

Wood of Palaeozoic Conifers.

Woody fibres.	Medullary rays and pith.	Generic names.	Geological age.
No discs.	One or two series of cells.	<i>Aporoxylon</i> , Unger.	Devonian (Erian).
Discs in one series contiguous, or in several series spirally arranged.	Complex, or of two or more series of cells. Pith Sternbergian.	{ <i>Pitus</i> , Witham. <i>Palæoxylon</i> , Brongniart. <i>Pissadendron</i> , Endlicher.	Middle and Lower Carboniferous and Devonian.
	Simple, or of one row of cells. Pith Sternbergian.	{ <i>Araucarites</i> , Goeppert <i>Dadoxylon</i> , Endlicher. <i>Araucarioxylon</i> , Schimper.	Upper Carboniferous and Permian.
	Pith in spherical chambers.	<i>Ormoxylon</i> ,* Dn.	Devonian.
	Medullary sheath scalariform. Medullary rays frequent, simple, short.	<i>Dadoxylon</i> (Cordaoxylon),† Dn.	Devonian.

* Type *O. Erianum*, Dn., "Report on Canadian Plants," 1871.

† Type *D. Clarkii*, Dn., "Report on Canadian Plants," 1882. This may be wood of *Cordaites*, to which it approaches very closely.

Family CORDAITEÆ, Genus CORDAITES, Brongniart.

Trunks marked by transverse scars of attachment of bases of leaves; leaves broad, with many parallel veins, and attached by a broad base; pistillate and staminate catkins of the nature of *Antholithes*. Fruit winged or pulpy, of the kind known as *Cardiocarpum*. Stem with a *Sternbergia* pith, usually large, surrounded by a ring of pseudo-scalariform vessels, and with a cylinder usually narrow, of woody wedges, with bordered pores in one or more series, and with simple medullary rays.

From specimens kindly presented to me by Prof. Renault, I have been able to ascertain that the stems of some at least of these plants (*Eucordaites*) are distinct in structure from all the species of *Dadoxylon*, above mentioned, except *D. Clarkii*, of the Erian. They may be regarded as intermediate between those of conifers and cycads, which is indeed the probable position of these remarkable plants.

Grand Eury has divided the *Cordaites* into sub-genera, as follows:

1. *Eucordaites*.—Leaves spatulate, obovate, elliptical, or lan-