Asian Journal of Research in Social Sciences and Humanities

Asian Research consortium

www.aijsh.com

ISSN: 2249-7315
Vol. 11, Issue 10, October 2021
SJIF –Impact Factor = 8.037 (2021)
DOI: 10.5958/2249-7315.2021.00068.X

A BRIEF DESCRIPTION ON POTATO

Dr. Jyoti Sharma*; Dr. Sudheesh Shukla; Dr. Manisha Rastogi*****

*School of Humanities, Physical & Mathematical Sciences,
Faculty of Engineering and Technology,
Shobhit Institute of Engineering and Technology,
(Deemed to be University), Meerut, INDIA
Email id: Jyoti2@shobhituniversity.ac.in,

[2, 3]School of Biomedical Engineering,
Faculty of Engineering and Technology,
Shobhit Institute of Engineering and Technology,
(Deemed to be University), Meerut, INDIA
Email id: [2]sudheesh.shukla@shobhituniversity.ac.in [3]Manisha.rastogi@shobhituniversity.ac.in

ABSTRACT

Potato (Solanumtuberosum L.) is a self-pollinated annual herbaceous plant. Potato is a member of the Solanaceae family and the Solanum genus, having a basic set of 12 chromosomes (x = 12). It's a vegetable that's also utilized in businesses to make starch, alcoholic drinks, and other processed foods like French fries and chips. A fresh potato has a carbohydrate content of 16-20% and a crude protein content of 2.5-3.2 percent. Despite the fact that potatoes have a low protein content, their nutritional quality is superior than cereals. Potatoes have the ability to generate more calories and protein per unit land area with less time and water than the majority of major food crops. As a result, knowing its genetic diversity is critical for improving this crop as well as making efficient use of germplasm. Because morphological characterisation is heavily affected by the environment, diversity study based on molecular characterization is preferable. As a result, in-depth research using both morphological and molecular markers will aid in a better understanding of potato germplasm genetic diversity.

KEYWORDS: *Genetic, Potato, Molecular Marker, Morphological Marker, Solanum Tuberosum L.*

REFERENCES

1. H. ZHANG, F. XU, Y. WU, H. hai HU, and X. feng DAI, "Progress of potato staple food research and industry development in China," *Journal of Integrative Agriculture*. 2017, doi: 10.1016/S2095-3119(17)61736-2.
2. H. Y. Gebrechristos and W. Chen, "Utilization of potato peel as eco-friendly products: A review," *Food Science and Nutrition*. 2018, doi: 10.1002/fsn3.691.

3. Y. Li *et al.*, "Genomic Analyses Yield Markers for Identifying Agronomically Important Genes in Potato," *Mol. Plant*, 2018, doi: 10.1016/j.molp.2018.01.009.

4. A. Hameed, S. S. e. A. Zaidi, S. Shakir, and S. Mansoor, "Applications of new breeding technologies for potato improvement," *Frontiers in Plant Science*. 2018, doi: 10.3389/fpls.2018.00925.

5. K. Watanabe, "Potato genetics, genomics, and applications," *Breeding Science*. 2015, doi: 10.1270/jsbbs.65.53.

6. D. Halterman, J. Guenthner, S. Collinge, N. Butler, and D. Douches, "Biotech Potatoes in the 21st Century: 20 Years Since the First Biotech Potato," *American Journal of Potato Research*. 2016, doi: 10.1007/s12230-015-9485-1.

7. K. Zaheer and M. H. Akhtar, "Potato Production, Usage, and Nutrition—A Review," *Crit. Rev. Food Sci. Nutr.*, 2016, doi: 10.1080/10408398.2012.724479.

8. A. N. Furrer, M. Chegeni, and M. G. Ferruzzi, "Impact of potato processing on nutrients, phytochemicals, and human health," *Crit. Rev. Food Sci. Nutr.*, 2018, doi: 10.1080/10408398.2016.1139542.

9. S. Wang, S. Nie, and F. Zhu, "Chemical constituents and health effects of sweet potato," *Food Research International*. 2016, doi: 10.1016/j.foodres.2016.08.032.

10. J. J. Okello *et al.*, "Productivity and food security effects of using of certified seed potato: The case of Kenya's potato farmers," *Agric. Food Secur.*, 2017, doi: 10.1186/s40066-017-0101-0.