# Tamarisk

Tamarix chinensis Lour.

### Taxonomic Classification

Domain: Eukaryotes Kingdom: Plantae Phylum/Division: Anthophyta Class: Dicotyledoneae Order: Violales Family: Tamaricaceae Genus: Tamarix Species: chinensis



#### **Botanical Description**

Shrubs or small trees, deciduous, to 20 ft tall. Bark dark reddish brown, gray at maturity and furrowed; branchlets not jointed and whispy when young, easily broken. Leaves small and scale-like, alternate, without sheathes, and sessile (leaves grow directly from the branch). Flowers bloom March to October in pink dense plumes, petals up to 2 mm long and obovate. Fruit a capsule, one-chambered; seeds with small hairs dispersed by wind.

## Identification Tips

Other *Tamarix* in Utah (*aphylla* and *parviflora*) are similar though uncommon in the State. The biggest differences are subtle: *chinensis* leaves are not sheathing, and flowers are 5-merous (5 petals, stamens, and sepals) in contrast to *parviflora's* 4-merous flowers. The leaves are cedar-like, but unlike cedars, *Tamarix* has true flowers, bright pink and abundant [6].

### Fun Fact!

Though *Tamarix* is highly invasive and noxious, research suggests that some bird species have benefitted from its spread, including the Summer Tanager (*Piranga rubra*), a beautiful vibrant bird.

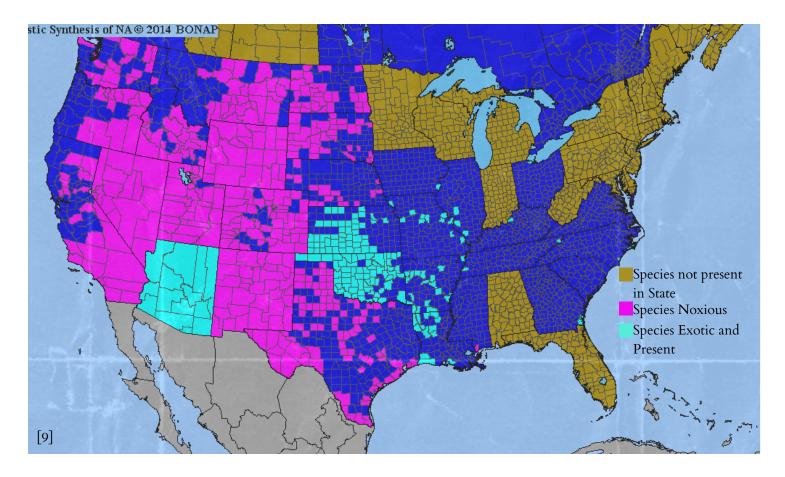
[7]

#### Ethnobotanical and Other Uses

While Tamarisk hasn't been extensively researched for medicinal uses, the phytochemicals present in the species have been analyzed. Those include flavonoids, phenolic acids, tannins, and some others. These phytochemicals have potential to help with conditions such as Alzheimers disease, Diabetes, Inflammation, and have antimicrobial, and antineoplastic properties which may help with cancer treatment. All these attributes are under review and further research for future medical application. [8]

Originally Tamarisk was introduced as an ornamental plant and to aid in erosion control in the Southwest; however, the plant quickly grew out of control and has invaded natural habitats, pushing out species native to the area. [5]

### Habitat Range



#### **Conservation Status**

Species is not globally rated; invasive and noxious. [1]

#### Plant Ecology

Tamarisk is native to desert regions of Asia, Europe and Africa, and was introduced in Southwestern America and escaped cultivation. The species is well adapted to alkaline and saline soils. Because it has deep roots that sap water from springs and streams, and has no natural predators, Tamarisk alters natural ecosystems and threatens native plants in fragile dessert ecosystems. [5]

#### References:

[1] *Tamarix Chinensis*. NatureServe Explorer 2.0. (n.d.). https://explorer.natureserve.org/Taxon/ELEMENT\_GLOBAL.2.139893/Tamarix\_chinensis

- [2] Baldonado, G. (2023) photograph.
- [3] Opiola, J. (2006a). Tamarix ramosissima a1.jpg. photograph.
- [4] Opiola, J. (2006b). Tamarix ramosissima a2.jpg. photograph.

[5] Buren, R. V. (2011). In *Woody Plants of Utah a field guide with identification keys to native and naturalized trees, shrubs, cacti, and vines* (pp. 444-445). Utah State University Press.

[6] Welsh et al. (1993). Tamaricaceae Link. In *A Utah flora* (Second Edition. Revised, p. 693-694). essay, Brigham Young University.

[7] Hunter, W. C., Ohmart, R. D., & Anderson, B. W. (1988). Use of exotic saltcedar (Tamarix chinensis) by birds in arid riparian systems. *The Condor*, *90*(1), 113-123.

[8] Bahramsoltani, R., Kalkhorani, M., Abbas Zaidi, S. M., Farzaei, M. H., & Rahimi, R. (2020). The genus Tamarix: Traditional uses, phytochemistry, and pharmacology. *Journal of Ethnopharmacology*, *246*. https://doiorg.ezproxy.uvu.edu/10.1016/j.jep.2019.112245

[9] Kartesz, J.T., The Biota of North America Program (BONAP). 2015. *North American Plant Atlas.* (http://bonap.net/napa). Chapel Hill, N.C. [maps generated from Kartesz, J.T. 2015. Floristic Synthesis of North America, Version 1.0. Biota of North America Program (BONAP). (in press)].

Information collated by Anne Robinson under the direction of Dr. Ashley N. Egan in collaboration with UVU's summer 2023 BOT 2050 and fall 2023 BOT 4300 classes and through the UVU Excelerate Program.

