## ABSTRACT

Evaluation ofthe sensory and meat quality was performed on Kenya Agricultural and Livestock Research Organization (KALRO) improved chicken (KIC) fed on diets incorporated with ground Prosopis juliflora pods (GPJP. Breast and thigh samples were obtained from chicken fed on GPJPbased diets substituting whole diet at 0% (PJP-0), 10 % (PJP-10), 20% (PJP-20) and 30 % (PJP-30). Organoleptic characteristics were evaluated using questionnaires for attribute profiling and affective tests using trained and miniature consumer panels. Continuous anchored attribute scales and hedonic scale were used for sensory tests while meat quality was determined by Honikel method. Increasing the levels of GPJP had similar effect on Breast pH but PJP-20 had higher pH than cockerels offered PJP-0 and PJP-10 and pullets offered PJP-30. At 14th day, pullet meat from PJP-0 had lower water holding capacity as compared to all other samples apart from cockerel samples from the same treatment. Pullets offered PJP-0 performed better in thigh and breast. In general acceptability (GA), 6.9% and 12.33% could be attributed to the effect of GPJP in thigh and breast in pullet and cockerel samples respectively. Results indicate that cockerels' meat had more favorable sensory effect than pullets' meat. Inclusion of 20% of GPJP in diet could be used to feed chicken while at the same time maintaining high quality meat desired by the consumers.