

longitudinal slit. *Females* in a crowded spike-like raceme, with leafy bracts. The perianth consists of a single small spathe-like sepal, which is persistent, acuminate, ventricose at the base, embraces the ovary, and is covered with short, brownish glands. Ovary subglobular, 1-celled, with one pendulous ovule. Style short, Stigmas 2, elongated, glandular. Nut ovate, greyish colored, smooth, covered by the calycine sepal, bivalved but not dehiscing, and inclosing a single oily seed. Seed pendulous. Testa thin, membranous, marked at the apex with colored hilum. Embryo without albumen, doubled upon itself. Radicle elongated, turned towards the hilum, and the apex of the nut separated from the incumbent plano-convex cotyledons by a small quantity of albumen."

Some very valuable information on the production of the hemp plant in India will be found in a Report on the subject by Dr. Royle, in the year 1839, which was published in the Trans. of the Agri.Hortic. Soc., Vol. viii. p. 15.

"Hemp is cultivated in almost every part of Europe for home consumption, but only in large quantities for export in Russia and Poland, though the finest quality of hemp comes from Italy. In America large quantities are produced in Kentucky, and Missouri.

The soil must not be over rich nor too sterile, of moderate depth and friable. In Russia the time of sowing varies from the middle of May to the end of June. The season of reaping is from the end of August to the end of September, and it is therefore between three and four months in a state of vegetation; the male plants being pulled some weeks before the female. The Russian summer, though short, is regular while it lasts, and the temperature sufficiently high to bring it to perfection.

Large quantities are grown in the Southern climate of Italy, both in Bologna and Romagna, and along the banks of the Po, as in the neighbourhood of Naples. The Italians have a saying, that 'hemp may be grown everywhere, but it cannot be produced fit for use either in heaven or earth without manure.' The climate of Italy, it is well known, is remarkable for its clearness, regularity, dryness, and warmth. The Italian hemp is fine, soft, light-colored, and strong, as well as long in the staple; and it sells for 50s. per cwt. in the English market, when the best Russian sells at 47s. for the same quantity."

Hemp being one of the few cultivated plants which has the male and female flowers in different plants, affords some anomalies in its culture, especially that of having two harvests in the same crop.

*Soil.*—The soil in which hemp thrives, is a deep, rich, moist soil, five or six inches deep; besides the alluvial, where sand and clay are intimately mixed, and having the above characteristics; also the friable loams, which contain much vegetable matter. All should contain a fair portion of sand, as this keeps the soil open and light for the roots to spread in. Stiff, cold clays are unsuitable for even if the plant should grow well, it is not easy to pull it; for when strong clay becomes saturated with rain, the soil runs together, and on drying sets as hard as a pavement. If the soil be over-rich, the plant grows too luxuriantly, and produces a coarse but strong fibre. But hemp is sometimes sown in such soils to meliorate them for the cereals, which would otherwise run too much to straw. But as many soils are too poor, they require to be raised to a suitable state by the addition of manure; and with this, it is said that hemp may be grown in the same soil for many years. When a fine quality of fibre is required, of course, only the most suitable soil should be selected, or that in which the growth of the plant is neither excessive nor stunted. In Italy, hemp is sown in their best lands, which are rich and strong loams, and made fine and friable.

*Culture and Manure.*—At Soonamooky, hemp grows luxuriantly in sand, manured with stable dung. But the richness of the soil, and the quantity of manure required, must vary, not only according to the nature of the soil and its requirements, but also to the warmth of the soil, and the nature of the