

(October 10-12, 2022)



Organized by

Foundation for Advanced Training in Plant Breeding (ATPBR*)

Supported by ICAR-IARI.

BACKGROUND

Okra (Abelmoschus esculentus L. Moench) is an important vegetable crop belonging to the family Malvaceae. Okra is grown throughout the tropical and subtropical regions of the world and in warmer parts of the temperate zone. India is the largest producer of okra globally, with a contribution of more than 72% (6 million tonnes) from an area of 0.5 million hectares (NHB, 2020). Okra has vast potential for earning foreign exchange as it has a significant share in fresh vegetable export (APEDA, 2020). Tender pods of okra are used as a delicious vegetable. Its leaves, buds, and flowers are also consumed especially in West Africa. It is used in canned, dehydrated, and frozen forms to a limited extent. Okra mucilage is used as a food, non-food and medicinal product. Okra dry seeds are a rich source of oil (18-20%) and protein (20-23%). During the sugar production process, okra roots and stems are used to clean the cane juice. The okra development in India had taken pace with the release of Pusa Sawani, the first YVMV (Yellow Vein Mosaic Virus) resistant variety by Dr. Harbhajan Singh at IARI, New Delhi in late fifties. Pusa Sawani remained a ruling variety for several decades worldwide. Many private seed companies in India, like Mahyco started their seed business with this variety. Later on with the development of Parbhani Kranti by Drs. Jambhale and Nerker and Arka Anamika by Dr. O.P. Dutta in eighties the okra development taken a further boost. "With the expansion of private seed companies in India after eighties, okra research and development resulted into advent of hybrids both by private and public sector on a large scale, e.g Vijay and Varha (IAHS), Sun 40 (Pioneer), Mahyco-10 (Mahyco), OH 152 (Syngenta) Shakti (Nunhems), CO-4(TNAU), Arka Nikita -GMS Based (IIHR) Kashi Bhairav(IIVR), Pusa Okra Hyb-1(IARI) etc were key products". In the last five years, okra has become the most valuable vegetable crop in India both in terms of annual revenue and increased popularity. Hybrids that possess strong resistance to diseases and pests and have better yielding capacity have become more popular among farmers as they ensure a high return on their investments.

Several hybrids have been developed both by public and private sectors, namely Mahyco-10, Shakti, CO-4, Arka Nikita (GMS based), Kashi Bhairav, Pusa Okra Hybrid-1etc. Some of these hybrids have contributed significantly to tackling the problem of YVMV disease faced by farmers. The introduction of a short inter-noded strong virus-resistant hybrid Radhika (15-20% more yield) by Advanta (2018) enhanced the popularity of hybrid okra across India. Adaptation of hybrids has been easier as no enhanced agrotechnique and additional costs were required to grow the hybrid vs openpollinated (OP) varieties. Hence, a 90-crore (\$11 m) seed revenue per year in 2011 has now become around 1000-crore (\$112 m) annual market and growing continuously at the rate of about 8-10 percent.

The value addition that Okra has seen in India over the last four decades indicates the excellent work carried out by breeders both from the public & private sectors. As per FAO estimates, around 75 percent of the Okra

market is in India and 12% is in Nigeria.

However, in more than 30 West and Central African countries, okra is cultivated as both rain-fed and irrigated crops and is the most valued and popular vegetable consumed in fresh and dried forms. The last five years have seen okra gaining ground as a global crop as its nutritional values are being recognized by consumers. This is especially after COVID pandemic that a healthy and balanced diet is getting embedded in the global mind set. Okra seeds are getting exported to over 20 countries from India. Recently, an increased number of research papers on its genetics, breeding, genomics, and agronomy from Asia and African countries have appeared. This is a further indication of it's becoming a global crop. Over 80 percent market is covered by hybrid seeds in India. Global seed requirement is expected to be 6000 mt by 2030 making it a \$ 300m crop soon.

PROPOSAL

Seeing the okra crop production scenario, it is a great time to bring all okra crop improvement scientists and other stakeholders together for a 'Global Okra Roundtable' under the aegis of ATPBR and fully supported by ICAR-IARI, New Delhi where the okra virus resistance breeding had started followed by path breaking virus resistant variety & hybrid developement by both public and private sector. The time for conducting the conference will be Oct 10-12, 2022, which will include a field day on Okra at the IARI campus. GORT can develop into a biennial conference so that Okra stakeholders can meet & take the crop research forward.

ABOUT ATPBR

Foundation for Advanced Training in Plant Breeding (ATPBR). The ATPBR is a non-profit organization, which primarily aims to strengthen plant breeding capacity among crop improvement scientists and students. With its global footprint and multi-partner platform, ATPBR is a leading organization in India that nurtures personal and institutional capabilities as per the current and future needs and help to formulate strategies to develop effective crop improvement program and scientific skill required for sustainability of agriculture and the ecosystem. For more details, visit www.atpbr.com.

REGISTRATION

Registration for the conference will be open from 20th July 2022.

Registration Type	Early Bird Rate (Till August 10)	Regular Rate (Till Oct 11)	On site*
Indian Participants	₹ 5900	₹ 7080	₹ 8260
Students	-	₹ 1000	₹ 2000
Foreign delegate	\$ 200	\$ 250	\$ 300
Online Registration	_	₹ 2000	₹ 3000

* Note: fee includes 18% GST

VENUE

ICAR - Indian Agricultural Research Institute, Pusa, New Delhi.

BANK DETAILS

Account Name: Foundation for Advanced Training in Plant Breeding (ATPBR)

Bank Name: HDFC

Account No. 50200050384008 (Current)

IFSC Code: HDFC0000113, Aurangabad, Maharashtra

GST: 27AADCF2861J1ZI

For registration, for detail about poster and abstract submission, for detail

about our speakers, please visit www.atpbr.com

CORRESPONDENCE

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