

THE UNCULTIVATED FIBER PLANTS OF OHIO.

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This list of plants was taken from the Ninth Report of the United States Fiber Investigation Commission of the Department of Agriculture, 1897. They are grouped according to the part used and the character of the fiber as pseudo, structural and bast fibers. Many of these plants are used quite extensively in the arts in other countries if not in this one.

The list of uncultivated plants is supplemented by a few cultivated ones, some of which are in general cultivation as *Zea mays*, *Triticum sativum*, etc., and others as *Linum usitatissimum* have escaped from cultivation.

PSEUDO FIBERS.

FUNGI:—*Polyporus squamosus* Fr., *P. betulinus* Fr. and *Merulius lacrymans* Fr. are used for razor-strops; *Fomes fomentarius* Fr. is used for chest protectors, hat linings, coarse garments, tinder and other household purposes; *Daedalea quercina* Pk. is used for tinder.

FILICALES:—*Adiantum pedatum* L.—The glossy leaf stalks of this species and of *A. capillus-veneris* are used for ornamental weaving in caps, baskets and mats by the Northern Indians.

LYCOPODIALES:—*Lycopodium clavatum* L. is used in Sweden in the manufacture of door-mats.

GYMNOSPERMÆ:—*Pinus strobus* L. is used for excelsior.

MONOCOTYLÆ:—*Philotria canadensis* (Mx.) Britt. is used for paper, but is of doubtful utility; *Sorghum vulgare* Pers. is used for brooms and brushes.

DICOTYLÆ:—*Hicoria* spp.—Hickory splints are used for brushes; *Ulmus fulva* Michx.—The bark is used for horse collars; *Dirca palustris* L.—The leathery twigs are used as thongs; *Fraxinus nigra* Marsh.—Thin layers of wood are employed as material for baskets; *Ligustrum vulgare* L.—The branches are used for bird cages and traps; *Viburnum* spp.—The flexible and tenacious branches are used for binding bales and large packages.

TEXTILE FIBERS.

Structural Fibers.

GYMNOSPERMÆ:—*Larix laricina* (Du Roi) Koch.—The roots are used by the Indians for sewing seams of birch bark canoes and making basket kettles.

MONOCOTYLÆ:—*Typha latifolia* L. and *T. angustifolia* L.—The leaves are used for chair bottoms, mats, ropes and strings, and the fibrous material borne in the spadix is used for stuffing

pillows; *Hordeum vulgare* Bailey; *Phragmites phragmites* (L.) Karst.—The structural fiber is used in Mexico for mats to cover houses; *Secale cereale* L.; *Spartina cynosuroides* (L.) Willd.; *Sporobolus cryptandrus* (Torr.) A. Gr.—It is also used for paper; *Triticum sativum* Lam.; *Zea mays* L.—Also used in upholstery and for paper; *Eleocharis palustris* (L.) R. & S.; *Scirpus lacustris* L.; *Eriophorum polystachyon* L.—Also used for paper; *Juncus effusus* L.; *Yucca filamentosa* L.

DICOTYLAE:—*Melilotus alba* Desv.

Bast Fibers.

DICOTYLAE:—*Populus deltoides* Marsh; *Salix* spp.—Used also in the manufacture of willow ware; *Morus rubra* L.; *Morus alba* L.; *Humulus lupulus* L.—This is used also for paper; *Cannabis sativa* L.; *Urtica dioica* L.; *Urtica gracilis* Ait.; *Urticastrum divaricatum* Kuntze; *Asimina triloba* (L.) Dunal.—The inner bark stripped from the branches is used by fishermen to string fish and by Indians for withes, strings and nets; *Camelina sativa* (L.) Crantz; *Robinia pseud-acacia* L.—Used also for paper; *Linum usitatissimum* L.; *Celastrus scandens* L.; *Tilia americana* L.—Used as rough cordage and coarse woven mattings; *Althaea officinalis* L.; *Althaea rosea* Cav.; *Malva sylvestris* L.; *Malva rotundifolia* L.—These two species of *Malva* are very widely used; *Abutilon abutilon* (L.) Rusby.—The fiber is sold as a substitute for jute and the cellulose is used as paper stock; *Hibiscus moscheutos* L.; *Chamnerion angustifolium* (L.) Scop.; *Apocynum cannabinum* L.; *Asclepias syriaca* L.—The fiber is ranked between that of flax and hemp. The hairs from the seeds are used in this country in stuffing beds. In Russia 20% of *Asclepias* hairs mixed with 80% wool are manufactured into a cloth called silver cloth. Used alone the hairs are too smooth to weave; *Asclepias incarnata* L.—Used for all purposes to which hemp can be applied; *Ambrosia trifida* L.; *Solidago canadensis* L.; *Helianthus annuus* L.—Used also for rough wrapping paper; and *Helianthus tuberosus* L.