:**

https://plants.usda.gov/core/profile?symbol=BIAU, accessed February 22, 2019. http://www.pfaf.org/User/Plant.aspx?LatinName=Bidens+aurea, accessed February 22, 2019. http://www.fireflyforest.com/flowers/3797/bidens-aurea-arizona-beggarticks/, accessed February 22, 2019.

https://www.drugs.com/npp/bur-marigold.html, accessed February 22, 2019.



**Common Names:** Lance-leaved coreopsis, Lanceleaf Tickseed, Sand Coreopsis

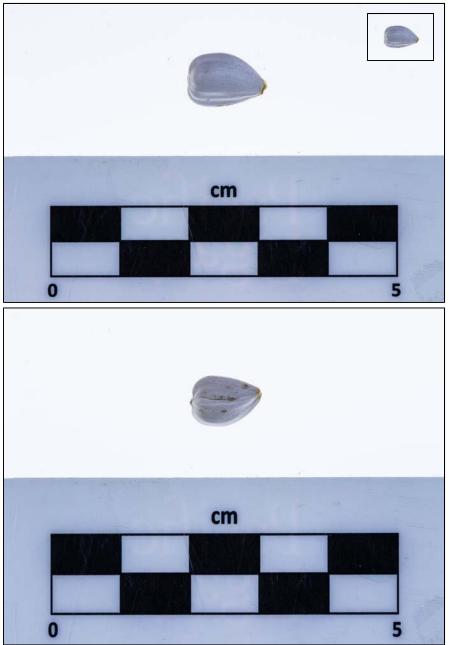
Habitat and Growth Habit: This plant is native to many coastal and inland regions of North America.

**Human Uses:** Medicinal usages are mostly unknown. Some have used the roots to make a tea used for emetic purposes or treatment of diarrhea, but this needs further investigation. Other more common uses are mostly ornamental.

## **Sources Consulted:**

http://www.wildflower.org/plants/result.php?id\_plant=COLA5, accessed February 22, 2019. https://plants.usda.gov/core/profile?symbol=cola5, accessed February 22, 2019. http://www.naturalmedicinalherbs.net/herbs/c/coreopsis-tinctoria=coreopsis.php, accessed February 22, 2019.

## Helianthus annuus



## Family: Asteraceae

Common Names: Common Sunflower

**Habitat and Growth Habit:** The sunflower is native to the United States, but it was introduced to many other parts of North America and around the globe.

**Human Uses:** The seeds of the plant are edible and are often used in baking, as a garnish, and for the extraction of an edible oil. In addition to subsistence, there are medicinal usages including treatment of chest pain, pulmonary disorders, and alleviation of rheumatism. Tea made from the flower had been used to treat lung ailments and malaria. Tea made from the leaves has been used in treating high fevers.

## **Sources Consulted:**

https://plants.usda.gov/core/profile?symbol=hean3, accessed February 22, 2019. https://www.wildflower.org/plants/result.php?id\_plant=hean3, accessed February 22, 2019. http://www.phytopharmajournal.com/Vol3\_Issue2\_11.pdf, accessed February 22, 2019.