

chromatographing, on an equal nitrogen basis. The results are represented in Fig. 2.

At 50×10^{-3} ml. level of the original extract the chromatogram reveals that Mulgova extract shows the maximum number and concentration of amino acids followed closely by the ungrafted country variety and the grafted Raspuri variety. The Alfonso variety shows, surprisingly, the least number and concentration of amino acids.

A careful scanning of the chromatograms leads to the following conclusions:—(1) *Mulgova*: Aspartic acid, glutamic acid, alanine, serine or glycine are the principal amino acids with basic amino acids, valine or methionine and leucines occurring in smaller amounts. Also prominent was another spot (indicated by an arrow in Fig 2) near that of tyrosine having a characteristic bright bluish purple colour and hence different from tyrosine which gives the dull purple colour. This is the position reported for γ -amino-butyric acid in a single dimensional chromatogram with butanol-acetic acid solvent.⁶ γ -Amino-butyric acid has been reported to be a constituent of many plant tissues.^{3,4} Its absolute identity, however, has yet to be established in mango extracts.

(2) *Country variety*: Aspartic and glutamic acids and the near-tyrosine spot are the principal components with glycine, alanine, valine

or methionine and leucines as minor constituents.

(3) *Raspuri*: Aspartic and glutamic acids, alanine and the near-tyrosine spot are the principal amino acids and glycine or the basic amino acids, valine or methionine are in smaller amounts. The presence of cystine and leucine group is indicated.

(4) *Alfonso*: Aspartic and glutamic acids and near-tyrosine spot are the chief constituents though the amounts are smaller than that of other varieties. Basic amino acids and alanine are seen in smaller amounts. The picture given by the unhydrolysed extract of this variety, showed the pear-shaped spot which was weak and dull.

The identification of the near-tyrosine spot and an analysis at higher levels by double chromatogram is in progress.

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GOVERNMENT TO PURCHASE URANIUM STOCKS

UNDER Section 3 (d) of the Atomic Energy Act, XXIX of 1948, uranium is a 'prescribed' substance and cannot, therefore, be exported. The Government of India have decided to purchase all stocks of uranium available with dealers or mine-owners. The purchase of acceptable uranium-bearing minerals and ores or concentrates will be on the following price basis:

- (1) A minimum uranium content equivalent to 10 per cent. by weight of uranium oxide in the ores or concentrates will normally be required.
- (2) The price to be paid will be based upon the uranium content of the ores or concentrates and will be at the minimum rate of Rs. 9 per pound of contained uranium oxide f.o.r. station of despatch, and this price will be guaranteed for a period of five years commencing from the date of announcement.
- (3) This price will include all radioactive elements in the ores or concentrates but consideration will be given to the

commercially recoverable value of any associated non-radioactive constituents in the ores such as cerium groups of earths, columbium, niobium, etc., either by adjustment of prices or by re-delivery of the residues containing such constituents.

- (4) All purchase of uranium will be subject to the provisions of the Atomic Energy Act XXIX of 1948.

Rules regarding detailed procedure to be followed for the sampling of uranium and despatch of consignments of uranium to the Chairman, Atomic Energy Commission, Bombay, may be obtained from the Secretary, Atomic Energy Commission, Department of Scientific Research, New Delhi.

Under the Atomic Energy Act XXIX of 1948, uranium being a 'prescribed' mineral can be compulsorily acquired by the Government. It would, therefore, be advantageous for dealers and mine-owners or persons possessing stocks of uranium to sell their stocks to the Government of India at an early date.