

NEWS LETTER

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Governing Council Meeting Held on 4th April, 2024 At ASPEE Head Office, Malad

The governing council meeting of ASPEE Foundation was held on 4th April 2024 at ASPEE head office, Malad (Mumbai). The meeting was chaired by Dr. S.K. Singh Deputy Director General (Horticulture Science), ACAR New Delhi. Dr. Dr. Z. P. Patel, vice-chancellor Navsari Agriculture University Navsari (Gujarat), Dr. Sanjay G. Bhawe, vice-chancellor, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (MS), Dr. D.J. Patel Ex principal, Ananad Horticulture College, Anand, Dr. Timur Ahlawat Director Research, Navsari Agriculture University Navsari, Dr. Alka Singh, Principal, ASPEE Horticulture College, Navsari and other prominent members were present. They finalized the Awardees for the L.M. Patel Award 2022, reviewed the progress of preliminary selection process of the L.M. Patel Award 2023 and also finalized the awards categories for the year 2024.



Mango Harvesting

This year, we successfully harvested a total yield of 14 tons of mangoes. Our orchard boasts a variety of mango types, ensuring a diverse and rich harvest. Notably, this year's yield prominently features the Kesar variety, which constitutes a significant 80% of the total harvest. The remaining 20% of the yield consists of other demanding mango varieties, each contributing to the overall quality and diversity of our harvest.



Irrigation Management: Drip line collection from Chiku orchid before rainy season



Every year, once the harvesting of the chikoo (sapota) crop is completed in May, we undertake the important task of collecting and storing our drip irrigation lines. These drip lines are carefully bundled and kept in a secure location to protect them from potential damage, particularly from rats ensuring these remain in good condition for the next irrigation cycle. This practice is crucial for prolonging the life span of the drip pipes. This proactive approach to equipment maintenance is a key part of our orchard management strategy, helping to reduce costs and maintain the effectiveness of our irrigation system.

Ring making around Mango & Chiku trees - for giving fertilizer in kharif season



Every year, as we prepare for the Kharif season, we undertake the meticulous process of ring making around our mango and chikoo trees. This involves creating circular trenches, or "rings," around the base of each tree. The primary purpose of these rings is to ensure the effective application and absorption of fertilizers. By forming these rings, we create a designated area where fertilizers can be applied directly to the root zone, allowing the nutrients to be efficiently absorbed by the trees. The ring structure helps to prevent the fertilizer from being washed away by rain or irrigation, ensuring that the essential

nutrients remain concentrated around the tree's root system. Overall, the practice of ring making is a crucial part of our orchard management. It ensures that our mango and chikoo trees receive the necessary nutrients and water in the most efficient way possible, promoting their health and productivity throughout the growing season.

Watering to forest tree by tanker - For survival of forest trees during shortage of water in summer

During the scorching summer months, when water becomes scarce, we take proactive measures to ensure the survival of our orchard trees and plants by providing supplemental watering using tankers. This practice is critical in maintaining the health and vitality of the trees, especially during periods of severe water shortages. The process typically includes identifying the most water-stressed areas and scheduling regular watering trips to ensure consistent moisture levels in the soil. Our team carefully monitors the trees, adjusting the frequency and amount of water delivered based on current weather conditions and the specific needs of different tree species. By using tankers, we can



precisely control the amount of water each tree receives, ensuring that they get just the right amount needed to sustain them through the hot summer months.

Paddy Crop Management: Seed Nursery

In our paddy cultivation, we utilize the raised bed nursery technique for growing paddy seedlings intended for manual transplanting. This traditional method involves creating elevated beds of soil where paddy seeds are sown. The raised beds offer several advantages, including improved drainage, better aeration, and easier management of water levels, which are important for the healthy growth of young seedlings. The process begins with preparing the nursery area by tilling the soil and forming raised beds, typically 10-15 cm high and 1-1.5 meters wide. The paddy seeds are then evenly sown on these beds, and a thin layer of soil is spread over them. Regular watering ensures that the seeds



germinate and grow into robust seedlings over the next few weeks. Once the seedlings reach the appropriate stage, they are carefully uprooted and manually transplanted to the main paddy field. This method is particularly effective in ensuring strong root development and healthy seedling growth, leading to a successful and productive paddy crop.

Mat Nursery in tray - By Machine transplanting



Keeping in view of ongoing transformation of the agricultural practices, we adopted innovative modern and efficient paddy cultivation techniques, we employ the mat nursery technique using trays, specifically designed for machine transplanting. This innovative method involves growing paddy seedlings on specially prepared trays. The trays are filled with a mixture of soil, compost, and other organic materials to create a nutrient-rich growing medium. The paddy seeds are uniformly spread over the trays and lightly covered with soil. These trays are then kept in a controlled environment with optimal moisture and light conditions to promote uniform germination and growth. After a few weeks, the seedlings form a dense mat that can be easily handled and transplanted.

Mango Grafting: Mango Stone planting

Mango stone planting is a critical primary step in process of producing high-quality grafted mango trees. This method involves planting mango seeds (stones) to grow rootstock, which will later be used for grafting desired mango varieties. These stones are thoroughly cleaned to remove any remaining pulp and then dried to facilitate easier planting. The prepared mango stones are planted in well-drained soil, rich in organic matter. The stones are sown at a depth of about 3-4 centimeters, ensuring they are covered lightly with soil. Regular watering is essential to maintain soil moisture, which is crucial for germination. Within a few weeks, the mango stones germinate, and young seedlings start to emerge. These seedlings are nurtured with appropriate care, including consistent watering, weeding, and protection from pests and diseases. As the seedlings grow, they develop into robust rootstock, with strong root systems and healthy growth. Once the rootstock reaches a suitable size, it is ready for the grafting process.



Soil testing before started kharif season for sowing Paddy Crop

At ASPEE foundation we undertake comprehensive soil testing to ensure optimal soil health and fertility. Soil testing provides detailed insights into the nutrient content, pH level, organic matter, and overall health of the soil. Understanding these parameters is essential for determining the specific fertilizer requirements of the paddy crop, ensuring that nutrients are supplied in the right amounts and proportions. The process begins with the systematic collection of soil samples from different sections of the paddy field. Using a soil auger or similar tool, samples are taken from the topsoil and subsoil layers, typically at depths of 0-15 cm and 15-30 cm. By conducting thorough soil testing before the Kharif season, we can precisely manage soil fertility and nutrient availability, leading to healthier plants and improved paddy yields. This proactive approach not only



enhances crop productivity but also promotes sustainable agricultural practices by minimizing the over dose of fertilizers and protecting soil health.