

*Panicum virgatum*

[Synonyms : *Chasea virgata*, *Eatonia purpurascens*, *Ichnanthus glaber*, *Milium virgata*, *Milium virgatum*, *Milium virgata* var. *elongatum*, *Milium virgatum* var. *elongatum*, *Panicum buchingeri*, *Panicum coloratum*, *Panicum giganteum*, *Panicum glaberrimum*, *Panicum ichnanthoides*, *Panicum kunthii*, *Panicum pruinatum*, *Panicum virgatum* var. *breviramosum*, *Panicum virgatum* var. *confertum*, *Panicum virgatum* var. *cubense*, *Panicum virgatum* var. *diffusum*, *Panicum virgatum* var. *elongatum*, *Panicum virgatum* var. *glaucephylla*, *Panicum virgatum* var. *glauciphyllum*, *Panicum virgatum* var. *obtusum*, *Panicum virgatum* var. *scorteum*, *Panicum virgatum* var. *spissum*, *Panicum virgatum* var. *thyrsiforme*, *Panicum virgatum* var. *virgatum*]

**SWITCHGRASS** is a perennial grass. Native from central United States to southern Canada it has leaves that turn yellow and lightish brown in Autumn, and feathery heads of purplish-green spikelets.

It is also known as Blackwell switch grass, Broom-like panic grass, *Jungfruhirs* (Swedish), *Liu zhi ji* (Chinese), *Panic érigé* (French), *Panic vierge* (French), Prairie switchgrass, *Rutenhirse* (German), Tall panic grass, Tall smooth panic grass, *Vitshirss* (Estonian), Wand panic grass, and Water panicum.

This grass is viewed as invasive in some parts of North America.

*Virgatum* is Latin (made of twigs) meaning ‘twiggy or wand-like’.

Some authorities have described how when buffalo-hunting the North American Indians, not least the Ponca tribe, were well schooled in remembering to avoid placing cut meat on flowering grass. (The sharply pointed purplish-green spikelets would be likely to stick to the flesh and then be caught in the throat when the meat was eaten.) Apparently early European settlers also learnt to be careful similarly when they were out hunting as well.

Nutritious young grass (before it becomes coarse and tough) can be vulnerable to overgrazing. It has provided fodder for livestock and although it is especially valued for cattle, it is also enjoyed by sheep and horses.

Unlike its close relative witchgrass (*Panicum capillare*), switchgrass is extremely attractive for small mammals and birds. The latter (including songbirds, doves, quail, pheasants and turkeys) all feed on the glossy seeds – and the underground stems dug up by hungry larger wildlife, including some deer, provide food when this is in short supply in Winter. It can also offer valuable shelter in Autumn and Winter, especially as it is understood it can withstand the weight of heavy snow. As a result switchgrass can harbour rabbits and other small mammals and can also provide night roosting, general cover and nesting sites for pheasants, quail and various kinds of grouse (such as prairie-chicken and sharp-tailed grouse). Recognition of this has led to recommendations for its active planting as a general ground cover and as a suitable edging for ponds.

Switchgrass is one of the species specifically cultivated on inland dunes because its web of underground stems can assist in the control of erosion. It is also planted (alone or mixed with other seeds) along roadsides, on the edges of waterways and in areas such as those which have been subjected to strip-mining. It has been a constituent in prairie restoration programmes too and the grass is also cultivated as an ornamental.

Records note that this grass is fairly tolerant of fires (especially when it is dormant) because of the depth of the underground stems which are protected and thus enable regrowth. The plant above ground will of course succumb, and its dead litter can even add to the speed of the fire's progress as the dry bits of grass do not compact and provide a medium that readily carries the fire.

Some authorities note that in the United States (and a little more recently Europe) this grass has attracted the attention of researchers involved during the last decades of the 20<sup>th</sup> Century in identifying practicable energy biomass crops for producing electricity through gasification, and for co-combustion in coal plants, as well as for the production of ethanol as a transportation fuel. Of the herbaceous crops being considered switchgrass has predominated in much of the research and is said to offer promising results.