

## Nutritional evaluation of *Malbhogkal* (*Musa* AAB) at different stages of development

### ABSTRACT

'*Malbhogkal*' (*Musa* AAB) is an important commercial crop of Assam and North east India. It has been investigated for various morphological and biochemical changes during different stages of fruit development. Fruits were analyzed at five developing stages viz., 20 days after emergence (DAE), 40 DAE, 60 DAE, 80 DAE and ripening. The results revealed that fruits at ripening stage recorded the highest fruit weight (94.60gm), fruit length (12.13gm) and fruit diameter (3.50gm). The study showed that there was a gradual increase till ripening stage from 20 DAE in case of ash, reducing sugar and non reducing sugar content. The ripening stage revealed the highest ash (5.48%), reducing sugar (6.77%), non-reducing sugar (7.98%). It was observed that in case of fat, protein content, starch, ascorbic acid and titratable acidity there was an initial increase from stage 1 (20 DAE) to stage 4 (80 DAE), which however, decreased towards final stage (ripening stage) of development. Thus the highest fat content (0.63 %) was recorded at stage 4 (80 DAE) which decreased to 0.57% at ripening stage. Protein reaches its maximum value of 7.43% at stage 3 (60 DAE) which subsequently showed a declining trend reaching a value of 6.83 % at ripening stage. Ascorbic acid at 80DAE was recorded the highest (7.66mg/100g). Similarly, titratable acidity and starch content increased respectively to 0.39% and 10.73% (at stage 4) but they again decreased towards ripening.