Siberian Elm

Ulmus pumila L.

Taxonomic Classification

Domain: *Eukaryotes*
Kingdom: *Plantae*
Subkingdom: *Tracheobionta*
Super Division: *Spermatophyta*
Division: *Magnoliophyta*
Class: *Magnoliopsida*
Subclass: *Hamamelididae*
Order: *Urticales*
Family: *Ulmaceae*
Genus: *Ulmus*
Species: *pumila*

[1]


Entire Tree[4]

Botanical Description

Trees 25 meters tall or more. Bark glabrous (no hairs), may be hairy in youth. Buds glabrous. Leaves strongly 2-ranked (in two separate rows or planes on the branchlets). Leaves elliptic to lanceolate, 2.5 - 7.5 cm long, leaf tip acute, leaf base slightly oblique, once-serrate (saw-like), thick, smooth, and dark green above. Flowers small, greenish, in clusters; blooming in spring; stamens 8. Fruit a samara (seed has papery wing structure), 10 - 13 mm long and about as wide, glabrous, round to oval shape. [5]

Identification Tips

Ulmus pumila grows to be shorter than most of the members of the *Ulmus* genus found in Utah, except *Ulmus parvifolia*, a cultivated species that grows to just 7 m tall. Other species grow to be larger than 30 m tall, where the Siberian Elm stays around 25 m tall. The leaves are only once serrate and the flowers are borne in early spring rather than late summer/fall as are the flowers of *Ulmus parvifolia* (a species with leaves that are also only once serrate and can be confused with younger, shorter Siberian Elms) are borne. [5]

Fun Fact!

After the dust bowl happened and American soils were struggling, the Siberian Elm was used extensively as a soil stabilizer because of it's rapid growth, ease of reproduction, and large root system. [6]

Bark [7]

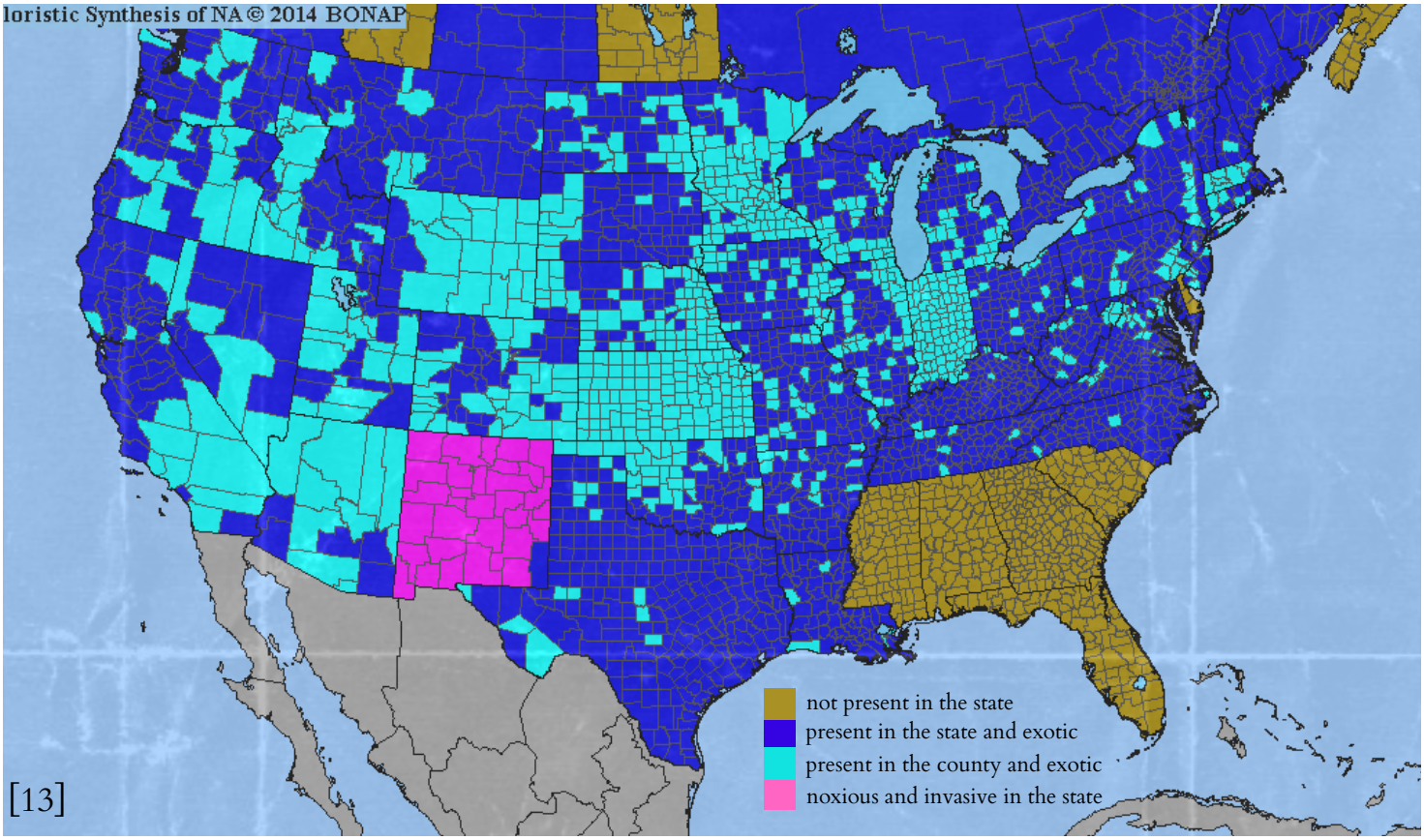
Leaves with parallel venation [8]

[9] Early Fruit

Ethnobotanical and Other Uses

As well as being used for soil stabilization as mentioned above, the Siberian Elm is also used in agriculture as windbreaks in tree strips. Their rapid growth helps provide protection for crops and livestock in areas that have harsh winters and intense storms [10]. The inner bark can be dried and ground then added to other grains to make breads or to soups as a thickener. Some used the immature fruit to make a sauce or a wine [11], and some used the harvested tree wood to make boats and agricultural tools [12].

Habitat Range



Conservation Status

Ulmus pumila is not native to the United States and is considered invasive in New Mexico and becoming so elsewhere [10].

Plant Ecology

The Siberian Elm is native to Asia but is introduced to the USA. It is adaptable and persistent. It can be found in well irrigated areas, but can handle drought and the hot sun [6]. In A Utah Flora, it's distribution is described as "... seedlings [are] established in every conceivable place in lower elevation portions of the state." [5].

References:

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Information collated by [Abbigale Baum] 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.

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