

ARIES FLASH

DECEMBER 2024

**"Rabi Rhythms with Aries Agro: Cultivating Success
Through Innovation and Expertise"**

EDITORIAL TEAM

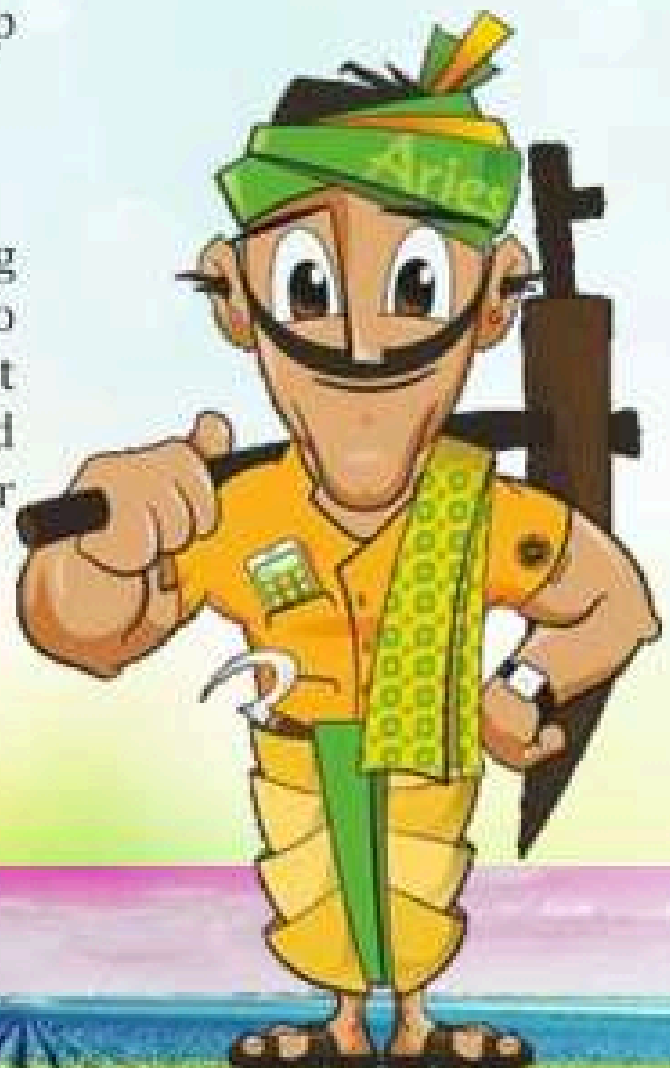
Sundus Kant, Supriya Kambale, Swapnil Mali, Dr. Shama Zaidi .

ARIES VISION

Our vision is to create value for "farmers" and all "stakeholders" using cost effective, environmentally safe crop nutrition solutions customized for the specific needs of crops and soils of India and other markets we serve. To do so, we aim to spread knowledge of good agricultural practices and use our products to make balanced crop nutrition a farming imperative.

ARIES MISSION

Our Mission is to evolve from being India's Plant Nutrition Super-Bazaar to one of the India's largest Agri input companies and to have an ARIES brand in every product category required for specialized agriculture.



Rabi Season in India

The Rabi season in India spans from October to March, marked by cooler temperatures and reduced rainfall. It begins with the retreating monsoon, allowing farmers to sow crops that thrive in cooler, drier conditions. The harvest typically occurs in spring (March-April). This season's success largely depends on the availability of irrigation since it coincides with the dry winter months.

Major Crops by Agro-Climatic Regions

Region	Major Crops	Agro-Climatic Conditions	Climate Change Impact
Indo-Gangetic Plains (North and Central India)	Wheat, barley, mustard, gram, and peas	Cool winters (10–15°C), minimal rainfall (50–100 mm), fertile alluvial soils. Irrigation from rivers like Ganga and Yamuna supports high wheat yields.	Rising winter temperatures threaten wheat's critical grain-filling stage. Altered precipitation patterns affect mustard and gram flowering.
Western Region (Rajasthan, Gujarat, Punjab, and Haryana)	Mustard, gram, barley, and cumin	Arid to semi-arid zones with scant rainfall (<50 mm), reliance on groundwater or canal irrigation.	Depleting groundwater levels and erratic rainfall impact crop viability. Increasing salinity in soils challenges barley and cumin cultivation.
Central India (Madhya Pradesh and Chhattisgarh)	Wheat, chickpea, lentils, and linseed	Moderate winters (10–20°C), black cotton soil in some regions, moderate rainfall (50–75 mm).	Delayed onset of winters shortens the growing period. Extreme weather events, like unseasonal rains, disrupt harvesting.
Peninsular India (Karnataka, Andhra Pradesh, and Tamil Nadu)	Rabi sorghum, chickpea, sunflower, and safflower	Warmer winters (15–25°C) with residual moisture from the monsoon. Red and lateritic soils require supplementary irrigation.	Rising temperatures reduce sorghum yields and affect oilseed quality. Erratic rainfall during planting impacts crop establishment.
Eastern Region (West Bengal, Bihar, and Odisha)	Wheat, pulses, mustard, and maize	Fertile alluvial soils, cooler winters (10–15°C), and dependable irrigation systems.	Increased frequency of floods damages early-sown crops. Winter warmth may favor pest infestations.

"Maximizing Wheat Yield: Best Practices for the Rabi Season"

Wheat: The Staple Food of India and a Pillar of Agricultural Heritage

Wheat, often regarded as the “Staple Food of India,” is pivotal in the nation’s agriculture and culture. Its cultivation, particularly dominant in the northern states like Punjab and Haryana, has shaped the agricultural landscape. These states contribute significantly to India’s wheat production, thanks to fertile plains and optimal climatic conditions.

Key Factors Driving Wheat Productivity

The success of wheat cultivation hinges on adopting improved practices and efficient nutrient management. Yield is influenced by two primary factors: the number of spikes per unit area and the seed yield per spike. Growth stages and nutrient optimization are critical for maximizing output.

Wheat Life Cycle	
Stage	Details
Vegetative Stage	
Germination	5–7 days
Crown Root Initiation	20–25 days after sowing (DAS)
Tillering	Starts at 15 DAS and continues every 4–5 days until 45 DAS
Jointing	Rapid growth period, 45–60 DAS Internode Elongation
Reproductive Stage	
Boot Leaf	70–75 DAS
Flowering	85–90 DAS
Milking	100–105 DAS
Dough	105–110 DAS
Maturity	115–120 DAS

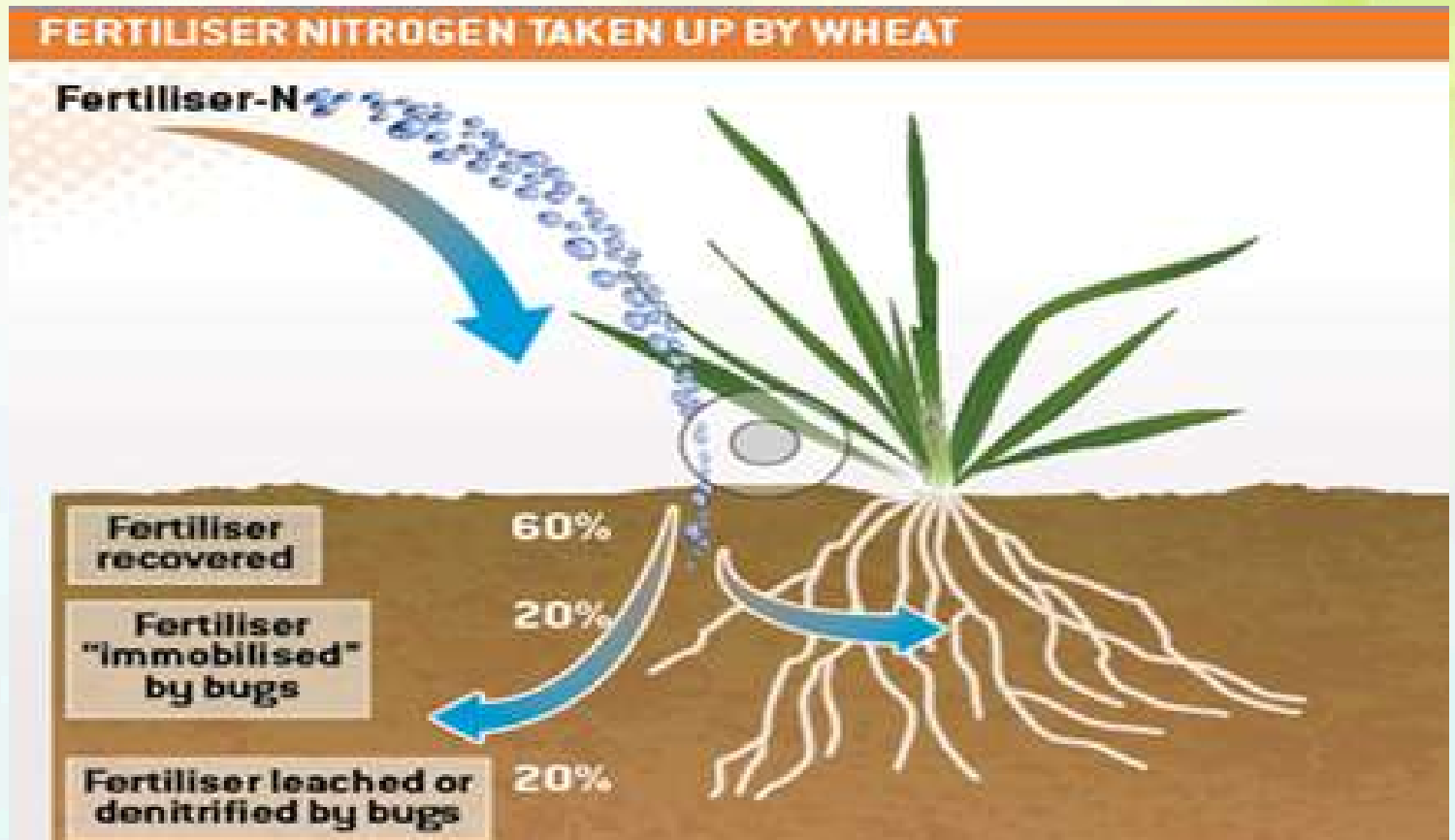


Climate Change Challenges in the Rabi Season

1. **Temperature Stress:** Higher winter temperatures shorten crop maturity, reducing yields.
2. **Irrigation Scarcity:** Declining water availability affects wheat and oilseed crops.
3. **Pests and Diseases:** Warmer winters promote pest proliferation, affecting productivity.
4. **Unseasonal Rains:** Unexpected rainfall during harvest damages crops and affects quality.
5. **Soil Degradation:** Rising salinity and loss of organic matter reduce soil fertility.
6. **Delayed Monsoons:** Disrupt planting schedules, affecting crop cycles and productivity.
7. **Extreme Weather Events:** Increased frequency of storms or hail damages standing crops.
8. **Reduced Pollinator Activity:** Higher temperatures and erratic rains negatively impact pollinators, reducing yields of cross-pollinated crops.

Efficient Fertilizer Application Techniques

Foliar application of nutrients at critical growth stages like CRI, tillering, jointing, and booting boosts nutrient uptake and utilization. This method allows nutrients to penetrate the stomata, quickly enhancing plant health.



Recognizing Nutrient Deficiencies

Nutrient	Deficiency Symptoms
Nitrogen	Pale green or yellowing leaves, slow growth.
Phosphorus	Dark green leaves with purpling, delayed maturity.
Potassium	Chlorosis on older leaves, weak stems.
Zinc	Interveinal chlorosis, stunted growth.
Sulfur	Yellowing on younger leaves, progressing through veins.

Correct Practices:

Use the recommended seed rate, spacing, and proper sowing techniques.

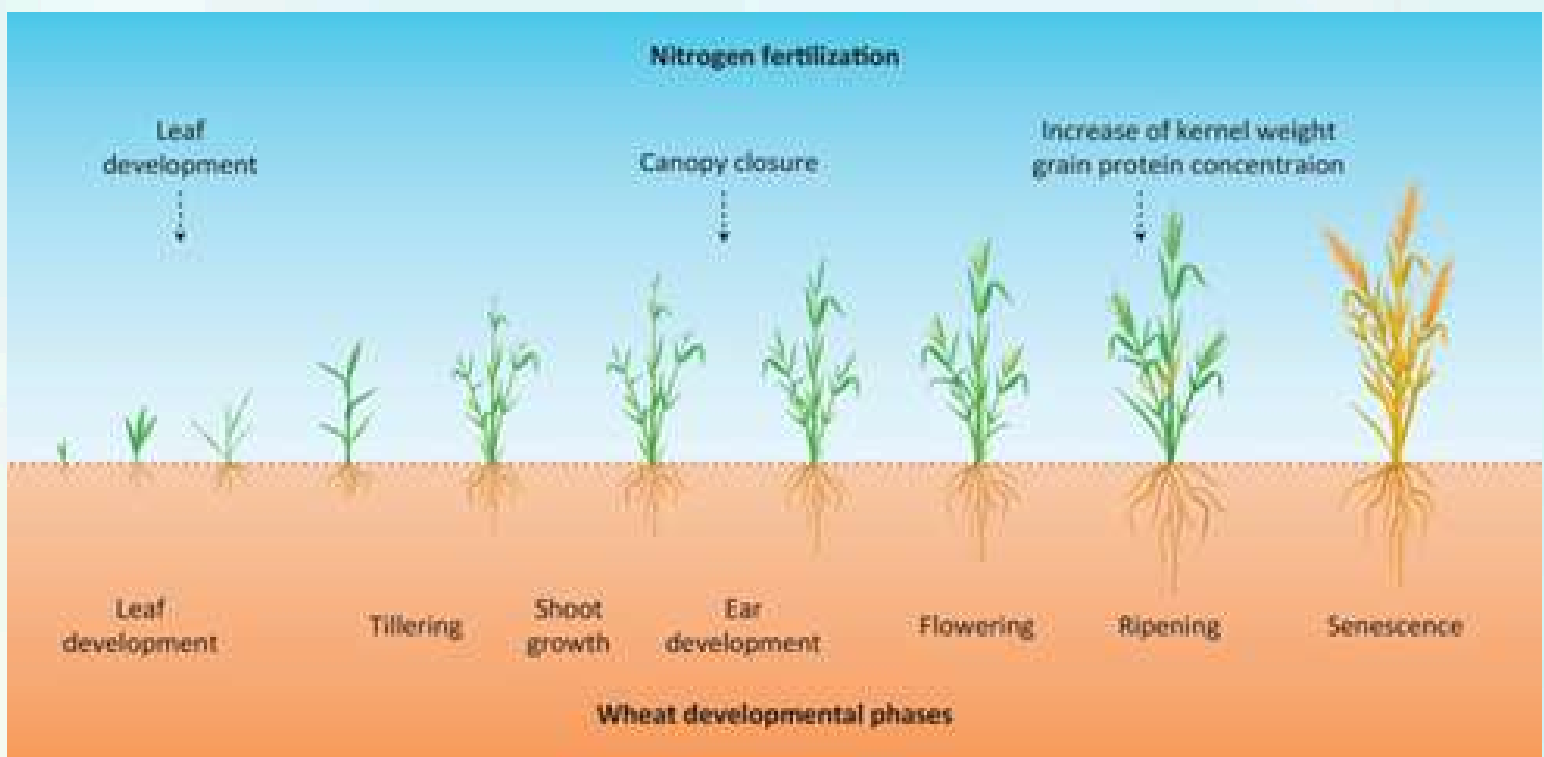
Fertilizer Application: Follow the recommended dosages and methods.

Weed Management: Integrate effective weed control practices.

Harvesting: Harvest timely to prevent losses from bad weather or grain shattering.

Crop Rotation: Plan for summer crops like moong or fodder to better utilize resources.

Wheat productivity in India can reach new heights by integrating scientific practices, efficient nutrient management, and timely interventions. The collective efforts of farmers, researchers, and policymakers ensure that this staple crop continues to sustain the nation's food security and agricultural legacy.



Trends in Plant Science

Wheat Development Phases

Wheat Deficiency



Nitrogen (N) Deficiency: Pale green to yellow leaves, chlorosis starting from lower leaves and moving upwards, spindly stems, slow growth.



Potassium (K) Deficiency: Chlorosis on older leaves progressing upwards, streaked and scorched leaf margins, weak stems prone to lodging. Young leaves may also show symptoms in some varieties.



Potassium (K) Deficiency: Chlorosis on older leaves progressing upwards, streaked and scorched leaf margins, weak stems prone to lodging. Young leaves may also show symptoms in some varieties.



Zinc (Zn) Deficiency: Interveinal chlorosis on new leaves, stunted growth, few tillers, white and dying leaves (severe), whitish-brown necrotic spots, scorched appearance.



Sulfur Deficiency: The symptoms of sulfur deficiency first appear on the younger leaf with fading of the normal green color. This is followed in the veins. The topmost leaves become light yellow except for the tip, while the lower leaves retain green color for a long period



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FIELD DEMONSTRATION



- किसान का नाम: रवींद्र सोलंकी
- फसल: केला
- गांव: जरवाह
- तहसील/डाक: थिकरी
- जिला: बड़वानी , (मध्य प्रदेश)
- उपयोग किए गए उत्पाद (एरिस):
- एरिस कॉम्बोकिट, एग्रोमिन मैक्स ES, चेलामिन, चेलाफेर, फर्टिसोल, एक्वाकैल, बोर्ॉन-20, हाइड्रोप्रो, एरिपोटाश ,WSF रेंज
- लाभ: वजन में वृद्धि, निर्यात गुणवत्ता वाले केले का उत्पादन, लंबाई में वृद्धि !
- एरिज कर्मचारी: नारायण सिंह सिसोदिया



केला फसल में एरीज उत्पादों का शानदार अनुभव

मैं, रवींद्र सोलंकी, अपने केले के खेत में एरीज कॉम्बोकिट, एग्रोमिन मैक्स एफएस, चेलामिन एफएस, चेलाफेर, फर्टिसोल, एक्वाकैल, बोर्ॉन-20, हाइड्रोप्रो, एरीपोटाश और डब्ल्यूएसएफ रेंज का उपयोग करता हूं। इन उत्पादों के उपयोग से मेरी केले की फसल का उत्पादन बढ़ा है और गुणवत्ता इतनी बेहतरीन हुई कि यह निर्यात योग्य बन गई। पौधों की बढ़वार से लेकर फलों की चमक और आकार तक हर पहलू पर सकारात्मक प्रभाव पड़ा है। ये उत्पाद न केवल पोषण की पूर्ति करते हैं बल्कि मिट्टी की उर्वरता को भी बनाए रखते हैं। मैं हर केले किसान को एरीज के उत्पादों का उपयोग करने की सलाह देता हूं। "बेहतर फसल, बेहतर कल" के लिए एरीज का आभार।



FIELD DEMONSTRATION

- **किसान का नाम:** शंभूभाई पडियार
- **फसल:** मिर्च
- **गांव:** खिजलपुर
- **तहसील/पोस्ट:** उमरेठ
- **जिला:** आणंद
- **राज्य:** गुजरात
- **उपयोग किए गए एरिज उत्पाद:** एरिज डब्लूएसएफ, मेजरसोल मिर्च, हाइड्रोप्रो, मैरिनो, एक्वाकल, एरिपोटाश
- **एरिज कर्मचारी:** डॉ. मयूर प्रजापति, चंचल कुमार



नमस्कार साथी किसानों, मैं शंभूभाई पडियार आपसे अपने कृषि अनुभव के बारे में बात करना चाहता हूं। मैं अपने खेत में मिर्च की फसल लगाने के लिए लंबे समय से एरिस एग्रो लिमिटेड के उत्पादों का उपयोग कर रहा हूं। मैं 15 एकड़ में मिर्च की फसल लगाता हूं जिसमें पिकाडोर और शिमला मिर्च की किस्म शामिल है। जिसमें एरिस कंपनी के अधिकारी श्री चंचल कुमार एवं मयूरभाई प्रजापति के समय पर मार्गदर्शन से मिर्च की फसल की स्थिति एवं संतुलित उर्वरक प्रबंधन से मिर्च का अच्छा एवं गुणवत्तापूर्ण उत्पादन प्राप्त करना है।

मिर्च में एरिस न्यूट्रिशन बैग के उपयोग से मिट्टी की गुणवत्ता और सूक्ष्म पोषक तत्वों की पर्याप्तता में सुधार होता है। संक्षेप में, यह मिट्टी की नींव को मजबूत करता है। समय पर उर्वरक का छिड़काव करने से फूलों की संख्या बढ़ती है और उत्पादन बढ़ता है। मेजरसोल मिर्च एक शोध-आधारित उत्पाद है जो तोड़ने के तुरंत बाद लगाने पर मिर्च बढ़ती और हरी रहती है। मिर्च का उत्पादन पिकाडोर 700 मन/बीघा और शिमला मिर्च का 900 मन/बीघा उत्पादन लिया गया है।

बेहतर फसल, बेहतर कल

ARIES EVERYWHERE



Annadanam (SHUBHAM 2024)





CII KRISHI BHARAT EXPO, LUCKNOW 2024



ARIES SAHI CHUNO 2024



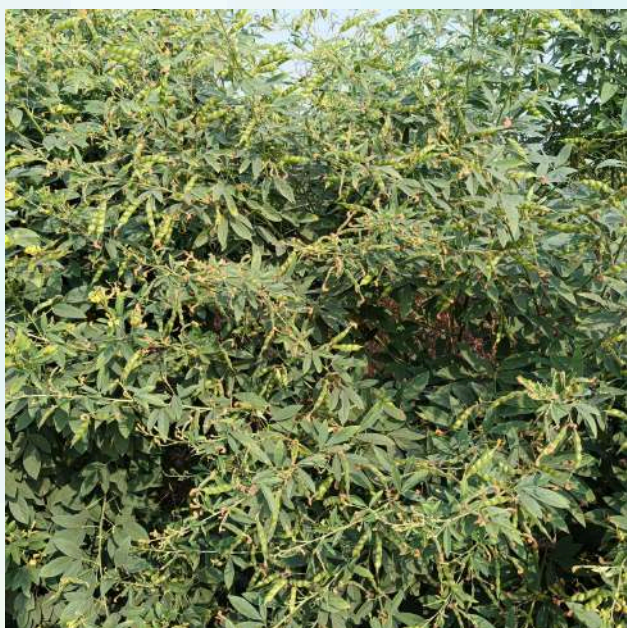
ARIES MEN'S DAY CELEBRATION 2024



PLOT 1- BRINJAL



PLOT 2 BANANA



PLOT 3 - ARHAR (TUR)



PLOT 4 - TOMATO+ CHILLI+CABBAGE



PLOT 5- TURMERIC

ARIES RESEARCH AND DEVELOPMENT FARM, RAIPUR

