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## Sequencing and comparison of antidiabetic potential of proteins isolated from *Momordica charantia* collected from different regions of India

Pratibha Srivastava<sup>1</sup>, Ninad V Puranik<sup>1</sup>, Hemalata M Puntambekar<sup>1</sup>, Anuradha S Upadhye<sup>2</sup> and Mahesh J Kulkarni<sup>2</sup> <sup>1</sup>Agharkar Research Institute, India

<sup>2</sup>National Chemical Laboratory, India

Diabetes mellitus is a serious chronic metabolic disorder and it is one of the six leading causes of death in adults. It has a significant effect on the health, quality of life, and life expectancy of sufferer. Diabetes has become a worldwide epidemic. Clinical and animal studies suggest that *Momordica charantia* (MC) has strong hypoglycemic activity. Whole plant portions of MC, including extracts of fruit pulp, seed, and leaves has shown hypoglycemic effect in various animal models. Antidiabetic protein from this plant has already reported but their comparative analysis from various geographical region of India is still uncovered. Seeds of M. *charantia* have been collected from different regions of India and properly identified. The proteins were isolated using mixture of buffered sulfuric acid (0.06 M) and ethanol (70%) pH 6.2. The protein was purified by bioassay guided fractionation. Comparative analysis (LC-MS, MALDI-TOF) and antidiabetic activity of isolated proteins from different regions of India are in process. Since the protein is isolated from the plant source, the quantity of the isolated product depends on the quality of raw material used. The constituents of the plants are greatly affected by the soil and environment and it is not always possible to get consistent quality of the final product. Therefore, in this paper we are presenting the effect of environment on quantity, homology in their sequence and antidiabetic potential of the proteins, isolated from seeds of M. *charantia* from different regions of India. Details of analysis will be presented at the time of conference.

## Biography

Pratibha Srivastava has completed her PhD at the age of 30 years from Central Drug Research Institute and postdoctoral studies from National Institute of Health, USA. She is the Scientist in Agharkar Research Institute, Pune, India. She has published more than 25 papers in International journals in the area of synthetic organic and protein chemistry.

psri94@yahoo.com