



Dr Phinehas Tukamauhabwa of CAES explains to stakeholders' the agronomy of soybean growing at the at the national agricultural trade show in Jinja. PHOTOS BY LOMINDA AFEDRARU

# Best practices soybean farmers can adopt today

Denis Ebong, the programme coordinator at Technical Centre for Agricultural and Rural Cooperation (CTA), says farmers should apply fertilisers containing phosphorous and potassium if they are to realise bumper soybean harvest, writes **Lominda Afedraru**.

**S**oybean is a legume crop that fixes nitrogen into the soil adding to its fertility and the beans are rich in vegetable protein including bioactive food components and several important nutrients such as fibre and iron.

A report about soybean research in Uganda for the year 2002 - 2015 by Dr Phinehas Tukamauhabwa, and partners at Makerere University College of Agricultural and Environmental Sciences (CAES), states that soybean originated from East Asia and was first domesticated in China in the second century BC.

It is ranked the number one most important oil crop in the world

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PERCENTAGE OF PROTEIN CONTENT IN SOYBEAN



providing the cheapest source of protein for both human and livestock diets.

The protein content of soybean is the highest among legumes, averaging 40 per cent on dry matter basis.

The report further states that owing to the high nutritious status of soybean, the colonial government made deliberate attempts during the 1940s and 50s to encourage local production of soybean in order to combat protein malnutrition among soldiers and kwashiorkor among children as well as in the interest of crop diversification.

However, not very many farmers in the country are engaged in growing the crop and the adaptation rate has remained low.

Dr Tukamauhabwa is passionate in soybean breeding and has so far released a number of varieties namely Namsoy4M, Maksoy1N, Maksoy2N, Maksoy3N, Maksoy4N

## PLANTING

In land preparation farmers are advised to plough their land and left to decompose for 3 - 4 weeks before planting.

It is important to purchase seed from certified seed outlets with good vigour for germination and Namsoy4 and Maksoy3N are recommendable because they are drought tolerant and high yielding.

Spacing during planting can be 50cm by 50cm where a farmer is expected to drop one seed in each. If the spacing is 50cm by 25cm then two seeds have to be dropped in each hole.

Weeding should be done after two weeks from time of germination.

## Fertilisers

Farmers are advised to apply fertiliser containing phosphorous and Potassium which can be applied in the soil during planting. It is also advisable to inoculate the seeds in liquid containing Rhizobia a nitrogen fixing bacterium that is common in the soil and processed by scientists.

## Pests and diseases

Soybean suffers from several pests and diseases that occur over a wide range of conditions and plant growth stages.

The common biotic constraints to soybean production include pests like groundnut leaf miner sometimes known as webworms, bean leaf beetles, green clover worms and stink bugs.

and Maksoy5N which are being grown by soybean farmers across the country.

However, a number of partners have now come on board to help farmers across the country in soy bean growing.

One such is the current initiative being carried out by a consortium of non governmental organisations under the Netherlands based Technical Centre for Agricultural and Rural Cooperation (CTA). "The response from farmers is big," said Dr Tukamauhabwa.