Summary & Conclusion
An experiment was undertaken during the year 1999-2001 entitled "Studies on the effect of foliar application of Nitrogen, Zinc and Boron on growth, yield and quality of Guava fruit (Psidium guajava L.) cv. Allahabad Safeda". Plants of 10-12 years age were selected from a private orchard at Bakewar (Barikhera) Distt. Etawah. The chemical components of fruits were studied at K.A.P.G. College, Allahabad. The experiment was laid out by two factor factorial design and replication three times and single plant made one replication.

The maximum number of fruit set was recorded with nitrogen alone at N$_1$ 1 per cent nitrogen (587.33 fruits/plant). The application of zinc and boron singly were also helpful in improving the fruit set, but less than nitrogen at 1.0 per cent.

The nitrogen with zinc and boron in combination significantly improved the fruit set with N$_1$Z$_3$B$_2$ combination 679.20 fruits/plant in both years of study. In Table No. 1 & 2 and Fig. No. 1.

The fruit growth (length and width) were studied at 15 days interval till harvest both years. The maximum fruits height was recorded between IIInd week from fruit set till 6th week. The length and width, of fruits also followed the trend of height thereafter the rate of increase slowed down. The period between 30th days till 70 days may be considered as the period of grand growth of fruits of Allahabad Safeda cultivar.

Application of N along with micro nutrient significantly improved the size as (length and width) of the fruits.
Nitrogen alone at rate of N\textsubscript{2} increase length (7.00 cm) and width (6.46 cm) which were maximum. The growth rate in combination of zinc and boron were not very effective in accelerating the rate of growth of fruits. However, nitrogen along with zinc and boron showed a significant effect to promote the growth. The best result was recorded with N\textsubscript{2}Z\textsubscript{2}B\textsubscript{2} (8.33 cm) length and (8.43 cm). In Table No. 11A-1 to 11A-5, 11B-1 to 11B-5 and 12A-1 to 12A-5 & 12B-1 to 12B-5 and Fig. No. 2.

It was observed that guava fruit cv. Allahabad Safeda observed a double sigmoid growth curve.

The fruit weight of guava continuous growth at rapid growth rate up to 70 days after that it declines. It was observed that II\textsuperscript{nd} peak of growth was observed. The fruit weight was lighter the I\textsuperscript{st} phase. The maximum average fruit weight with N\textsubscript{2}Z\textsubscript{2}B\textsubscript{2} (211.00 gm)/fruit in Table No. 13.1-13.5 and 14.1 -14.5 and Fig. No. 3.

The reducing, non-reducing and total sugar of ripening fruits reveals that fructose was maximum in guava fruits, where non-reducing sugars were less as compared to reducing sugar. The maximum values of reducing sugar, non-reducing and total sugar with N\textsubscript{2}Z\textsubscript{3}B\textsubscript{3} treatment in Table No. and Fig. No. 33.1-33.5 to 38.1-38.5 and Fig. No. 8.

The pH of fruits seems to not influenced by application of nitrogen, zinc and boron. However, the present investigation boron treatment lower the pH being low much in Table No. 25.1 - 25.5 and 26.1 - 26.5.

The T.S.S. of fruits were least influenced by application of nitrogen and micro-nutrient. The maximum value with N\textsubscript{2} (12.20%), Z\textsubscript{3} (11.10%) and B\textsubscript{3} (10.36%) in Table No. 27.1 - 27.5 and 28.1 - 28.5 and Fig. No. 5.
The shelf life of marketable fruits was improved. The combination of treatment (N₂Z₂B₃) enhances the shelf life up to 5 days against control of 3 days in Table No. 23.1 - 23.5 and 24.1 - 24.5.

CONCLUSION:

1. The guava plants of Allahabad Safeda tolerate nitrogen up to 2.0 per cent whereas 3.0 per cent foliar application of nitrogen results in scorching of leaves and dropping of leaves.

2. The guava fruits observe on a double sigmoid growth curve. Foliar application of nitrogen and micro-nutrients (zinc and boron) with different concentrations do not disturb the double sigmoid growth curve.

3. Using 1 or 2.0 per cent of nitrogen pre-bloom and after fruit setting as foliar application of nitrogen increases yield up to 15 per cent.

4. Application of 2 per cent nitrogen along with zinc and boron can be profitable for quality frutis of guava.