

Conclusion

From the survey results, it is clear that the radio, leaflets and neighbours have served as important sources of agricultural information for farmers, complementing the work of the extension service. Many farmers had learnt modern agricultural technologies from their neighbours. In summary, the results suggest the benefits of a combination of both radio programmes and the activities of the agricultural extension service in educating farmers on modern agricultural technologies.

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THE HISTORY OF TOMATO - A REVIEW.

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Introduction:

Tomato (*Lycopersicon esculentum*) is one of the most important vegetables in the world. It originated in Peru, Latin America. All cultivated tomato varieties descend from seeds taken from Latin America by Spanish and Portuguese merchants, during the 16th century (Villarreal, 1979). Tomato was grown in England by 1580 largely as a curiosity. However, it was discovered that the Mexican Indians consumed tomato long before the Europeans.

Tomato is an appetizing vegetable containing some of the key nutrients such as vitamin A, ascorbic acid, some protein and iron. Tomato also ranks first in perishability.

Varieties:

Tomato had been named from time to time as Peruvian apple, Golden apple, Love apple and Mad apple, based on various myths and beliefs in different countries. It had also been called the "poor man's orange" in the United States.

Tomato, like most other fruit varieties come in assorted shapes and sizes. Cherry tomato from Ecuador, (and Peru) having small sweet fruits in clusters was possibly the ultimate ancestor of cultivated tomatoes. The Fruit tomato is very juicy and almost seedless. Italian plum tomato is sweet and coarse centered; the Oxheart is large and pink or yellow coloured; the Pear tomato is so named for its shape and is red or yellow. The smallest is the Current tomato or German raisin which belongs to a separate species, S. Pinnpinelifolium.

Utilization:

Different tomato varieties serve different purposes such as processing and for the fresh market. Tomatoes can be grown in the open or in Green houses, supported by stakes or without it.

In most countries the determinate type of tomato varieties are used for processing fruits whereas the indeterminate types are utilized as table tomato.

The size and shape of fruits are important in fresh market tomato, whereas the flesh colour or pigmentation is an essential feature of varieties used for processing.

Production:

Of more than 100 species of vegetable crops selected for intensive study in the Asian countries, tomato ranked first. The leading tomato producers of the world are in the temperate regions, where the highest yields are recorded. Tomato production in tropics however is only one fourth of those produced in temperate regions in relation to the extent. Also the yield per unit area is low in the tropics, averaging about less than 50% of the yield obtained in temperate regions, (ANON, 1984). Thailand as well as Sri Lanka are among the lowest, when yield per unit area of each country is compared.

Research and improvement:

Today, there are new tomato cultivars and hybrids

which can be grown in climates far different from their site of origin (Villarcal., 1979). In general the low yield of tomato in the tropics is due to high temperature excess or very low moisture and some major diseases like bacterial wilt. Also, the use of unadapted varieties, lack of appropriate cultural practices during both dry and wet seasons are some constraints to tomato production.

The stepwise breeding programme initiated at the Asian Vegetable Research and Development Centre (AVRDC) in Taiwan has resulted in new breeding lines suitable for the lowland humid tropics. They are more tolerant to bacterial wilt, heat and drought. New components like resistance to important diseases, and improved fruit quality are now being incorporated and tomato breeding programmes (Opena, 1985).

In Sri Lanka, tomato is a good income generating vegetable crop. It is more appropriate to identify suitable tomato varieties for processing as well as for the fresh market. This could expand the cultivation and open more avenues for processed products such as Ketchups, Source and tomato juice as a fresh drink.

(This review is based on the 5th Thailand out reach programmes/AVRDC training programme on Advanced Vegetable Production held in Thailand from Oct., 1986-Feb., 1987.)

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