

Europe it does not attain much more than half of this altitude. Its stems are straight and smooth, often covered with a white bloom, or down, having leaves somewhat flexuous, falling over, and greatly resembling in appearance those of Indian corn, but more elegant in form. When cultivated in hills, containing eight or ten stalks each, it puts forth at its top a conical panicle of dense flowers, green at first, but changing into violet shades, and finally into dark purple, at maturity. In France, and the central and northern sections of the United States, it has thus far proved an annual; but from observations made by M. Vilmorin, as well as some experiments in our Southern States, it is conjectured that, from the vigor and fullness of the lower part of the stalks, in autumn, by protecting them during the winter, they would produce new plants the following spring. It stands drought far better than Indian corn, and will resist the effects of considerable frost without injury, after the panicles appear, but not in its younger and more tender state. If suffered to remain the field after the seeds have ripened and have been removed, where the season is sufficiently warm and long, new panicles will shoot out at the topmost joints, one or more to each stalk, and mature a second crop of seeds. The average yield of seed to each panicle is at least a gill.

CULTIVATION.

Since its introduction into this country, the Chinese sugar-cane has proved itself well adapted to our geographical range of Indian corn. It is of easy cultivation, being similar to that of maize or broom-corn, but will prosper in a much poorer soil. It does not succeed so well, however, when sown broad-cast with the view of producing fodder, as it will not grow to much more than one-half of its usual height. If the seeds are planted in May, in the Middle States, or still earlier at the South, two crops of fodder can be grown in a season from the same roots—the first one in July, to be cut before the panicles appear, which would be green and succulent, like young Indian corn, and the other a month or two later, at the time, or before, the seed is fully matured. In the extreme Northern States, where the season is too short and cool for it to ripen in the open air, the cultivator will necessarily have to obtain his seed from regions further south. If it were important for him to raise his own seed, he could start the plants under glass, in the spring, and remove them to the field or garden at about the period of planting Indian corn, after which they would fully mature. One quart of seeds are found to be sufficient for an acre. If the soil be indifferent or poor, they may be sown in rows or drills about three feet apart, with the plants from 10 to 12 inches asunder; but if the soil be rich, they may be planted in hills, five or more seeds to each, 4 or 5 feet apart in one direction, and 3 or 4 in the other. The plants may be worked or hoed twice in the course of the season, in a similar manner to Indian corn, any suckers or superfluous shoots, which may spring up, may be removed. The seed should not be harvested before it acquires a dark or black hue. Should the plants lodge, or fall to the ground, by the excessive weight of the heads, during storms of wind or rain, before the seed matures, they may remain for weeks without injury. In collecting the seed, a convenient method is to cut off the stalks about a foot below the panicles, tie them up in bunches of twenty-five, and suspend them in any secure, airy place, sheltered from the rain. If intended solely for fodder, the first crop should be cut just before the panicles would appear, and the second, as soon as the seed arrives at the milky stage. It may be tied up in bundles, shocked and cured, like the tops or stalks of Indian corn. If not intended to be employed for any other economical use, after the seed has been removed, and the weather be cool, and the average temperature of the day does not exceed 45° or 50° F., the stalks may be cut up close to the ground, tied in bundles, collected into shocks, or stowed in a mass in a succulent state, for fodder in sheds or barns, where they will keep without injury if desired, until spring. In this condition, however, the lower parts of the stalks will be found to be quite hard and woody, and will require to be chopped into small pieces for feeding.

PRECAUTION.

Particular care should be observed not to cultivate this plant in the vicinity of Dourah corn, Guinea corn, or broom-corn, as it hybridises, or mixes freely with those plants, which would render the seeds of the product unfit for planting.

Yours, very respectfully,

CHARLES MASON, *Com'r.*