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Profiling of Indian potato cultivars for major 5' nucleotides

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Potato flavour depends on the level of umami compounds and volaties. Major umami compounds present in potato are 5' nucleotides (adenosine 5'monophosphate and guanosine 5'monophosphate) and amino acids (aspartic acid and glutamic acid). Presently the level of these compounds in Indian potato cultivars is not known. Therefore, umami 5' nucleotides were estimated from raw and microwave cooked tubers of forty four Indian potato cultivars through HPLC. Level of these nucleotides was correlated with dry matter and texture of the cultivars. The level of AMP and GMP was low in raw tubers and increased to appreciable amount in microwave cooked tubers. In raw tuber tissue concentration of 5'-nucleotides ranged from 1.70 µg/ g FW (Kufri Jawahar) to 6.68 µg/ g FW (Kufri Muthu). After microwave cooking 5'-nucleotide content ranged from 2.97 µg/ g FW (Kufri Jawahar) to 9.22 µg/ g FW (Kufri Muthu). In large number of cultivars AMP and GMP content almost doubled after microwave cooking. Cultivars such as Kufri Khasigaro, Kufri Muthu, Kufri Sherpa, Kufri Surya and Kufri Sutlej contained highest AMP and GMP content before as well as after microwave cooking. No correlation was reported between the level of AMP + GMP content and dry matter as well as texture of the cultivars. Food flavour is of great interest because consumers have preferences for better-tasting food. Therefore, complete knowledge on the level of umami compounds in Indian potato cultivars can be utilized to find out better tasting cultivars for product development and to develop products with less added salt.

Biography

Pinky Raigond has completed her Ph.D. at the age of 26 years from Punjab Agricultural University. Pinky Raigond is a Scientist in the division of Crop Physiology and Post Harvest Technology in Central Potato Research Institute, Shimla (H.P). She joined the Institute in 2010.

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Prevailing standards and dimensions governing sanitary and phyto-sanitary compliance in Indian black pepper

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Sanitary and phyto-sanitary (SPS) compliance in agricultural trade has received considerable attention from policy makers, agribusiness firms, exporters and researchers for its perceived ability to contribute towards production and development of safe and quality agri-products for domestic and international markets. This paper examines prevailing standard practices and major dimensions governing SPS compliance along the black pepper supply chain in India. It was found that knowledge generation and dissemination in food safety aspects is indispensable to fill gaps and deficiencies in domestic food safety standards as to comply with the international standards. The important dimensions include application of GAP, GMP, GHP and hygiene practices besides physical and financial infrastructures along the supply chain. An important policy implication of this study is the efforts and investments should be targeted towards promotion of important dimensions governing SPS compliance along the supply chain.

Biography

Shiv Kumar is an agricultural economist and public policy analyst at National Centre for Agricultural Economics and Policy Research (NCAP), Delhi, India with research and teaching and national and international projects responsibilities. After completing degrees at Haryana Agricultural Universities, Hisar, and getting Agricultural Research Service in 1998, he began work as Scientist at Indian Agricultural Research Institute (IARI), Pusa, New Delhi and have been there for 9 years and five years at NCAP, New Delhi as Senior Scientist. His research has focussed on developing decision support system on Agricultural Market Outlooks on food grains and oilseeds for India besides food safety issues, institutional change and governance to match the current requirements of evolving contemporary issues of regional and global significance. He is the author of over 35 refereed journal articles and book chapters. He is recipient of National Award for Underground Water Augmentation in the year 2011 by the Ministry of Water Resources, Government of India.

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