

TILHAN TECH - ICH-5 Castor Hybrid: A Boon for Castor Cultivation

Castor crop is ideally suited from times immemorial to the rainfed agro ecosystem. Considering its resilience to harsh climatic conditions, low input requirement, ease of management, castor plays an important role in the livelihood of small holder agriculture in the rainfed ecosystems of the country. The country is the global leader in castor production and exports with Gujarat and Rajasthan contributing to the majority of the above. However with the recent dynamics of the changing climatic scenario, the impetus on developing suitable genotypes for the rainfed ecosystem was warranted on demand driven approach. In this direction, ICH-5 was developed by ICAR-Indian Institute of Oilseeds Research, Hyderabad and was notified by CVRC in December, 2021, (Gazette Notification S.O.8 (E) dated 24.12.2021) for cultivation in the states of Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, Odisha and Maharashtra. ICH-5 has recorded mean seed yield of 1671 kg ha⁻¹ under rainfed cultivation in AICRP-castor trials (2018-21), which was 15-21% higher over the existing hybrids (national check, GCH-8: 1378 kg/ha, zonal check, ICH-66: 1521 kg/ha) in the recommended states. It has also recorded higher test weight (>30 g per 100 seeds) under rainfed cultivation. The performance of the hybrid has been highly appreciated by the farmers in Andhra Pradesh, Telangana and Karnataka, during kharif, 2023, due to its drought tolerance and yielding ability despite 35-55 days of dry spell during the season. The hybrid has seed yield potential of 2000-4000 kg ha⁻¹ under drip irrigation for the crop duration of 6-8 months. Considering its potential and farmer's feedback, Rayalaseema Agri Producer Company Limited (RAPC) has secured the licence for its hybrid seed production and marketing, through a tripartite agreement between ICAR-IIOR, RAPC and Agrinnovate India Ltd. (AgIn). Participation of private sector helps in castor area expansion, increasing productivity of castor cultivation and thereby farmers income in the above states.

