



“ Take risks in your life...
If you win: you may lead....
If you loose: you may guide... ”

- Swami Vivekananda

Dear Novaites

At the outset, I would like to thank 'Nova Group Management' for giving me this opportunity. It gives me immense pleasure in writing for the Nova Family September 2024 Monthly News Letter. I have joined Nova Family as 'Head-Research & Development (R & D)' on the 6th February, 2023, and promoted as 'Chief Technical Officer (R & D)' from the 2nd April, 2024, and continuing.... I come from Entomology (Study of Insects) and Insecticide Toxicology Research background and did my Ph.D. in Entomology with Insecticide Toxicology specialization. Therefore, I take this opportunity to shed some light on selected features of synthetic chemical pesticides and their prominent role in making India a food grain surplus country at present and in future. Also, I present some insights on pre- and post-development aspects of pesticides for our News Letter Readers as Nova Group deals with sizable number of pesticides in its portfolio of products.



Significance of Synthetic Chemical Pesticides and Fertilizers in Making India A Food Secure Nation

India produced 5,082 Metric Tonnes (MT) of food grains immediate post-independence (in 1950), which were not sufficient to cater to the food needs of then Indian population (35 Crores), which had forced us to depend on donor shipments of wheat from United States of America (USA). Thanks to the Green Revolution in 1960s, which reversed this situation and paved the way for industrial agriculture, where selective single plant species, mostly High Yielding Varieties (HYV) at the beginning and Hybrids eventually, is grown mainly for higher economic yields. Hybrids/HYVs have been bred to respond to high doses of externally applied synthetic chemical fertilizers and growth promoters for producing robust growth and enhanced yield. However, application of large amounts of chemical fertilizers especially Nitrogen (N), a regular practice in industrial agriculture, results in production of abundant biomass that in turn attracts insect, mite, nematode, rodent pests and fungal, bacterial, viral diseases as well as competition from weed plants. Hence, Hybrids/HYVs in industrial agriculture are highly vulnerable to competition from weeds, attacks from insect and non-insect pests as well as diseases resulting in greater plant damage and yield loss of up to 35%. The need based, safe and judicious usage of abundantly available, inexpensive, quick in action and result oriented herbicides, insecticides, and fungicides (also miticides/acaricides, nematicides, rodenticides), which are collectively called 'pesticides' helped to prevent the aforesaid crop yield loss. Similarly, application of synthetic chemical fertilizers has aided in realization of full genetic potential of Hybrids/HYVs in terms of economic yield.

Use of chemical pesticides and fertilizers for protecting crop plants from pests and diseases during- and aftermath of Green Revolution period has turned India a food grain surplus nation to feed its 144 Crore population (2024) and a net exporter of food grains to several other countries with a total annual production of 33,220 MT in 2023-24. The aforementioned scenario of India becoming a food secure nation underscores the importance of synthetic chemical pesticides and fertilizers in gradually increasing crop production and productivity with sustenance and achieving food security for a country. Food security of a nation in specific and world in general is utmost important, because as per United Nations reports, the global human population increased from 250 Crores in 1950 to 820 Crores in 2024 and is projected to reach 980 Crores by 2050. Proportionately the demand for food grains to meet the food requirements of world's burgeoning population will go from current 250 Crore MT in 2020 to 300 Crore MT in 2050. The chemical pesticides and fertilizers are valuable tools and their role in achieving the above daunting task is strongly tenable. The global pesticide market value, which was at Rs. 4,85,600 Crores in 2020 is slated to grow to Rs. 5,44,000 Crores by 2025, to Rs. 5,88,000 Crores by 2030 and to Rs. 6,12,000 Crores by 2035, corroborates the above statement.

Need Based, Safe and Judicious Use of Synthetic Chemical Pesticides and Demand for Safer Pesticides

Although pesticides are hazardous in nature and harmful to the human beings and other non-target organisms, if they are used discriminately in the way they are intended to be, they help protect the crop plants from pests and diseases. Such discriminate use aids the growers in sustainable increase of crop production and productivity with no or minimal hazard. Therefore, best results from synthetic chemical pesticides can be derived through the prescribed usage as per the recommended guidelines. The older synthetic chemical pesticides that were discovered in 1950s-80s were non-selective, harmful to non-targets and more persistent in the environment. The stringent regulatory restrictions coupled with public demand for pesticides that are more selective to pests, safer to human beings and beneficial organisms as well as environmentally friendly in nature has opened the gateway for development of more selective pesticides. Hence, 1990 onwards, there has been a spurt in registration of new pesticide molecules (and more in development pipeline) that are applied at low dosages (less environmental impact) and more selective to pests (safer to non-targets).

Pesticide Molecule Discovery Research, Development and Marketing

Active new pesticide molecule discovery, development and registration processes involve high investment in terms of money, time, infrastructure, and scientific human resources. It, approximately, takes Rs. 500-1000 Crores of monetary and 5-10 years of time investment to develop an active new pesticide molecule. Active new pesticide molecules are mostly discovered, developed and registered by the Multi-national Companies (MNCs) and will get a patent protection of 20 years during which the respective company recovers the expenses incurred along with huge profits. Until recently, discovery research on active new pesticide molecules is being done by MNCs from USA, Germany, and Sweden, while a few companies from India, China and Japan with commendable research in this area have joined the list. In India, more than 250 companies are registered to manufacture and sell pesticides most of which are generic in nature (i.e. off patented). Since discovery, development and registration of an active new pesticide molecule involves high investment, MNCs and several Indian pesticide companies have resorted to developing and registering combinations of pesticide molecules for circumventing the problems associated with already existing single molecule pesticides.

Pesticide Resistance in Pests and Its Management

Pesticide Resistance is one of the pivotal issues pesticide industry is currently facing because it drastically reduces the life of an active new pesticide molecule. The status of a pest not being controlled by a pesticide at the same dosage is called pesticide resistance. A pest develops resistance to a pesticide, if the same pesticide is repeatedly used on the same pest at same dosage. The possible and practical solutions to ride on this problem are 1. Alternation or rotation of a pesticide with another pesticide of different target site and/or mode of action and possibly with different chemistry from that of first pesticide; 2. Temporal withdrawal of pesticide from application until susceptibility is restored in pest population; 3. Development of combination of pesticides with different target site and/or mode of action and possibly with different chemistry; 4. Increase in the dosage of pesticide, where regulations permit.

Pesticide Stewardship

Pesticide Stewardship is another important aspect of pesticide development. Post-releasing of an active new pesticide molecule into the market, its performance, usage, disposal and environmental fate are monitored to achieve the best results out of its use with minimal impact on non-targets and environment.

“Real Scientists Do Real Science and Live in Real World, Only A Real Scientist Can Understand Another Real Scientist”

Dr. Dhana Raj Boina, Ph.D.
(Chief Technical Officer, R & D)
Nova Agritech Limited

Welcome note to new employees

“Congratulations and welcome on board. We hand-picked you because we know you’ll help us rise to the next level, and we hope you’ll always feel free to take the necessary initiatives in your work.”



Pogula Shiva Kumar

D.O.J. : 26-08-2024
Designation : Trainee Officer
Dept. : Marketing



Dacharla Sreenivasulu

D.O.J. : 30-08-2024
Designation : Product Manager
Dept. : Marketing



Bandarupally Sambasiva Rao

D.O.J. : 05-09-2024
Designation : Senior Manager
Dept. : Finance & Accounts



Chirumamilla Venkatesh

D.O.J. : 11-09-2024
Designation : Area Manager
Dept. : Marketing

Happy



Birthday Wishes

There are two great days in a person's life – the day we are born and the day we discover why. Here is a list of employees, who celebrated their birthday in the month of September.



Rishikesh Kailas Khedkar

Trainee-Production
02nd September



Tukaram Prabhu Kawane

Jr. Officer - Marketing
05th September



Jitendra Kumar

Area Manager- Marketing
05th September



Shashikant Prakash Mahajan

Trainee-Production
15th September



Dipak Pandharinath Patil

Jr. Chemist-Quality & Control
21st September



Sunil Kumar Singh

Regional Manager - Marketing
25th September

Highlights of Annual General Meeting

On 20.09.2024, the Nova Agri Group held its 17th Annual General Meeting (AGM) of shareholders. This was the first AGM since the company's listing on the stock exchanges.

Highlights of the Meeting.

- **Financial statements:** The company's audited financial statements are considered and adopted.
- **Director's and auditor's reports:** The director's and auditor's reports are considered.
- **Annual report:** The company's performance, strategies, and prospects are reported on.



Nova Agri Group has established a pivotal partnership with KL University, setting the stage for a bright future for students.



Free Medical Camps

at Parchur and Swarna (V) of Bapatla District

Nova Agritech Limited hosted a **Free Eye Screening & Cataract Surgery Camp** on September 22, 2024, in **Y.R. High School, Parchur**, Bapatla District, in collaboration with a team from the **Andhra Pradesh State Blindness Control Movement** and **Shankara Netralaya**. Following the eye screenings, patients were referred for cataract surgery at no charge. Additionally, a **Free Medical Camp** for the public took place in **Swarna (V)** on September 29, 2024. This medical camp was organized in Swarna Village, Karamchedu (M), with the assistance of the medical team from **Aster Ramesh Hospital, Guntur**. Many attendees benefited from the free medications provided by the organizing team in partnership with the medical professionals.





Top achievers for this month

Congratulations on such a remarkable accomplishment!



M. Narasimhulu
Sr. Officer-Marketing



Badavath Ravindhar
Trainee Officer-Marketing



Gautam Kumar
Officer-Marketing



Raj Kumar Sharma
Area Manager-Marketing

Activities by Marketing Team



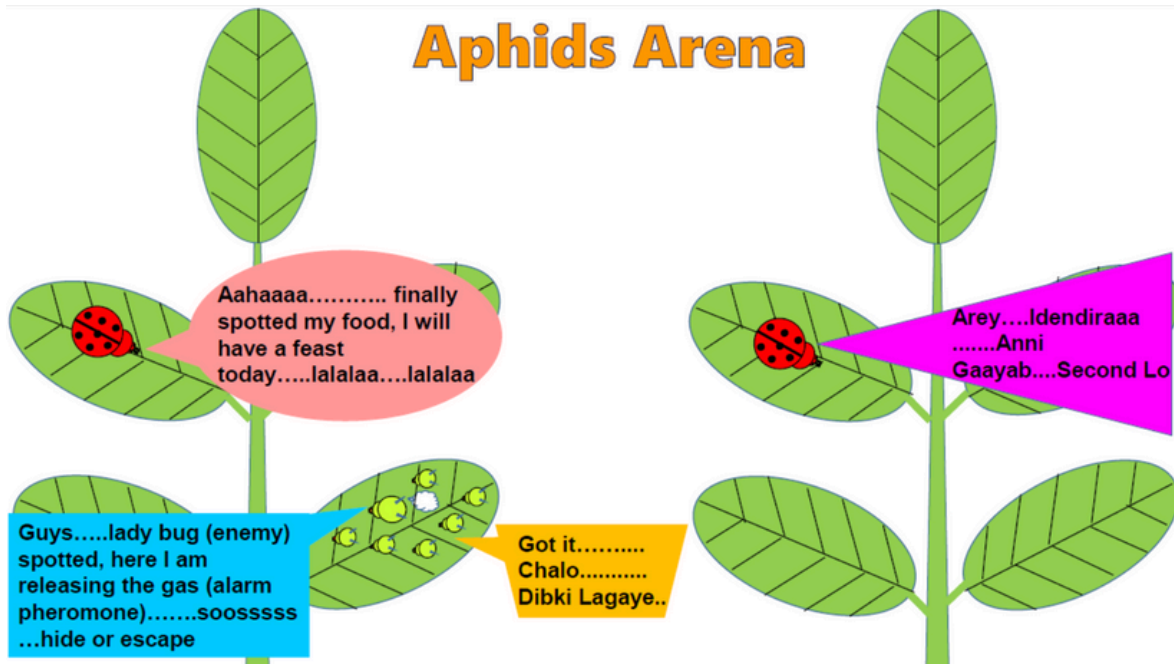


Information on Newly Launched Pesticide Products

In the Kharif season of 2024-25, two new products (**Novazide** & **Nova Fly Mar**) from Nova Agri Sciences Private Limited have been launched for use in several Field and Horticultural crop ecosystems. Of these, Novazide is a combination product of Novaluron and Emamectin Benzoate actives, which is used for controlling several types of caterpillars in Cabbage, Chilli, Redgram and Paddy crop ecosystems. Nova Fly Mar is another insecticide combination product containing Dinotefuran and Pymetrozine as active ingredients and is recommended for controlling insect pests in Paddy crop ecosystem.



Fascinating World of Insects – Aphids/Plant Lice



In this blog of 'Fascinating World of Insects', I will write about 'APHIDS' (Fig. 1), which are crop pests with some peculiar features. Aphids are also known as 'PLANT LICE' because they suck the sap from plants similar to 'HEAD or HUMAN LICE' (which are also insects) that suck blood from human body. Aphids usually have 'PEAR' (fruit) shaped body (Fig. 2) with some exceptions and appear in different body colours. Aphids form colonies on plants from which they suck plant sap. When food and space are scarce on the feeding crop plants, some adult aphids develop wings (known as 'Alates') (Fig. 3), fly to new places and find fresh crops where they start new colonies. Aphids reproduce both by laying eggs (sexual reproduction a.k.a. oviparous) as well as directly giving birth to young ones called 'nymphs' (asexual reproduction/parthenogenesis a.k.a. viviparous) (Fig. 1). Aphids possess piercing and sucking type of mouth parts through which they suck sugars containing plant sap (Fig. 4) similar to us drinking a cool drink using straw. Aphids excrete copious amounts of 'HONEY DEW' (thick and viscous sugar syrup like liquid) (Fig. 3) on plant parts to which ants get attracted. Owing to this feature, Aphids are known as 'PENUBANKA' in agriculture (Telugu language). 'Honey Dew' excretion is the result of a digestive system organ called 'FILTER CHAMBER', which filters out the extra sugars present in sucked plant sap from first part of gut (foregut) and releases them into last part of gut (hindgut) bypassing the middle part of gut (midgut) that is excreted as 'HONEY DEW'. On Honey Dew a black fungus called *Capnodium* grows because of which the plant parts appear sooty or black colour. Aphids possess specialized morphological structures known as 'CORNICLES' on dorsal (upper) side of abdomen (stomach) (Fig. 1). 'Cornicles' release a pheromone (a communication signal chemical) called 'ALARM PHEROMONE' when they spot a predator/enemy such as 'Aphid Lion/Lacewing Bug' (see previous blog to know about this) (Fig. 5) as a warning signal of predator presence. The members of colony receiving this pheromone signal become alert and escape the predator attack or drop down to the ground from leaf. Aphids are one of the important sucking pests of crop plants. Aphids infestation and sap feeding from plant leaves result in cupping, curling, and mottling of leaves affecting the plant photosynthesis and some Aphids also act as 'VECTORS' of plant diseases by transmitting disease causing plant pathogens while feeding.





Trading in International Shares and Alternative Investments from India

1. Trading in International Shares from India

Investing in international shares has become more accessible to Indian investors over the last few years. By diversifying portfolios into foreign markets, investors can tap into global opportunities and reduce the risks associated with being restricted to a single economy. Here are key ways Indian investors can invest in international shares:

A. Routes for Investing:

- 1. Direct Investment via Foreign Brokerages:** Indian investors can open accounts with international brokerage firms such as Interactive Brokers, TD Ameritrade, or Charles Schwab. These platforms offer access to a wide range of international shares, providing exposure to markets like the U.S., Europe, and Asia.
- 2. Indian Brokerages with Global Tie-Ups:** Indian brokerage firms like ICICI Direct, HDFC Securities, and Kotak Securities offer platforms for international investments through their partnerships with foreign brokers. These services allow Indians to invest in global stocks seamlessly using their domestic accounts.
- 3. Mutual Funds and Exchange Traded Funds (ETFs):** Investing in international mutual funds and ETFs is a relatively simple way to gain exposure to global markets. These funds invest in a variety of global equities, offering diversification without the need for direct ownership of foreign shares.

B. Regulatory Framework: Under the Reserve Bank of India's (RBI) Liberalised Remittance Scheme (LRS), Indian citizens can remit up to \$250,000 per financial year to invest abroad. It is essential to understand the tax implications—capital gains from international investments are taxed based on the investor's income tax slab and residency status.

2. Investments in Gold, Diamonds, Art, and Craft

A. Gold and Diamonds: Gold and diamonds have historically been seen as safe-haven assets that appreciate in value over time, especially during economic instability. In India, gold can be purchased through local jewelers, banks, or the government's sovereign gold bonds (SGB). Internationally, firms like De Beers and Tiffany & Co. are leading names in diamond trading.

Where to Buy:

- **Gold:** World Gold Council, U.S. Mint, and Royal Canadian Mint are reliable sources for purchasing gold internationally.
- **Diamonds:** De Beers and Tiffany & Co. are globally renowned for trading in high-quality diamonds.

Advantages of Investing in Gold and Diamonds:

- **Hedge Against Inflation:** Both commodities often retain or increase in value as the purchasing power of currency declines.
- **Liquidity:** Gold and diamonds can be sold relatively quickly, making them highly liquid assets.
- **Global Acceptance:** These commodities are recognized and traded globally, making them easily convertible across markets.

B. Art and Craft as Investment:

Art and Auctions: Art and antiques have become increasingly popular as alternative investment assets. Globally, auction houses like **Sotheby's**, **Christie's**, and **Harrods** hold prestigious auctions where buyers and sellers trade high-value art and collectibles. These platforms offer global exposure to works by renowned artists, such as Van Gogh, Pablo Picasso, and Claude Monet.

Participating in an Art Auction:

- **Register with Auction Houses:** To participate, you must first register with auction houses like Sotheby's or Christie's, either in person or online.
- **Preview the Artwork:** Auction houses often allow potential buyers to view artworks before the auction to assess their condition.
- **Bidding:** Once registered, you can place bids either in person, online, or over the phone. It is essential to set a budget and stick to it.

Understanding Art: Famous art is valued based on the artist's reputation, rarity of the work, and historical importance. For example, a painting by Van Gogh holds immense value due to his pivotal role in the history of art, and his works have proven to appreciate significantly over time. Understanding internationally famous artists involves studying their contribution to art history, techniques, and uniqueness.

Renowned Indian Artists in the International Market:

- **M.F. Husain:** His works have sold for millions at international auctions.
- **S.H. Raza:** Known for his abstract art, his paintings have gained global recognition.
- **Tyeb Mehta:** His expressive works are highly sought after in global art markets.

C. Advantages of Investing in Art:

- **Appreciation in Value:** Rare and high-quality artwork tends to increase in value over time, especially when the artist becomes more recognized or their works become scarce.
- **Cultural Prestige:** Owning renowned artwork can boost the collector's social and cultural standing.
- **Diversification:** Art offers a unique investment class that behaves differently from traditional assets like stocks or bonds.
- **Safe-Keeping and Maintenance:** Artwork needs to be stored in climate-controlled environments and insured to maintain its value. Regular maintenance is crucial to preserve its physical integrity and market value.

3. How to Begin Small and Grow Internationally

Starting with alternative investments can be intimidating, but a gradual, step-by-step approach can help you grow your portfolio.

A. Starting Small:

- Begin by investing in affordable but promising assets, such as gold coins, small diamond pieces, or emerging artists' works.
- Use accessible platforms like mutual funds or fractional shares to dip your toes into international stock markets.
- Explore online art marketplaces that offer affordable artworks from up-and-coming artists before transitioning to high-value auctions.

B. Gradual Expansion:

- Reinvest your returns from initial investments into more valuable assets over time.
- Diversify your portfolio by adding international stocks, rare commodities, and renowned artworks as you gain confidence and knowledge.

C. Network and Education:

- Attend art auctions, investment seminars, and global financial forums to stay informed on trends and opportunities.
- Network with art dealers, financial advisors, and experienced investors to gain insights into growing your investments internationally.

D. Long-Term Strategy:

- Have a clear long-term plan for when to liquidate your holdings or continue building your collection.
- Ensure proper documentation, safe-keeping, and insurance for all high-value assets to protect their worth.

Conclusion: Investing in international shares, precious commodities like gold and diamonds, and valuable art can be highly rewarding both financially and culturally. Begin small by understanding the nuances of each investment class, leverage reliable platforms for purchasing, and steadily expand your portfolio. Over time, with informed decisions, one can build significant wealth while contributing to the preservation of culture and history.



Fun Ideas to Relieve Stress at Work

There are plenty of healthy ways to cope with stress. Depending on the type and amount of stress, there are some approaches that are more effective than others. For everyday stress at work, there are a few fun and work-friendly ways to relax by yourself or with co-workers that can help make work more engaging and productive.

Below is a mix of both individual and group activities that your team can do to blow off steam at work:

1. Read a book: When you need a moment to reset your mental focus, take a short break to read a book or magazine or browse some digital content. Stepping away from your desk to consume interesting material that's not related to work can not only recharge your batteries but may even inspire new creativity.

2. Listen to a podcast: If you're more of an auditory consumer, switch on your favourite podcast or YouTube channel instead. To help lighten your mood, choose entertaining material such as comedy shows or how-to channels that cover topics on your favourite hobbies. A few minutes of light-hearted content can help you return to work with a renewed attitude.

3. Try self-massage techniques: Did you know that massage releases mood-enhancing chemicals? Get your endorphins flowing with a self-massage routine you can practice at your desk. Give yourself a foot, neck, or head massage, or use a self-massaging device like a massage pillow to help you sink into a moment of quiet relaxation.

4. Encourage creative side projects: Help your team step away from the stress of daily work by having a creative side project to work on. Whether revamping the office layout or holding skill-sharing meetings, having a focus outside of normal job duties can help employees feel more engaged while also adding value to the business.

5. Take a fitness break: Physical exercise is a top stress-buster recommended by mental health professionals. Encourage your team to cope with stress in a productive way by holding a group fitness break. Have a team member lead a short aerobic exercise break to get the blood pumping.

6. Work on a group art project or puzzle: When it's time for a stress-relieving break at work, give your team a therapeutic or calming project to work on. Paint by numbers, murals, and puzzles are all great office hobbies to make available for employees to work on together during their breaks. Activities like these also drive a sense of company culture and boost social well-being.

7. Bring pets to work: Spending time with pets has been shown to reduce both blood pressure and cortisol, which is a primary stress-response hormone. Inviting pets to work may help lighten the office mood and relieve employee stress.

8. Celebrate milestones: What's the point of working hard if you don't pause to celebrate your success? Whether you've launched a new product, onboarded a big client, or reached a business anniversary, be sure to celebrate the important milestones with your team. Celebrating success reinforces that hard work pays off and can help build team resilience to stress.

9. Host a wellness lunch-and-learn: Normally, companies host lunch-and-learns to educate teams on new industry products or best practices, but you can also hold lunch-and-learns to foster employee well-being. Invite a wellness expert or a series of experts to teach employees healthy ways to cope with stress at work. Cover what they can do in their personal and professional lives to mitigate workplace stress effects.

10. Create the ultimate break room: De-stressing at work is much easier when there's a relaxing, functional, and enjoyable break room to use. Many employers invest in creating the ultimate break room as an attractive company perk. Some classic breakroom activities include board games, foosball or ping pong, espresso machines, fitness equipment, and plenty of other amenities that make it fun to come to work.



The Living Encyclopedia of the Forest
Padma Shri Tulsi Gowda

Tulsi Gowda is a prominent Indian environmentalist hailing from Honnali village. She has made remarkable contributions to environmental conservation, having planted over 30,000 saplings and managed nurseries for the Forest Department. Her dedication has earned her recognition from the Government of India and various organizations. In 2021, she was honored with the Padma Shri, the nation's fourth-highest civilian award. Often referred to as the "Encyclopaedia of the Forest," she possesses an exceptional ability to identify the mother tree of any species.

Gowda's commitment to environmental preservation extends beyond mere tree planting; she actively raises awareness about the significance of forests and biodiversity. Her contributions have garnered national and international acclaim, underscoring the vital role of grassroots activism in environmental conservation.

Born in 1944 into a Halakki tribal family in Honnali village, which is situated in the Uttara Kannada district of Karnataka, Tulsi grew up in a challenging environment. After the death of her father when she was just two years old, she began working as a day laborer at a local nursery alongside her mother. Despite her lack of formal education, she developed extensive knowledge in botany while caring for seedlings at the Karnataka Forestry Department.

For 35 years, Gowda worked at the nursery as a daily wage worker before being offered a permanent position due to her contributions to conservation efforts. She continued in this role for 15 years before retiring at the age of seventy. Throughout her career, she played a vital role in the afforestation initiatives of the department, utilizing her traditional knowledge of the land to combat poaching and prevent forest fires.

Gowda dedicated over sixty years to the Karnataka Forest Department, which encompasses one community reserve, five tiger reserves, fifteen conservation reserves, and thirty wildlife sanctuaries. The department aims to reconnect communities with nature, striving for a future where one-third of the state is covered by forests or trees.

Her accolades include the Indira Priyadarshini Vrikshamitra Award in 1986, which recognizes significant contributions to afforestation and wasteland development, and the Karnataka Rajyotsava Award in 1999, the second-highest civilian honor in the state awarded to distinguished citizens over sixty. In November 2020, she received the Padma Shri, which is awarded annually on India's Republic Day. Despite this recognition, Gowda emphasizes that her true value lies in her connection to the forests and trees.

Known for her exceptional knowledge of the forest, she is revered as the "tree goddess" among her tribe for her ability to identify mother trees, which serve as crucial nodes within the ecosystem, facilitating nutrient exchange with saplings. Additionally, she is an expert in seed collection, a meticulous process that requires precise timing to ensure the successful regeneration of plant species.

Gowda's wisdom is deeply rooted in the traditions of her matriarchal tribe, the Halakki Vokkaliga, where a strong connection to nature is paramount. It is estimated that she has personally planted around 100,000 trees in Karnataka, leaving a lasting impact on her community. Nagaraja Gowda of Uttara Kannada District, who advocates for the Halakki tribe's welfare, describes her as a source of pride, emphasizing her invaluable knowledge of the forest and medicinal plants, despite her limited ability to communicate her contributions.

Even in retirement, Gowda continues to educate the children of her village about the importance of forests and seed care. She has also been an advocate for women's rights, demonstrating her commitment to her community by standing up for those in need. When a Halakki woman faced threats, Gowda vowed to protest vigorously until justice was served. Her life and work exemplify a profound dedication to environmental stewardship and community empowerment.



- **Longan** is the fruit produced by the Lamyai tree and is mainly grown in the North of Thailand, in the regions of Chiang Mai, Chiang Rai and Chiang Dao. Longan requires a somewhat cooler climate than most other fruits found in Thailand, and these mountainous areas are always much cooler than the South.
- The longan, which means “dragon eye” in Cantonese, got its name from the fact that it resembles an eyeball when it's shelled.
- Longan produces dense clusters of small, brownish yellow to yellowish-green flowers. Each cluster contains three types of flowers: functionally male, functionally female and hermaphroditic.
- In ancient Vietnamese medicine, longan seed was used to stop the bleeding and absorb the venom after a snake bite. This is ineffective, but still commonly used today.
- The longan is believed to have originated from the mountain range between Myanmar and southern China. Other reported origins include India, Sri Lanka, upper Myanmar, north Thailand, Cambodia, north Vietnam and New Guinea.

Health Benefits

- The nutritional value of Longan is fairly high, with just a handful of fruit proving the daily recommended dosage of both phosphorous and calcium.
- Longan are high in antioxidants. Antioxidants help battle free radicals in your body that damage cells and lead to disease. Research shows getting your antioxidants from fresh fruits and vegetables and not supplements, has the most health benefits.
- The fruit is a rich source of vitamins A and C and minerals such as iron, phosphorus, potassium and magnesium.
- Longans are used in the treatment of insomnia, fatigue, depression and irritability. It also accelerates healing of a wound, improves blood circulation and absorption of iron and keeps the cardiovascular system, skin, gums and teeth healthy.



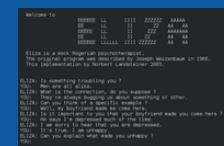
4 Fun Facts About Artificial Intelligence

The term "artificial intelligence" was publicly debuted in 1956 at the Dartmouth Conference; it is widely believe that this was the start of the field of AI with John McCarthy presiding over a group of top researchers.



AI has been around for decades. While AI is often thought of as a new technology, the concept has been around since the 1950s. Early AI systems were used to perform tasks such as playing chess and solving mathematical problems.

The first AI-powered chatbot, ELIZA, first appeared in 1966. ELIZA made its debut 48 years before Amazon's Alexa. ELIZA, named after the fictional Eliza Doolittle, would essentially rephrase the user's input in the form of a question.



The term "machine learning" was coined shortly after AI. In July of 1959, Arthur L. Samuel's report, "Some Studies in Machine Learning Using the Game of Checkers," appeared in the IBM Journal.

Thank You