

Grape Seed Oil Technology

Press Release

ICAR-NRC Grapes has introduced a grape seed oil with high nutraceutical properties from Manjari Medika, a unique, made in India grape variety. This technology was recently chosen as one of the five best entries of the Horticulture Division of ICAR, New Delhi. Dr Kaushik Banerjee, the Lead Developer and the Director of the institute received this recognition from the Union Ministers of Government of India, Shri Parshottam Rupala and Shri Kailash Chaudhary, in presence of Dr Himanshu Pathak, the Director General, ICAR, on the occasion of ICAR Foundation and Technology Day celebration at NASC auditorium in New Delhi on July 16, 2023.

This oil is rich in vitamin E (~ 1500 mg/kg) and beneficial fatty acids. It is also rich in gamma-tocotrienol content (~1100 mg/kg), which protects human body from exposure to atmospheric radiation. The oil has proven to be beneficial for the treatment of hepatic inflammation related disorders in animal bodies. The polyphenolic constituents provide antioxidant properties on oral ingestion or dermal supplementation. After the oil extraction, the remaining solid (grape seed cake) is also useful as an animal feed, containing high proportions of polyphenolic antioxidants and dietary fiber. This highlights the 'zero waste' nature of this innovative technology. All these have been published by Dr Banerjee and his team in leading scientific journals, viz. Sustainable Chemistry and Pharmacy, European Journal of Lipid Science and Technology, and Journal of Inflammation Research.

Dr Banerjee mentioned that this grape seed oil from Manjri Medika variety has a strong potential for utilization in high value functional food and nutraceutical industries. It is also possible to utilise it as a constituent in cosmetics and diverse personal care products. He further requested the food, feed and health care industries to consider utilizing this unique grapsed oil for commercialisation, or value addition to their existing products.