

YIELD AND CHEMICAL COMPOSITION OF GOLDEN DELICIOUS APPLE (PYRUS MALUS L.) GROWN IN N.W.F.P. AS AFFECTED BY CHEMICAL FERTILIZERS

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ABSTRACT

The effect of NPK fertilizer (1 : 2 : 1) on the weight per fruit, yield per plant and chemical constituents of Golden Delicious apple was studied in three localities of N.W.F.P. It was found that locality and fertilizer application had no significant effect [on the weight per fruit. The yield per plant was not significantly affected by fertilizer. However, significant difference existed due to locality. Fertilizer treatment decreased the moisture, acidity and Vitamin C content of apple, while soluble solids, sugar and mineral matter were increased. The quality of apple fruits was improved due to wider sugar-acid ratio.

INTRODUCTION

Fruits play an important role in human nutrition. They supply the essential dietary constituents such as vitamins and minerals, which can protect the health against certain diseases. Hence, they are also called as protective foods. The soil and climatic conditions of N.W.F.P. are well suited for the production of temperate and sub-tropical fruits. The hilly areas of N.W.F.P. like Parachinar, Swat and upper Hazara are particularly suitable for the production of apples. The area under this crop in N.W.F.P. was 3160 hac with the production of about 36 thousand tons in the year 1976-77 (Dir : Agri., 1977).

The yield and quality of apple is greatly influenced by fertilizer application (Oland, 1963 ; Quidet *et al*, 1961). However the effect of fertilizer varies, depending upon the natural fertility of the soil and ecological factors of the locality. In order to study the effect of fertilizer on the yield and chemical constituents of apple, fertilizer trials at Parachinar, Swat, and Mansehra were conducted so as to know the possibility of increasing apple production in these areas by applying NPK fertilizers. Gruppe (1960) and Oland (1963) reported that the yield of apple fruit increased with

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