

**YIELD EVALUATION OF EIGHTEEN PIGEON PEA (*Cajanus cajan* (L.) Millsp.)
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TANZANIA**ABSTRACT**

The yield of pigeon pea (*Cajanus cajan* (L.) Millsp.) has remained low on the farmers' fields in Southern Tanzania. In 2013 – 2014 season, eighteen improved medium duration pigeon pea genotypes from ICRISAT were evaluated for grain yield and other agronomic characteristics with an objective of improving pigeon pea productivity. A randomized complete block design experiment with three replications was conducted in three different on-station sites. Cross site yield analysis was done on 18 pigeon pea genotypes. The overall mean yields of the pigeon pea genotypes ranged between 1410kg/ha in ICEAP 001179 and 2073kg/ha in ICEAP 00979. The best ten genotypes; ICEAP 00979/1, ICEAP 00540, ICEAP 00554, ICEAP 00673/1, ICEAP 00557, ICEAP 00850, ICEAP 01147/1, ICEAP 01147, ICEAP 01152/2 and ICEAP01154 were passed to the next advanced stage of breeding. The remained genotypes out of eighteen were maintained in germplasm bank for breeding purposes of other attributes apart from yield.

Keywords: Pigeon pea, Genotypes, Yield, Selection, Tanzania.