An investigation to compare sugar blend 1 plus with straight fertilizers (single super phosp hate and muriate of potash) as basal fertilizer was carried out at Hippo Valley Estates in the 2012/13 growing season. A 2x3 factorial experiment in a Randomised Complete Block Design with 3 replications was used. The first factor was fertilizer type which consisted of two levels, sugar blend 1 plus and straight fertilizer and the second factor was variety with the following levels N14, Zn10 and Nco376. The results showed that there was no interaction (p<0.05) between fertilizer type and variety on number of sugarcane tillers, stalks, sugarcane height and yield. However, there was significant difference (p<0.05) between the fertilizer types on number of sugarcane tillers, stalks, sugarcane height and yield. Also varieties had significant difference on yield. Sugar blend 1 plus fertilizer increased the number of tillers, primary stalks, cane height and yield when compared to straight fertilizer. The cane yield in treatments applied sugar blend 1 plus increased by 24% when compared to use of straight fertilizer, from 87.2 to 108.4 tonnes / hectare.