History of Tomato (Poor Man's Apple)

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SUMMARY: Tomatoes originated from the Andes, in what is now called Peru, Bolivia, Chili and Ecuador – where they grow wild. They were first cultivated by the Aztecs and Incas as early as 700 A.D. The earlier tomatoes were little sour berries that grew on low bushes in dry, sunny places in the Andes mountain in South America beginning about 350 million year ago. When people first came to South America about 20,000 year ago, they ate these tinny wild tomatoes. Travelers brought a few kinds of wild tomato plants from the Andes to Central America. Where the ancestors of the Maya began to farm them. Nobody knows exactly when people began farming tomatoes but it was definitely before 500 B.C. It was not until around the 16^{th} Century that Europeans were introduced to this fruit when the early explorers set soil to discover new lands. Throughout Southern Europe, the Tomato was quickly accepted into the kitchen, yet as it moved north, more resistance was apparent. The British for example admired the tomato for its beauty but believe that it was poisonous, as a result the tomato was considered unfit for eating for many years in Britain and its North American Colonies. However by the mid – 18^{th} century tomatoes were widely eaten in Britain. Tomato come to India by way of Portuguese explorers during the early 16^{th} century. Because tomatoes thrive in warms, sunny condition with no severe frost, the plants took well to Indian soils and now India is the second largest producer of tomatoes in the world right after china.

Keywords: Tomato, Cultivation, Varieties, Production, Commercially.

Date of Submission: 20-07-2017	Date of acceptance: 08-08-2017

I. INTRODUCTION

The Tomato is the edible fruit of solanum lycopersicum commonly known as a tomato plants which belongs to the nightshade family, solanaceau. The English word Tomato comes from the Spanish word, 'tomate' derived from 'Nahuatl' (Aztec language) word 'tomatl', It first appeared in print in 1595.

II. HISTORY OF TOMATO

The exact origin of tomato plant is not known, although it is speculated that it evolved from the prehistoric plant Night shade over millions of years ago in South America (together with potato, tobacco and chili peppers) and slowly moved to north until it was domesticated into the lands of Mesoamerica between Mexico and northern costa Rica. This land was a home of several advanced Pre-Columbian society who flourished there until arrival of Europeans in the age of discovery. During 500 B.C. One of those culture managed to domesticate tomato and integrate it into their cuisine. That culture was Aztec. From that point on, tomato slowly spread across the central and south America, somewhere being used as a food but somewhere aloes being used as a hallucinogenic. The first European contact with tomato came with Christopher columbus who possibly encountered it in 1493 but Spanish conquistador Hernan cortes may have been the first to transfer the small yellow tomato to Europe after he captured the Aztec City of Tenochtitlan, now Mexico city in 1521. The earliest discussion of the tomato in European literature appeared in a 'Herbal' written in 1544 by Pietro Andrea Mattioli an Italian physician and botanist. There seeing that Tomato could grow without a problem in a warm Mediterranean climate, Spanish government started encouraging its production in both Europe and its distant colonies. Most likely the first variety to reach Europe was yellow in colour since in Spain and Italy they were known as pomid' or or meaning vellow apples. Italy was the first to embrace and cultivate the tomato outside South America. The French referred to the Tomato as pommes d' amour or love apple and the Germans as 'apple of paradise : The English loved its brilliant red colour but they held the fruit in suspicion because its leaves resembled that of Deadly Nightshade (Belladona), a poisonous plant which also belongs to the solanaceae, the tomato's plant family'. An early as 1540 s tomato started being produced in Spanish field and was used regularly as a common food in early 17th century other European countries did not adopt tomato immediately. For example even though Italian nobility and scientists found out about tomato from 1548 (which is now famous for their tomato and ketchup industry), they used it only as a table top decoration fruit until late 17th and early 18th century. They cherished their beauty and experimented with selective breeding, managing to create tomatoes of many colours and shapes. (Smith, 1994, Gentilcore 2010). Tomato received similar fate in England where it was introduced in 1597 but it remained viewed as unhealthy, poisonous and unfit to eat. The people of florence, Italy used Tomatoes as mere table top decoration until the late 17th century and Americans didn't harvest tomatoes until 1835 because of the belief that they were poisonous.

In the late 1700 s a large percentage of Europeans feared the tomato. A nickname for the fruit was the "Poison Apple" because it was thought that aristocrats got sick and died after eating them but the truth of the matter was that wealthy Europeans used pewter plates, which were high in lead content. Because tomatoes are so high in acidity, when placed on this particular tableware, the fruit would leach lead from the plate resulting in many deaths from lead poisoning. No one made this connection between plate and poison at the time the tomato was picked as the culprit.

Poor people who ate off plates made of wood, did not have problem and hence did not have an aversion to tomatoes. This is essentially the reason why tomatoes were only eaten by poor people until the 1800's especially Italians. But there is a little more to the story behind the misunderstood fruit's stint of unpopularity in England and America, as Andrew F. Smith details in his book – "The Tomato in America : Early History, culture and cookery".

"The tomato didn't get blamed just for what was really lead poisoning. Before the fruit made its way to the table in North America, it was classified as a deadly nightshade, a poisonous family of Solanaeac plant that contain toxins called tropane alkaloids." The view about tomato changed in mid 18th century after many advances in selective breeding from Spain and Italy.

In 1897 soup mogul Joseph Campbell came out with condensed tomato soup, a move that set the company on the road to wealth as well as further endearing the tomato to the general public. Campbell may have made tomato soup popular but the first recipe is credited to Maria Parloa whose 1872 book, The Appledore cook Book describes her tomato chowder.

In early 19th Century tomato finally arrived in Asia. It arrived there under the guidance of British consul in Syria John Barker who directed first cultivation efforts. By mid 19th Century, tomato gained much popularity and started being used widely in Syria, Iran and China Modern age of commercially grown tomato started with the efforts of Alexander W. Livingston American botanist and scientists who dedicated much of his life of upgrading tomato with selective breeding into the most commonly known form we know today. (Mc Cue, 1952 and Smith, 1994).

The high acidic content of the tomato makes it a prime candidate for canning, which is one of the main reasons the tomato was canned more than any other fruit or vegetable by the end of the 19th century.

Tomato came to India by way of Portuguese explores during the early 16th century. Because tomatoes thrive in warm, sunny condition with no severe frost, the plants took well to Indian soils.

Due to lack of evidences as it is not clear when and where cultivation of tomato started in India but it is clear that they were the Britishers who made it popular. Different varieties of tomato were planted by them. Even today in Bengal tomato is named as 'Vilayati Begun'. According to Sir George Watt (1889). "19th Century onwards tomatoes were mainly grown in India for the Britishers. Mostly Bengali tomato were preferred due to its taste and sourness."

Today India is the second largest grower of tomatoes, producing nearly 12 millions tonnes. The National Horticulture Board gives a higher figure estimating India's production to be closer to 14 Million.

Andhra Pradesh leads tomato growth in India by covering approximately 35% of the country's production or almost 6 millions tonnes. Trailing a far distant second is Karnataka at 1.8 million tonnes. Other top tomato producing states in India are Orissa, West Bengal, Bihar, Gujarat, Maharashtra, Chattisgarh, Tamil Nadu and Jharkhand respectively. India grown several varieties of tomatoes, from the small lively cherry tomato bursting with juice to the large fibrous beefsteak.

The most common tomato variation are beefsteak, cheery, heirloom, roma and pear. A few of the 7500 tomato varieties grow in India many with rather peculiar name – "best of all", fire ball, desi Dixon, King humbere, roma and red cloud are a few examples.

III. UTTARAKHAND

Before 19th century tomato cultivation was confined to a limited area in Uttarakhand. The earlier tomatoes were little sour berries that grow on low bushes mostly in dry and sunny places of Uttarakhand. The local inhabitants mostly consume these tiny wild tomatoes to fulfill their day to day need. Though from Ancient time wild tomatoes were grown in Uttarakhand but tomatoes for the commercial purpose were made popular by the Britishers. According to historical records, Tomato cultivation in Uttarakhand started from Dehradun around 1815-1830. They were mainly grown for and by the Britishers slowly tomato cultivation also started in the area of Nainital, Pauri, Landsdown, Ranikhet and soon by the end of the 20th Century it became the main commercial crop of Uttarakhand. Today Tomato are widely grown in both, the plain and the hilly areas of Uttarakhand.

Known as 'poor man's apple' tomatoes are grown in approximately 1000 acres of land in the state. The farmers of Uttarakhand earn maximum profit from this crop. Tomatoes of this state are not only exported to other states but earlier large amount of tomato were even exported to Pakistan. (Arora, 2005, Bhardwai, Sharma, Singh, 2011). According to N.K. Joshi (an official in Nainital) – "Not just in Uttarakhand the production of tomato was quite good in other states as well. Earlier we used to sell tomatoes in other states and export even to Pakistan." Nainital is the big producer of Tomato among all 13 district of Uttarakhand. Being this reason, this is known as Tomato Belt. On the bases of last five years records, it has been concluded that Nainital district has produced 20346 Million tonnes with area of 1938 hectare (where block Haldwani has produced 9765 million tonnes and block Ramnagar has produced only 325 million tonnes). Haldwani and Ramnagar have emerged as potential blocks in district. They have produced 81.58% Tomato of Nainital District. Sitarganj and Rudrapur have emerged as main block in U.S. Nagar in Tomatoes. These block produced 39.45% of total tomatoes production. Other block Khatima, Gadarpur, Bazpur, Kashipur, Jaspur were having less produce than Sitarganj and Rudrapur but production is increasing with good extent. Productivity is also different in both districts U.S. Nagar has produced less volume and Nainital has produced much higher volume (20346 million tonnes) of tomato but per hectare productivity of Nainital is lower than U.S. Nagar. This is because of vast area (1938 hectare) used for tomato cultivation in Nainital than area (882 hectare) used for tomato cultivation in U.S. Nagar. In Kumaon region, U.S. Nagar got second rank and Nainital got first rank in tomato with 13582 million tonnes and 20346 million tonnes productions respectively in last five years. But lot of inefficiencies are equipped across the supply chain leading to poor price realization of growers on one hand and exorbitant prices paid by consumers on the other in concern districts. A major share of this consumer rupees goes to a plenty number of market intermediaries who exploit the farmers due to poor market linkages, virtually non-existent cold chain infrastructure and processing facilities. (Gunwant, Rawat, Meenakshi)

Cultivators have no idea of consumer needs and preferences, market prices, various government schemes, scientific agronomical practices especially agri-inputs sources of timely and adequate credit availability and market linkages. The tomato farmers of Uttarakhand suffer due to inadequate infrastructure especially cold chains, absence of demand forecasting and meager value – addition other prominent reasons are poor marketing linkages, non-availability of adequate market information and non-standardized processing facilities which make all the marketing efforts ineffective and uneconomic. Thus here efforts had been made by the government through various schemes so that the interest of farmers and consumer may be cushioned.

IV. ACKNOWLEDGEMENT

Firstly I would like to acknowledge with gratitude, the support and love of my family. They all kept me going and this research paper would not have been possible without them. I am deeply indebted to my respected professor and other members of History department for their invaluable help in preparing this Research paper. I humbly extend my thanks to all concerned persons who co-operated with me in this regard. Above all my heartiest thanks to the Great Almighty, the author of knowledge and wisdom, for his countless love.

V. CONCLUSION

Tomatoes are native to south America and it is believed the Pueblos harvested them as early as 500 B.C. Today countries across the world used tomatoes as a king ingredient in their dishes but this wasn't always the case. For instance, the people of Florence, Italy used tomatoes as mere table top decoration until the late 17^{th} century. Americans didn't harvest tomatoes until 1835 because of the belief they were poisonous. However by the mid -18^{th} century tomatoes were widely eaten in Britain. Tomatoes were first brought in by Portuguese traders. Their cultivation reached throughout India after Bombay which was a Portuguese port, which was gifted as dowry to the British by the Portuguese and Britishers started cultivating it throughout. Today India grow several varieties of tomatoes from the small lively cherry tomato to the large fibrous beefsteak, and rank second in the world in tomato production. Today Tomato also known as 'poor man's apple' has become the major food crop of India.

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IOSR Journal of Humanities and Social Science (IOSR-JHSS) is UGC approved Journal with Sl. No. 5070, Journal no. 49323.

Ravi Mehta . "History of Tomato (Poor Man's Apple)." IOSR Journal Of Humanities And Social Science (IOSR-JHSS) 22.8 (2017): 31-34.