This research aimed to obtain a certain local sweet potato with better phenotypic appearance and yield potential to be recommended as a promising clone. An experiment was carried out at Experimental Farm of Faculty of Agriculture, Hasanuddin University, from May 2006 to May 2007. It was arranged in a randomized complete block design, with experiment materials consisting of nine local clones and Cilembu variety as comparison. Experiment results indicated that there were seven (U2, U3, U4, U5, U66 and U9) out of nine clones having higher yield potential than Cilembu, with clone U5 had highest potential. These seven clones were potential to be developed as promising clones.

**Keywords:** phenotypic appearance, yield potential, local sweet potato