

## **Studies on combination of different forms of potassium and micronutrients on fruit yield and post-harvest quality of guava (*Psidium guajava* L.)**

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### **ABSTRACT**

*An investigation was carried out to find out combination of different forms of potassium and micronutrients on fruit yield and post-harvest quality of guava (*Psidium guajava* L.) was carried out at the Department of Horticulture, College of Agriculture Parbhani during the year 2019-20. The field experiment was laid out in Randomized Block Design with thirteen treatments and three replications. The treatments were: T<sub>1</sub>- KH<sub>2</sub>PO<sub>4</sub> at 1% + FeSO<sub>4</sub> at 0.5%, T<sub>2</sub>- KH<sub>2</sub>PO<sub>4</sub> at 1.5% + FeSO<sub>4</sub> at 0.5%, T<sub>3</sub> - KH<sub>2</sub>PO<sub>4</sub> at 1% + ZnSO<sub>4</sub> at 0.5%, T<sub>4</sub> - KH<sub>2</sub>PO<sub>4</sub> at 1.5% + ZnSO<sub>4</sub> at 0.5%, T<sub>5</sub> - K<sub>2</sub>SO<sub>4</sub> at 1% + FeSO<sub>4</sub> at 0.5%, T<sub>6</sub> - K<sub>2</sub>SO<sub>4</sub> at 1.5% at + FeSO<sub>4</sub> at 0.5%, T<sub>7</sub>-K<sub>2</sub>SO<sub>4</sub> at 1% + ZnSO<sub>4</sub> at 0.5%, T<sub>8</sub>-K<sub>2</sub>SO<sub>4</sub> at 1.5% + ZnSO<sub>4</sub> at 0.5%, T<sub>9</sub>-KNO<sub>3</sub> at 1% + FeSO<sub>4</sub> at 0.5%, T<sub>10</sub>-KNO<sub>3</sub> at 1.5% + FeSO<sub>4</sub> at 0.5%, T<sub>11</sub>-KNO<sub>3</sub> at 1% + ZnSO<sub>4</sub> at 0.5%, T<sub>12</sub>-KNO<sub>3</sub> at 1.5% + ZnSO<sub>4</sub> at 0.5% and T<sub>13</sub>- control through foliar application which was sprayed two times after fruit set at 15 days interval. Results of the study indicated that maximum number of fruits per tree (160.33), fruit retention (80.60 %), yield per tree (39.4 kg), yield per hectare (10.95 Mt per ha) and minimum fruit drop (19.84 %), maximum fruit weight (246.3 g), fruit volume (220.6 ml), fruit length (7.86 cm) and fruit diameter (8.06 cm) were more in treatment T<sub>12</sub> i.e., KNO<sub>3</sub> at 1.5% + ZnSO<sub>4</sub> at 0.5%. Better fruit quality and more shelf life (8.4 days) and minimum physiological loss in weight (11.77 %), fruit decay (24.7 %) during at ambient storage was also recorded under above treatment.*

**Keywords:** Forms of potassium, guava, micronutrients, quality, yield.