Qualitative and quantitative post-harvest losses of maize along the maize value chain in two regions in Ghana

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In recent times, maize has become first among other grains and cereals in terms of annual area planted in Ghana. Unfortunately, the crop suffers several losses, such as aflatoxin contamination along the maize post-harvest value chain which affects both quality and quantity before reaching the final consumer. A study was carried out to assess the qualitative and quantitative losses of maize along the maize value chain in two regions, Brong-Ahafo and Eastern Regions of Ghana. Questionnaires administered to key informant of the value chain established the main causative factors of post-harvest losses; such as losses due to the effects of insects, rodents, monkeys, birds, bushfires, ruminants (sheep and goats) and rainfall causing grains to grow mould since most farmers allowed drying on stalk before harvesting. Results from questionnaires, focus group discussion, transect walk and biophysical measurements indicated significant difference between the two regions: Mold (P=0.007), insect pest (P=0.005) and other pest (P=0.005). Laboratory analyses also showed the presence of free fatty acids and high levels of aflatoxins in most maize sampled, indicating poor storage. Change in moisture content reduced the volume and weight of the grains and was perceived as source of losses, hence the need for maize variety with less moisture content. The study revealed that even though responses from these value chain actors indicated that with the help of the extension workers they are abreast with several technologies to prevent losses, most value actors are not implementing what they learnt. There is therefore the need to use more innovative approach to help value chain actors in the maize industry to adopt methods for reducing post-harvest losses in the sector. The rapid loss assessment tool was observed to be an effective tool for assessing loss from the flow of the product.

Biography
Bridgette Naa Deedei Tagoe is currently a MPhil student at the Crop Science Department of the School of Agriculture, at the University of Ghana, Legon. She holds a BSc degree in Agriculture from the University Cape Coast and a Diploma in Post-harvest Technology also from the University of Ghana. She is also a trained Teacher by profession.

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