

**Maize** (*Zea mays* L) is an important billion tonnes producing cereal crop in the world used for staple food, animal feed, starch, ethanol and many other industrial applications. The crop has tremendous genetic variability, which enables it to thrive well in tropical, sub-tropical, and temperate climates. Maize is also known as the queen of cereals due to its high yield potential. It contains approximately 72% starch, 10% protein, and 4% fat, supplying an energy density of 365 Kcal/100 g. Maize is grown throughout the world, with the United States, China, and Brazil being the top three maize-producing countries in the world. It can be processed into a variety of food and industrial products, including starch, sweeteners, oil, beverages, glue, industrial alcohol, and fuel ethanol.



After rice and wheat, maize (9.4 million hectare) is the third most important field crop in India. India is one of the top 10 maize producers (2-3% of the global production) and top-5 maize exporters in the world (14% of the total export of world). The predominant maize growing states that contributes more than 80% of the total maize production in India are Andhra Pradesh (20.9%), Karnataka (16.5%), Rajasthan (9.9%), Maharashtra (9.1%), Bihar (8.9%), Uttar Pradesh (6.1%), Madhya Pradesh (5.7%), Himachal Pradesh (4.4%).



Maize consumption in India can broadly be divided into three categories viz. feed, food and Industrial non-food products (mainly starch). The most important use and demand driver of maize is poultry feed which accounts 52% of total maize consumption. Livestock feed accounts for 13% while starch industry has 18% maize consumption. The food consumption accounts for 14% of Maize consumption.



In the North Eastern Region (NER) of India, maize is the second most important crop (0.23 m ha), next only to rice and is mostly grown under rainfed hilly upland conditions and *jhum* fields. However, area of winter maize has increased during last five year in the region. Maize plays a significant role in ensuring food security and is used both for direct consumption and as well as feed ingredient for pig and poultry farming of this region. One of the major constraints of pig and poultry farming in the region is high feed cost as most of the feed comes from outside the region which exacerbates the transportation

cost. Hence, if maize sector in the region is given adequate boost, the pig and poultry industry in the region will also get equally benefited due to lower feed cost. Maize is also cultivated in Tripura to meet the demand for food, feed and economic purpose. Climate of Tripura provides a unique opportunity for year round cultivation of maize, as the state enjoys mild temperature range of 5 to 35 °C and a uniform distribution of rainfall from April to October. Maize in Tripura is having very good potential especially during pre-*kharif* and *rabi* season. Maize can also be grown under rice fallow land under limited irrigation condition where amount of irrigation water is not sufficient to support the *boro* rice. Several open pollinated varieties/composites and hybrids have been tested under North Eastern Region including Tripura conditions over the years. Composites and OPVs like Vijay, DA 61A, RCM 75 and RCM 76 performed well under Tripura Conditions with yield ranging from 3 to 4 t/ha. Maize hybrids like HQPM1, Vivek maize hybrid 23, CMH 08-239, CMH 08-239 etc. performed well under Tripura conditions with yield of 4.5 to 5.3 t/ha. The cultivation of maize is highly beneficial for both consumption and economic purpose. However, productivity of maize in Tripura and other NEHR states is low as compared to national average. Further, the region is lagging behind in mechanization and processing and value addition of maize. Therefore, better understanding about complex problem and constraints for low yield and processing, and their solution on a single platform is envisaged to bring farmers prosperity and economic development of Region. With adequate policy support, technology backstopping and capacity building maize can find its place in NEHR. Thus, keeping this background on mind a National seminar on "Promotion of maize in North East India-opportunities and strategies" is being organized during 22<sup>nd</sup>-23<sup>rd</sup> October 2019 in ICAR Tripura Centre, Lembucherra with the following objectives

• To deliberate and identify location specific maize production technologies for enhancing productivity, income, input use efficiency and climate resilience.

• To provide a platform for sharing of experiences and develop strategy for popularising scientific maize cultivation in north east India

• To develop linkages amongst stakeholders involve in value chain for enhancing production and profitability of maize production in north east India

- Seminar Themes:**
- Maize bio-diversity and crop improvement.
  - Sustainable maize production practices in changing climate.
  - Eco-friendly plant health management.
  - Mechanization, processing and value addition.
  - Maize as feed and fodder crop.
  - Marketing and entrepreneur development.

### Call for papers:

Abstracts of unpublished research works are invited for presentation. Abstracts may send through email (gulabicar@gmail.com) in MS word typed in double space and maximum of 500 words. The title should be followed by name of authors with the name of the person presenting underlined and their affiliation. Abstracts in different theme areas as mentioned will be selected for oral/ poster presentation. The keynote/lead and invited speakers will be given 20 and 15 minutes time, respectively (including discussion) for presentation. The speakers of contributory papers will be given 10 minutes (Max. 10 slides) including discussion. For poster presentation, the size of the poster should be 48" (L) and 36"(W) following standard formatting. Since oral papers and posters will be evaluated for awards, strict norms and timings may be maintained. Last date of paper/abstract submission is 7 October, 2019.

### About Agartala:

Agartala is the capital of Tripura, a State in North Eastern region of India. The city is well connected by Air with Kolkata, Guwahati, New Delhi, Imphal, Chennai & Bengaluru. This city is connected by Rail with Kolkata, Silchar, Guwahati, New Delhi & Bengaluru and also by road. Visits to farmers field and historical places will be organized on payment basis. Agartala is famous for beautiful palaces, monuments, temples and handicrafts. Ujjayanta Palace, Nirmahal, Matabari, Kasba Kali Bari etc. are some of the important tourist attraction in and around Agartala



### About ICAR - Tripura Centre:

The ICAR Research Complex for NEH Region, Tripura Centre, Lembucherra was established by Indian Council of Agricultural Research, New Delhi with its headquarter at Umroi Road, Umiam (Barapani), Shillong in 1975. The Centre is about 8 km away from the capital town, Agartala. Late S. Govindaswami was appointed as the first Joint Director of this Centre. During last 44 years six Joint Directors have served in this Centre. The Centre is established with mandate to provide adequate research base in the domain of agriculture, horticulture, animal and fisheries for the collection and preservation of cultivated or wild germplasm in crops, animals and fisheries for their subsequent utilization in improvement programme and to disseminate viable technologies among the farming community. The Centre over a short span of its existence has developed technologies with identification of high yielding varieties of



agro- horticulture crops, production and protection technologies and soil characterization relevant to the state. The centre has also developed and introduced suitable strains of poultry, rabbit, pig and goat as components for uplifting the economic levels of the local masses. The Centre has also standardized improved livestock and aquaculture practices to benefit farmers of the state. The Centre is focusing on 'Farming System Research' for food, nutritional security & income enhancement which have generated significant interest among the development workers and farmers of the state. ICAR Research Complex for NEH Region, Tripura Centre, Lembucherra has two Krishi Vigyan Kendras (KVKs), one at Birchandramanu, South Tripura and another at Belbari, West Tripura District.

#### About IIMR:

The Indian Institute of Maize Research (IIMR), Ludhiana is a constituent of the Indian Council of Agricultural Research (ICAR) – an autonomous organization under the Department of Agricultural Research and Education (DARE), Ministry of Agriculture, Government of India. The IIMR is the only institute of the country exclusively mandated for maize research and development. The institute is entrusted with the overall responsibility of research, coordination and management of the multidisciplinary programmes on maize improvement at national level and maintaining linkages with international programmes. The institute also undertakes scientific human resource development programmes involving national and international agencies/ organizations. The institute has dedicated NEH programme running in collaboration with ICAR institutes of NEH region from last 5 years for the research, capacity building and demonstration of the improved maize technologies.

#### Organizing Committee:

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#### Hotels in Agartala:

HOTEL SONAR TORI	GINGER HOTEL
Ronaldsay Road, Near Fire Brigade Chowmuhani, Agartala, Tripura (W), Pin-799006 Tel. +91 381 2311189 / 2322202 / 2322201, <b>e-mail:</b> reservation@hotelsonartoriagartala.com <b>Web:</b> www.hotelsonartoriagartala.com <b>Tariff:</b> Rs.2500 to Rs.5000 per day	Airport Road , Khejur Bagan , Barjala Mouja Agartala - 799006,Tripura(W) Tel.+913812303333, Fax:+913812303336 e-mail: reservation.agartala@gingerhotels.com Website: www.gigerhotels.com Tariff: Rs.2499 to Rs.2999 per day
<b>HOTEL VICTORIA PALACE</b> Kunjaban, Gurkhabasti, Airport Road, Agartala <b>Mob:</b> +91 9774303067 / 9436129807 / 9485152487 <b>Tariff:</b> Rs.1600 to Rs.2400 per day	<b>GITANJALI</b> (Adjacent to State Guest House, Agartala), Kunjaban, Agartala- 799006 Tel. +91 381 241 0009/ 0016 Tariff: Rs.2000 to Rs.2500 per day www.tripuratourism.gov.in/govtaccommodation
<b>HOTEL RAJDHANI</b> B.K. Road, Near Indian Airlines City Office, Agartala-799001 <b>Tel.</b> +91 3812223387/ 2226312/220 8635/ 2222215/ 2319170/2319169, <b>Fax:</b> +91 381 222 6157 <b>Tariff:</b> Rs.750 to Rs.3000 per day	<b>HOTEL HAVEN</b> Sakuntala Road, Aitorma Sentrum, Agartala, Tripura (W), Pin-799006 Tel. +91 381 238 4838, <b>e-mail:</b> hotelhavenint@gmail.com roybidyut1950@gmail.com <b>Tariff:</b> Rs.1400 to Rs.5800 per day

#### Contact us:

**Convener:** anupicar@gmail.com, 8730028333/ 9436336070  
**Organizing secretary:** gulabicar@gmail.com, 8413971329



## National Seminar on Promotion of Maize in North East India: Opportunities and Strategies (22-23 October, 2019)

**Organized by:**  
**ICAR Research Complex for NEH Region,  
Tripura Centre, Lembucherra, Agartala**  
**In collaboration with**  
**ICAR-Indian Institute of Maize Research,  
Ludhiana**



**Venue:**  
**ICAR Research Complex for NEH Region,  
Tripura Centre, Lembucherra, Agartala**