Comparative Seed Manual: CACTACEAE

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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 consulted1:

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:

Echinopsis pachanoi (also referred to as Trichocereus pachanoi)

Opuntia littoralis

Opuntia oricola

Opuntia spp.

¹ <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.

Echinopsis pachanoi (also referred to as Trichocereus pachanoi)



Family: Cactaceae

Common Names: San Pedro Cactus, Peruvian Torch, Achuma

Habitat and Growth Habit: San Pedro Cactus is found in Argentina, Bolivia, Chile, Ecuador, and Peru. Notably, the Andes Mountains are were San Pedro Cactus as a historical and medicinal history. **Human Uses:** San Pedro Cactus has a history of medicinal, spiritual, and shamanistic uses. To start, it has been used as a healing technique for physical and mental illness in Andean traditional religious medicine, where it is often drunk. Notably, this plant contains mescaline, which is noted to have similar effects to LSD. This compound makes this plant a hallucinogenic that causes spontaneous physical sensations, salvation, and enhanced touch. Even more, the species can cause "Ego Death," which allows the user to experience a different perspective where their past experiences no longer taint their judgment and thoughts.

Sources Consulted:

https://www.trufflemagic.com/blog/trichocereus-pachanoi/, accessed May 8, 2019. https://azarius.net/encyclopedia/7/San_Pedro_Trichocereus_pachanoi_cactus/, accessed May 8, 2019.

http://www.neurosoup.com/san-pedro-trichocereus-pachanoi/, accessed May 8, 2019. http://trichocereus.net/trichocereus-pachanoi-echinopsis, accessed May 8, 2019.

Opuntia littoralis



Family: Cactaceae

Common Names: Coastal prickly pear, Western prickly pear

Habitat and Growth Habit: This species is distributed in Southern California, and Baja California. It is found in chaparral habitats and in coastal sage scrub.

Human Uses: There are several uses for Coastal prickly pear. Some include ornamental use, edible fruits, and in Native American medicine. Notably, the young plant is edible, while the older plant is too tough to consume. As well, recently Coastal prickly pear has been used to treat type 2 diabetes, high cholesterol, alcohol hangovers, colitis, diarrhea, and benign prostatic hypertrophy. Some research also indicates the plant is used to tackle viral infections.

Sources Consulted:

 $\frac{http://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=5940, accessed May 8, 2019.}{http://nathistoc.bio.uci.edu/Plants%20of%20Upper%20Newport%20Bay%20(Robert%20De%20Ruff)/Cactaceae/Opuntia%20%20littoralis.htm, accessed May 8, 2019.}$

http://www.iucnredlist.org/details/152203/0, accessed May 8, 2019.

https://www.inaturalist.org/taxa/78266-Opuntia-littoralis, accessed May 8, 2019.

https://www.rxlist.com/prickly_pear_cactus/supplements.htm, accessed May 8, 2019.



Family: Cactaceae

Common Names: Chaparral prickly pear, Prickly pear

Habitat and Growth Habit: Chaparral prickly pear is native to California. It can be found outside the California borders, however. Common distribution includes southern California and Baja California in chaparral habitats.

Human Uses: Prickly pear has been used as a beverage and food for a long period of time. Even more, this species, similar to coastal prickly pear, is used in plant medicine. It has anti-diabetic, anti-inflammatory, anti-viral, and analgesic properties. The pulp has been used to dress wounds. Lastly, prickly pear is grown in over thirty countries, and is a common trade good.

Sources Consulted:

http://www.calflora.org/cgi-bin/species query.cgi?where-taxon=Opuntia+oricola, accessed May 8, 2019.

http://davesgarden.com/guides/pf/go/85688/, accessed May 8, 2019.

https://www.pollinator.org/assets/generalFiles/Opuntia.draft.pdf, accessed May 8, 2019.

Opuntia spp.



Family: Cactaceae

Common Names: Prickly pear, Tuna fruit, Rabbit ears cactus, Prickly pear cactus **Habitat and Growth Habit:** This undefined species is native to the Americas. It is mostly distributed in the western United States.

Human Uses: There are multiple uses of this plant. It has an edible fruit, has ornamental qualities, and is used in landscaping.

Sources Consulted:

https://plants.ces.ncsu.edu/plants/all/opuntia-spp/, accessed May 8, 2019.