HOW TO PICK GREEN GOLD FROM TEA

Tea was first introduced in the Botanic Gardens at Entebbe, Uganda in 1909, but commercial cultivation didn't begin until the late 1920s, when a British National called Brooke Bond began extensive planting.

With its temperate climate and rich soil, Ugandan farmers embarked on growing the crop thereby becoming a major cash crop.

Tea grows best in misty, rainy regions at altitudes of 1,500 to 2,250ft above sea level in the tropics and lower elevations in temperate regions.

The best tea is produced in regions that have dry days and cool nights. Slow growth under some stress brings out the best flavor in tea but yields are lower under these conditions.

The leaves of the plant are what produce tea. The tea flavor is produced by oils in the leaves.

Dr. Ronald Kawooya, who specializes in tea breeding at Rwebitaba Zonal Agricultural Research and Development Institute (RZARDI) in an interview with Seeds of Gold, explains best practices farmers must follow in a bid to realize bumper harvest.

Land preparation, planting

To achieve the best crop, the following steps must be observed by the farmers;

Dr. Kawooya notes that it is important to clear the bush of forested land two years in advance to allow rooting of tree roots which if left in the field may affect roots of the tea plant. A normal land containing bush must be cleared and tilled twice.

Harrowing is done thereafter to level the field for a fine seed bed.

The soil must contain PH of 4.5 - 5.5 acidity and tea grows well in place where the minimum rainfall is 1200 mm.

During land preparation it is important to minimize erosion that will affect a healthy root system, which helps tea bush to survive in a drought.

Organic matter content in the soil is also a factor affecting water content in the soil. Avoiding heavy rain seasons, preparing the land and rehabilitation of the land with grass at least for a period of time are some of the practices that matter with climate mitigation when growing tea.

The recommended field spacing is 4ft by 2ft accommodating 13,480 plants per hectare, 4ft by 2.5ft accommodating 10,766 plants and 4ft by 3ft accommodating 8,775 plants per hectare.

Depth of the seed hole is 20cm deep. This must contain mixture of fertilizer to enable proper rooting of the plants.

Once the seedling is planted farmers are advised to provide each seedling with a shed for a period of one month using any local material to avoid wilting of the leaves.

When the plant begins to bare leaves, it is important to carry out knipping to enable multiple shooting of the branches. After 18 months pegging is done to support the tea plants and tipping to increase the growth height between 30cm to 50cm. This will also enable the plucking table to be round shaped.

"Much of the world's tea is planted on plantations called estates. Many of these have ski-tow-like rope ways and chutes that are used to carry leaves to where they

are processed. It is not advisable to grow the plant on small pieces of land but a farmer with minimum 3 hectares of land can venture into tea farming," says Dr. Kawooya.

This is because it is a long term business. Most tea plants can last between 80 – 120 years and example is the tea farm along Jinja highway which was planted in the year 1908.

Nursery

Tea seedlings are generated from mother gardens where nursery operators cut leaves from the bud and allow them to grow in potted polythene bags for 10 months. These are the seedlings farmers purchase for planting.

Harvesting

Tea is almost exclusively handpicked. In most parts of the world the work is done by women. Tea leaves have to be picked carefully.

The tea pickers pluck new and tender "flush" (two leaves and a bud). These flushes appear every seven or eight days in hot climates and around twice that long in cooler climates.

Generally the buds near the end of a branch are considered to be the best quality.

Lower quality one are found further down the branch. The flushes are flung over the shoulder of the pickers into baskets strapped onto their heads and backs.

Freshly picked leaves weigh about twice as much as correctly dried tea leaves.

Tea processing

Green tea can be processed from the tender leaves which can be boiled for about 30 seconds, air dried, crushed and packaged ready for sale.

Dr. Kawooya urges Ugandan tea farmers to process green tea for income earning rather than give way to green tea from china to flood the market. Leaves which are made into black tea are processed in factories. It is fermented and withered by blowing air in them and this removes the moisture

In order to maintain the nodule shape, the dried leaves are rolled in a special machine while maintaining the aromatic oils. It is then placed in a cool room to accelerate oxidation

It is then dried in a drying machine for 15 - 25 minutes and this enables the leaves to turn black.

According to Dr. Kawooya, farmers can up to Shs8,000 per kilogram of tea on world market

Varieties

There are five popular tea varieties grown by farmers in Uganda and these include 303/577 tea clone, 6/8 tea clone, 31/8 tea clone, 108/82 tea clone and 100/5 tea clone.

Pruning, weeding

Pruning of the plant is important because it halts the vertical growth thereby enabling the plant to grow horizontally. When it has grown for three years, it is important to cut off some stems and maintain the growth at 50cm.

This makes it easy for farmers to harvest the leaves and allows budding. It also enables the plant to grow in the required pattern to produce more leaves.

In most cases farmers use herbicides to clear the weeds but hand hoe weeding is also possible. However a well-managed plant with oval shape is of advantage because it suppresses growing of weeds.

Pests and diseases

The plant is mainly affected by pests termed as yellow mites which attack the leaves leading to yellowing and red mites which attack the entire plant leading to drying of the leaves and turning brownish.

Farmers are advised to spray the plant with recommended pesticides and locally made spray from mixture of neem tree leave and red pepper.

The common diseases are Xylaria and Armillaria that cause root rot of the planting making the plant to dry up.

Farmers are advised to purchase clean seedlings free from these diseases. The source must be a certified nursery operator, research institute such as Rwebitaba, tea estates and government seed distribution initiatives.