

Fiber Plants for Texas

Compiled by L. Bush, last revised 6/25/16

Common name	Botanical name	Part	Range	Known Used by	Reference
Indian mallows	Abutilon species	stem fibers	several species, mostly S Texas, but <i>A. fruticosum</i> extends to Parker County	Kickapoos spun <i>A. icanum</i>	Latorre and Latorre 1977
Agaves	Agave species	leaf fibers	about 5 species, either Trans-Pecos or S Texas (<i>A. lophantha</i>)		Tull 2013
Indian hemp	<i>Apocynum cannabinum</i>	herbaceous bast	all except S Texas		Tull 2013, Horton 2010
Cane	<i>Arundinaria gigantea</i>	culms	E Tx, along Red River, and some coastal counties. In Lower Pecos per Jack Johnson	Mississippians and descendant tribes	Horton 2010
Pawpaw	<i>Asimina</i> species	bark	2 species, E Tx only	Ozark Bluffdwellers	Horton 2010
Milkweeds	<i>Asclepias</i> species, especially <i>A. incarnata</i> and <i>A. curassavica</i>	herbaceous bast, seed hairs	about 36 species, throughout	<i>A. subverticillata</i> seed hair spun by Navajos	Tull 2013, Vestal 1952, Horton 2010
Hickory	<i>Carya</i> species	bark	about 9 species, E Tx except pecan		Horton 2010
Thistles	<i>Cirsium</i> species	seed hairs	about 10 species, throughout	<i>C. brevistylum</i> spun by Nitinahts	Tull 2013; Turner et al. 1983
Orinoco jute	<i>Corchorus hirtus</i>	stem fibers	Galveston Bay, Corpus Bay, Lower Rio Grande	None known but close enough relative to jute that Tull speculates it would be a good fiber plant	Tull 2013
Sotols	<i>Dasyilirion</i> species	leaf fibers	3 species, all Trans-Pecos with <i>D. texanum</i> extending east to Comal County		Tull 2013
Rattlesnake master	<i>Eryngium yuccifolium</i>	herbaceous bast	Eastern 1/3 of Texas; 7 other species	Ozark Bluffdwellers	Horton 2010
Cotton	<i>Gossypium</i> species	seed hairs	none in Texas; known import	Spiro Mounds, Neches River (de Soto), also in Ohio Late Woodland	Horton 2010, Blatt et al. 2011
Sunflowers	<i>Helianthus</i> species	herbaceous bast	about 16 species, throughout		Tull 2013
Red yucca	<i>Hesperaloe parviflora</i>	leaf fibers	Lower Pecos only		Tull 2013
Rosemallow	<i>Hibiscus</i> species	herbaceous bast	11 species except N central and Panhandle		Horton 2010
Redcedar, juniper	<i>Juniperus</i> species	bark	about 8 species except S Texas		Horton 2010
Black walnut	<i>Juglans nigra</i>	bark	E and Cen Tx; other species elsewhere		Horton 2010
Mulberry	<i>Morus rubra</i>	bark	E 2/3 of state; <i>M. microphylla</i> west		Horton 2010
Beargrass	<i>Nolina</i> species	leaves	5 species in W and central Texas	Pagago, Hualapai, Keres, Iselta, and Pima used for coils in basketry	Moerman 1998
Grasses	Poaceae	culms, leaves	ubiquitous throughout		Horton 2010

Cottonwood	Populus species	bark, seed hairs	at least two species, all except S Texas	P. balsamifera spun with cedar inner bark (twine) or nettle fiber (duck nets) by Nitinahts, P. balsamifera spun by Hanaksialas	Turner et al. 1983, Compton 1993
Common reed	Phragmites australis	culms, leaves	Coastal, Rio Grande, and Canadian River counties		Tull 2013
Willow	Salix	branches, bark			Horton 2010
Basswood, linden	Tilia americana	bark	E Tx and southern Escarpment		Horton 2010
Spanish moss	Tillandsia usneoides	whole plant	mostly E Texas and coastal counties but known along S Escarpment	used as "stuffing"	Tull 2013
Cattails	Typha species	split leaves, seed hairs	2 species in Texas, T. domingensis throughout	T. latifolia spun by Coast Salish	Tull 2013, Turner et al. 1971, Horton 2010
Elms	Ulmus rubra and others	bark	NE and Cen Tx per Benny Simpson		Horton 2010
Stinging nettles	Urtica species	herbaceous bast	Edwards Plateau and S Texas, Metroplex and east	U. dioica spun by Nitinaht	Tull 2013; Turner et al. 1983, Horton 2010
Yucca	Yucca species	leaf fibers	about 15 species, at least one present in each region of Texas		Many

References

- Blatt, S.H., B.G. Redmond, V. Cassman, and P. Sciulli 2011 Dirty Teeth and Ancient Trade: Evidence of Cotton Fibers in Human Dental Calculus from Late Woodland, Ohio. Inter Compton, Brian Douglas 1993 *Upper North Wakashan and Southern Tsimshian Ethnobotany: The Knowledge and Usage of Plants and fungi among the Oweekeno, Hanaksiala (K Haisla (Kitamaat) and Kitasoo Peoples of the central and north coasts of British Columbia*. Ph.D. Dissertation, Department of Botany, University of British Columbia.
- Dolores L. Latorre and Felipe A. Latorre 1977 Plants used by the Mexican Kickapoo Indians. *Economic Botany* 31:340-357.
- Horton, Elizabeth Temple 2010 *The Ties that Bind: Fabric Traditions and Fiber Use in the Ozark Plateau* Ph.D. Dissertation, Department of Anthropology, Washington University, Moerman, Daniel 1998 *Native American Ethnobotany*. Timber Press, Portland, Oregon.
- Tull, Delena 2013 *Edible and Useful Plants of Texas and the Southwest*. University of Texas Press, Austin.
- Turner, Nancy Chapman and Marcus A. M. Bell 1971 The Ethnobotany of the Coast Salish Indians of Vancouver Island, I and II. *Economic Botany* 25(1):63-104, 335-339
- Turner, Nancy J., John Thomas, Barry F. Carlson and Robert T. Ogilvie 1983 *Ethnobotany of the Nitinaht Indians of Vancouver Island*. British Columbia Provincial Museum, Victoria, Vestal, Paul A. 1952 The Ethnobotany of the Ramah Navaho. *Papers of the Peabody Museum of American Archaeology and Ethnology* 40(4):1-94 (p. 39)

Two technical sources on fiber/textile/basketry plants for the fiber-rich Lower Pecos region:

McGregor, Roberta

1992 *Prehistoric Basketry of the Lower Pecos, Texas*. Monographs in World Archaeology. Prehistory Press, Madison, Wisconsin.

Wolz, Ben Vandalsem

1998 *The Use of Agave, Sotol and Yucca at Hinds Cave, Val Verde County, Texas: Reconstructing Methods of Processing through the Formation of Behavioral Chains*. Unpublished M. A. Thesis, Department of Anthropology, Texas A&M University, College Station. [source of table below]

TABLE 2

BASKETRY AT HINDS CAVE
(Adapted from Andrews and Adovasio 1980)

DESCRIPTIVE CHARACTERISTICS	BASKETRY		
	PLAITING (75.15%)	TWINING (13.37%)	COILING (12.73%)
RAW MATERIAL	Sotol/Yucca Preferred (77.07%), mats are manufactured from sotol and yucca is used for tumplines	Warps and welfts manufactured of sotol (80%), sotol heavily preferred	warp made of willow/yucca, welf (bundles) composed of yucca and agave. Yucca dominant.
MODIFICATION	Water immersion or immersion followed by longitudinal splitting with or without partial to total despination	Warp/welf prep. involved immersion in water during weaving as well as longitudinal splitting and despination	Rod prep. involved immersion, partial total decortication and longitudinal splitting. Stitches in rod and bundle foundation prepared from pre-soaked elements that were whole, halved or quartered or otherwise longitudinally split. Bundles composed of despined elements.
FORMS CREATED	Principally matting, also tumplines and belt-like items	Some variety of trays (13), bags (3) and receptacle of questionable form	Three basic configurations: 1) shallow trays; 2) wide-mouthed bowls; and 3) bags/flexible carrying baskets