

CULTIVATION OF KNOL KHOL IN THE HANGURANKETA DISTRICT.

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KNOL khol or khol-rabi, *Brassica cauloropa* (*Cruciferae*) is grown essentially for its tuber which develops above ground into a globular stem upon which the scars of fallen leaves are left behind.

In the Hanguranketa area of Nuwera Eliya district, it is gaining popularity as a local vegetable. It is in prime condition for the table when the stem is about the size of a small orange. If allowed to grow too large, the root becomes fibrous and unpalatable. When harvested in the semi-developed stage it makes an excellent boiled or curried vegetable.

In the Hanguranketa district, knol khol is cultivated as a pure market-garden crop by small-holders and by a few others owning boutiques, who sell the crop locally. However, the greater portion of the crop finds its way to the Kandy market where it is sold for prices ranging from 2 to 7 cents per tuber and sometimes more.

In view of its keeping qualities after harvesting, this vegetable is gaining popularity as the cultivator is not compelled to dispose of his crop to the first buyer as he is often obliged to do in the case of more perishable vegetables.

The tubers are lifted according to the demand. They can be harvested from the third to the fourth month after planting. In plots that are well maintained, the harvest should be completed by the third month as by this time the tubers are in prime condition for cooking.

Knol khol is a crop admirably suited to a dry and cold climate as is experienced in the highland areas of the Hanguranketa district. It is best suited to a heavy, loamy soil with a good supply of organic matter. It will not grow in a sandy soil deficient in humus, nor will it thrive under waterlogged conditions.

In the Hanguranketa district, the lands are undulating and well drained. The days are warm but the nights and early mornings are cold. In such conditions knol khol thrives admirably.

Sowing is done at different periods between late September and April. Early sowing is undertaken in order to catch the

market during Christmas and the New Year. As a rule, the main seasons begins with the April rains, so that the crop can be gathered in time for the Perahera season in Kandy and Hanguranketa. It is advisable to sow the seed in the nursery at intervals of about a fortnight to ensure a continuous supply of tubers.

Nurseries should be carefully prepared, and land on a level site selected for the purpose. The top soil should be turned over twice with mammoties and then pulverized with a digging fork to provide a fine tilth. Dry cattle manure, in powder form if possible, should then be applied. The proper preparation of the nursery is most important as a good tilth ensures the vigorous growth of seedlings. Nursery beds should not be more than two feet broad, but the length may vary according to the supply of plants required. Beds should be at least six inches above ground-level and the soil allowed to settle before the seed is sown. Seed at the rate of 8 oz. per acre is sown broadcast mixed with a small quantity of fine sand or wood-ashes to ensure an even distribution.

The soil should be well watered before and after sowing. Nurseries should be shaded from the noon-day sun until the seeds germinate and while the young plants are tender, but the shade should be gradually removed when the plants are older and stronger and are ready for transplanting. Seedlings are ready to be transplanted when 2-3 inches high about 21 days after sowing in nurseries. Care should be taken not to damage the rootlets when uprooting. This can be avoided by watering the beds thoroughly before the plants are up-rooted. Before transplanting, the land should be opened with a plough or mammoty. It should be cross-ploughed and harrowed or well pulverized with digging forks. If the soil is deficient in organic matter, an application of five to ten tons per acre of cattle manure or compost, depending on the fertility of the soil, should be given about a week or a fortnight before the beds are prepared. Beds should be opened 3 to 4 feet in width and of a convenient length according to the lie of the land. Plants should be removed from the nursery preferably on a dull and showery day. Transplanting is done in rows 15 inches apart, the plants being placed 12 inches apart in the rows. After transplanting, shade should be provided by fixing temporary trellises until the plants have established themselves in their new environment.

The first cultural operation, two weeks after transplanting, is to loosen the earth round the plants and to fork in around each plant a handful of powdered cattle manure or powdered dry-fish refuse. Watering should be done regularly depending

upon the prevailing weather conditions. As the stems begin to thicken, the soil around the plants should be loosened lightly, but the stems should on no account be damaged or earthed up.

Harvesting is done by hand, the tubers being first loosened with a digging fork.

In the Hanguranketa district two varieties of Indian knol khol, purple and green, are cultivated, the latter being the more popular of the two.

This crop should do well in most mid-country districts especially in the suburbs of the larger towns.