

National News

A total of 213 students are graduating with PhDs during Makerere University's 76th graduation ceremony that started yesterday and runs until February 27 at the institution's Freedom Square. They are part of the 9,295 students graduating in different disciplines at Uganda's premier university. **Sylvia Katushabe and Jane Nafula** bring profiles of PhD graduates from the College of Agriculture and Environmental Sciences.

What Makerere's PhD graduates researched

DICKSON BIRYOMUMAISHO



Topic: Institutional frameworks and quality of propolis tincture
Mr Biryomumaisho examined how formal and informal institutional frameworks shape processors' practices in producing quality propolis tincture. He covered a census of 124 processors. In the absence of national standards, processors relied on informal norms, showing low capacity and moderate adherence influenced by infrastructure, equipment and skills.

HARRIET CHEROTICH

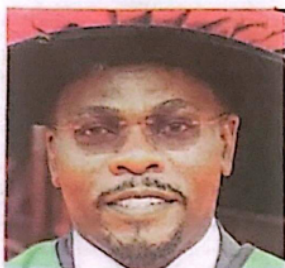


Topic: Prospects for reducing vulnerability of communities in post-disaster resettlement: Bunambutye camp
Her findings show survivors face physical and socio-economic vulnerabilities, worsened by dry spells and limited livelihood skills. Many resort to seasonal migration as a coping strategy.

RICHARD MUTUMBA BULIBA



Topic: Antecedents of innovativeness among smallholder poultry farmer groups in Wakiso
Mr Sebuliba explored socio-psychological factors influencing group membership and innovation among poultry farmers.



SAMUEL KAHEESI KUSIIMA

Topic: Effects of land use and land cover change on ecosystem services and human wellbeing in Budongo-Bugoma landscape
Mr Kusiima analysed land use changes between 1990 and 2020 in western Uganda's Budongo-Bugoma landscape. Grasslands, forests and wetlands declined, and under a business-as-usual scenario, over half the area could be farmland and built-up by 2040. He links these changes to declining ecosystem services and multidimensional human wellbeing. He recommends integrated landscape management, agroecology incentives and participatory land use planning.

GERTRUDE MIRIAM OJERA ALAL ATO

Topic: Chemical components of malakwang (Hibiscus species) leaves and influence of processing
Ms Ojera evaluated the nutritional and phytochemical composition of red and white malakwang and how processing affects their health benefits. She found significant differences in crude fat, magnesium, iron, vitamin A and ascorbic acid. Antioxidant potential was comparable to vitamin C. Cooking and drying were destructive to vitamin B-complex and E.



She concludes that malakwang can significantly contribute to micronutrient and bioactive intake in communities where it is consumed.

SAMUEL KALIMUNJAYE

Topic: Scaling out research innovations in cassava seed systems in Uganda
Mr Kalimunjaye focused on scaling out improved cassava seed varieties, including NAROCASS1 and NASE14, in Kiryandongo, Serere and Kamuli districts. He found that training and knowledge transfer are crucial for adoption. The boundaries between formal and informal seed systems are thin and require coordination among actors. He highlights



the role of research institutions such as National Agricultural Research Organisation in dissemination despite limited financial incentives.

EUNICE V. KESIIME

Topic: Genetics of cooking time and canning quality traits in common bean (Phaseolus vulgaris L.)
Ms Kesiime assessed variability in cooking time and canning quality traits, identifying 11 genotypes with moderately low cooking time and 39 with good canning traits. She identified genomic regions linked to the traits and developed validated KASP markers. Short-cooking beans can save time, fuel and water, benefiting resource-poor households and processors.



ELIZABETH KHAKASA

Topic: Prediction of acceptable quality of cooking banana hybrids

Ms Khakasa developed methodologies to predict consumption quality of cooking banana hybrids, addressing limited integration of consumer traits in breeding. Her study combined statistical

modelling, instrumental analysis, sensory evaluation and consumer preference to assess hybrids at early stages. The findings guide breeders and stakeholders in selecting hybrids that meet farmer and consumer expectations, strengthening food quality and market acceptability.

