ABSTRACT

Lack of awareness and information on the traits of orphan crops such as finger millet is a major constraint to finger millet production. Farmer participatory and varietal selection (FVPS) is an efficient method of achieving productivity through enhancing adoption of improved high yielding varieties. A study was conducted in two major growing areas in central Rift Valley, Agri-ecological zone III (ATC-Nakuru and Bomet), to assess the level of awareness and farmer preference of twenty-five finger millet varieties. Farmer participatory variety selection was conducted at physiological maturity of the finger millets. One hundred farmers assessed and scored their preferred traits and varieties in each site. The scores were ranked on a scale of 1-5 in Focused Group Discussions (FDGs) and analyzed using Kruskal Wallis H-test of non-parametric data using Statistical Package for Social Science (SPSS) while scores collected on variety traits were used to construct a Pair-wise ranking table to find the best traits selected by farmers. The results showed that farmers preferred high yielding varieties with qualities such as uniformity, drought tolerance, tillering ability, big fingers, lodging and folded or straight fingers. They appreciated the snapping varieties for the ease of harvesting using fingers instead of traditional cutting using a knife. Kal 2 Pader (3.9), P-224 (3.9), KatFM1×U151.6.6.3.1.1 (3.9), GBK 027189A (2.8), Snapping green early (3.7) and KatFM1xU151.7.8.2.1 (3.7) were the most preferred varieties while in AEZ III, Bomet ATC KatFM1 (4.3), KNE 741 (4.3), KNE629 (4.2), KatFM1×U151.6.6.3.1 (4.1), Gulu E (3.9), GBK 027189A (3.8) and Kal 2 pader (3.8) were the most preferred varieties in ATC Nakuru. In both sites KatFM1×U151.6.6.3.1.1 (4.0), Kal 2 pader (3.85) and GBK 027189A (3.8), Gulu E (3.75) and P-224 (3.75), were ranked the best. The farmers expressed their interest in accessing the seeds of these improved varieties. FPVS provides a platform for identification of the most preferred traits of finger millet and knowledge dissemination of improved varieties to farmers.

Key words: Finger millet, farmer participatory variety selection (FVPS), farmers preferred traits and varieties.

.