





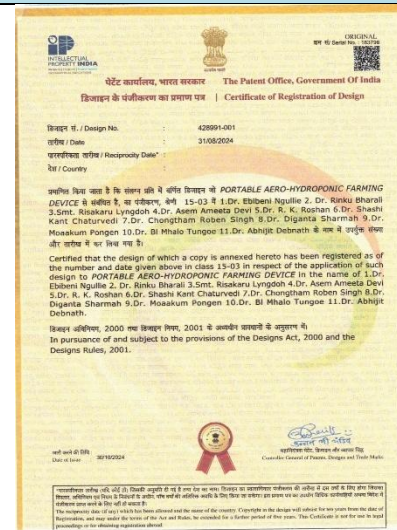
Patent Registered under ICAR-ATARI, Zone-VII, Umiam



S. No.	Patent	Description	Certificate
1.	<p>Certificate Type: Registration of Design</p> <p>Design No.: 418077-001</p> <p>Date: 27/05/2024</p> <p>Class: 15-03</p> <p>Title of Design: <i>Portable Device for Soil Management and Rotation</i></p> <p>Applicants/Inventors: Dr. Abhijit Debnath Dr. Tanmoy Bhowmik Dr. Binod Kumar Dr. Kunal Dr. Nishant Dr. Vishwa Priya V</p>	Handheld device optimizes soil health by monitoring compaction, moisture levels, and nutrient needs. Guides precise fertilization, tillage, and tailored crop rotation plans for sustainable yields.	


S. No.	Patent	Description	Certificate
2	<p>Certificate Type: Registration of Design</p> <p>Design No.: 418848-001</p> <p>Date: 03/06/2024</p> <p>Title of Design: <i>Mango Nutrient Managing Device</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants:</p> <p>Dr. Neha Negi Dr. Abhijit Debnath Dr. Chidembra Bhardwaj Dr. Bapi Das Dr. Nirupa Kumari Sri Avinash Sharma Dr. Amit Vashishth Dr. Megha Raghavan Dr. Ratan Das Dr. Ajaykumara K.M.</p>	<p>Portable device scans fruit for vitamins A & C, fiber, antioxidants, and key nutrients. Optimizes post-harvest care, ripening, and nutrition to ensure peak flavor, health benefits, and shelf life.</p>	 <p>The image shows a certificate from the Patent Office, Government of India, for the registration of a design. The certificate is titled 'Certificate of Registration of Design' and includes the following details:</p> <ul style="list-style-type: none"> Design No.: 418848-001 Date: 03/06/2024 Class: 15-03 Title of Design: Mango Nutrient Managing Device Inventors/Applicants: Dr. Neha Negi, Dr. Abhijit Debnath, Dr. Chidembra Bhardwaj, Dr. Bapi Das, Dr. Nirupa Kumari, Sri Avinash Sharma, Dr. Amit Vashishth, Dr. Megha Raghavan, Dr. Ratan Das, Dr. Ajaykumara K.M. <p>The certificate also includes a statement of the design and a declaration of the inventor/applicant.</p>

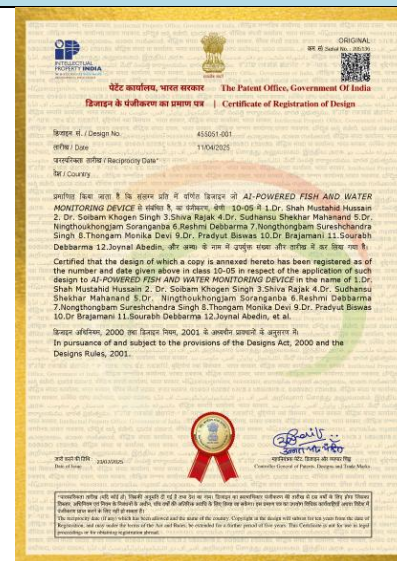
S. No.	Patent	Description	Certificate
3	<p>Certificate Type: Registration of Design</p> <p>Design No.: 420036-001</p> <p>Date: 14/06/2024</p> <p>Title of Design: <i>Pesticide-Detecting Food Safety Device</i></p> <p>Class: 10-05</p> <p>Inventors/Applicants: Dr. V.R. Senthamizhkumaran Dr. Yani Baja Dr. Sagarika Bhowmik Dr. Pranamika Sharma Dr. Monoj Sutradhar Dr. Sunil Kumar Yadav Dr. Rubin Debbarma Sri Avinash Sharma Dr. Abhijit Debnath</p>	<p>A portable device quickly checks for dangerous pesticide residues in fruits and vegetables. Ensures safe consumption, encourages organic options, and safeguards health with quick, precise findings.</p>	


S. No.	Patent	Description	Certificate
4	<p>Certificate Type: Registration of Design</p> <p>Design No.: 420750-001</p> <p>Date: 21/06/2024</p> <p>Title of Design: <i>Handheld Crop Optimization Device</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants:</p> <p>Dr. Sunil Kumar Yadav Dr. Naveen Katoch Dr. Aditi Sharma Dr. M. Ranjana Devi Dr. Bapi Das Dr. Michelle C. Lallawmkimi Dr. Julius Uchoi Dr. Sajal Debbarma Dr. Sankhyashree Roy Dr. Abhijit Debnath Dr. Rani Jha</p>	<p>Portable scanner analyzes soil, plant health, pests, and nutrients in real-time. Delivers precise irrigation, fertilization, and pest control recommendations to maximize yields and sustainability.</p>	


S. No.	Patent	Description	Certificate
5	<p>Certificate Type: Registration of Design</p> <p>Design No.: 428991-001</p> <p>Date: 31/08/2024</p> <p>Title of Design: <i>Portable Aero-Hydroponic Farming Device</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants:</p> <p>Dr. Ebibeni Ngullie Dr. Rinku Bharali Smt. Risakaru Lyngdoh Dr. Asem Ameeta Devi Dr. R.K. Roshan Dr. Shashi Kant Chaturvedi Dr. Chongtham Roben Singh Dr. Diganta Sharmah Dr. Moaakum Pongen Dr. BI Mhalo Tungoe Dr. Abhijit Debnath</p>	<p>Compact device integrates misting and nutrient film for soilless crops. Automates pH, EC, aeration; optimizes water, fertilizers. Enables year-round, space-efficient yields anywhere.</p>	 <p>The image shows a yellow certificate from the Patent Office, Government of India. It is for the design of a 'PORTABLE AERO-HYDROPONIC FARMING DEVICE' in Class 15-03. The design is registered in the name of 10 inventors/applicants. The certificate includes the Indian national emblem, the IP India logo, and a QR code. It also features a red ribbon seal and a signature at the bottom.</p>


S. No.	Patent	Description	Certificate
6	<p>Certificate Type: Registration of Design</p> <p>Design No.: 431518-001</p> <p>Date: 24/09/2024</p> <p>Title of Design: <i>Manually Operated Gun Type Kiwi Pollinator</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants: Priyam Goswami Thaneswer Patel Himangshu Bora Bishorjit Ningthoujam Subhabrata Basu</p>	Handheld, trigger-operated device dispenses precise pollen bursts onto kiwi flowers. Ensures efficient cross-pollination, boosts fruit set, yield, and quality without electricity.	
7	<p>Certificate Type: Registration of Design</p> <p>Design No.: 421657-001</p> <p>Date: 28/06/2024</p> <p>Title of Design: <i>Smart Home Vegetable Cultivation Device</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants: Dr. Joy Kumar Dey Dr. Pijush Kanti Biswas Dr. Kerimenla Dr. Amit Raj Dr. Dharmendra Debbarma Dr. Rajib Das Dr. Bai Koyu</p>	Countertop device guides vegetables from seedlings to harvest with automated LED lighting, hydroponics, precise nutrient dosing, and climate control for effortless, year-round fresh yields.	

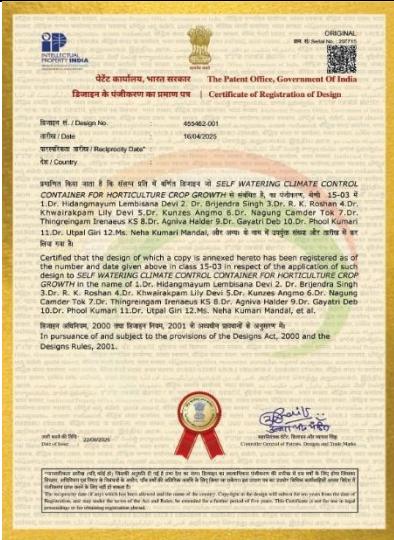
S. No.	Patent	Description	Certificate
	Dr. Kunal Debbarma Dr. Suvalaxmi Palei Dr. Abhijit Debnath		
8	Certificate Type: Registration of Design Design No.: 466823-001 Date: 22/07/2025 Title of Design: <i>Tube-Based Dual-Feeder for Fish</i> Class: 30-03 Inventors/Applicants: Laishram Kanta Singh Huidrom Dayananda Singh N. Peetambari Devi Hijam Jiten Singh A.K. Mohanty Sougrakpam Roma Devi Nivetina Laitonjam	This system delivers floating and sinking feeds via separate tubes. Ensures precise nutrition, reduces waste, promotes uniform growth in aquaculture tanks.	


S. No.	Patent	Description	Certificate
9	<p>Certificate Type: Registration of Design</p> <p>Design No.: 455051-001</p> <p>Date: 11/04/2025</p> <p>Title of Design: <i>AI-Powered Fish and Water Monitoring Device</i></p> <p>Class: 10-05</p> <p>Inventors/Applicants: Dr. Shah Mustahid Hussain Dr. Soibam Khogen Singh Shiva Rajak Dr. Sudhansu Shekhar Mahanand Dr. Ningthoukhongjam Soranganba Reshmi Debbarma Nongthongbam Sureshchandra Singh Thongam Monika Devi Dr. Pradyut Biswas Dr Brajamani Sourabh Debbarma Joynal Abedin, et al.</p>	<p>Solar-powered device uses detachable probes and biosensors for continuous water quality monitoring, AI camera for fish behavior analysis. Data processed locally/cloud, detects anomalies, predicts risks, sends alerts, auto-triggers systems. Stores historical data for informed aquaculture decisions.</p>	 <p>The image shows a formal certificate from the Patent Office, Government of India. It is titled 'Certificate of Registration of Design' and contains the following details: Design No. 455051-001, Date 11/04/2025, and Class 10-05. The title of the design is 'AI-POWERED FISH AND WATER MONITORING DEVICE'. The certificate lists the inventors and applicants: Dr. Shah Mustahid Hussain, Dr. Soibam Khogen Singh, Shiva Rajak, Dr. Sudhansu Shekhar Mahanand, Dr. Ningthoukhongjam Soranganba, Reshmi Debbarma, Nongthongbam Sureshchandra Singh, Thongam Monika Devi, Dr. Pradyut Biswas, Dr Brajamani, Sourabh Debbarma, and Joynal Abedin. It also includes a statement of registration and a signature of the Controller of Patents, Designs and Trade Marks.</p>



S. No.	Patent	Description	Certificate
10	<p>Certificate Type: Registration of Design</p> <p>Design No.: 460783-001</p> <p>Date: 30/05/2025</p> <p>Title of Design: <i>Insect Trapping Smart Tower Insect Trapping Smart Tower</i></p> <p>Class: 22-06</p> <p>Inventors/Applicants:</p> <p>Dr. Anoorag Rajnikant Tayde Dr. Simly Das Dr. Pasam Maheswara Reddy Dr. Vivek Kumar Dr. Arvind Kumar Ishar Dr. Prem Shanker Dr. Nongmaithem Johnson Singh Khaidem Maipak Singh Dr. Susmita Dey Pratiksha Dnyanoba Biradar.</p>	<p>Solar-powered modular insect trap tower automates attraction, capture, classification, and data transmission. Weather-resistant and low-maintenance, it delivers real-time urban vector insights, enabling proactive disease control, public engagement, and smart city integration for enhanced public health and ecological resilience.</p>	 <p>The image shows a formal certificate from the Patent Office, Government of India. It is titled 'Certificate of Registration of Design' and contains the following details: Design No. 460783-001, Date 30/05/2025, and Title 'Insect Trapping Smart Tower'. The certificate lists the inventors and applicants: Dr. Anoorag Rajnikant Tayde, Dr. Simly Das, Dr. Pasam Maheswara Reddy, Dr. Vivek Kumar, Dr. Arvind Kumar Ishar, Dr. Prem Shanker, Dr. Nongmaithem Johnson Singh, Khaidem Maipak Singh, Dr. Susmita Dey, and Pratiksha Dnyanoba Biradar. It also includes a red circular seal and a QR code.</p>


S. No.	Patent	Description	Certificate
11	<p>Certificate Type: Registration of Design</p> <p>Design No.: 455462-001</p> <p>Date: 22/08/2025</p> <p>Title of Design: <i>Self watering climate control container for Horticulture crop growth</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants: Dr. H. Lembisana Devi Dr. Brijendra Singh Dr. R.K.Roshan Dr. Kh. Lily Devi Dr. Kunzes Angmo Dr. N.C. Tok Dr. Th. Irenaeus KS Dr. Ahniva Halder Dr. Gayatri Deb Dr. Phool Kumari Dr. Utpal Giri Ms. Neha Kumari Mandal</p>	Self-watering climate control container for horticulture crop growth	

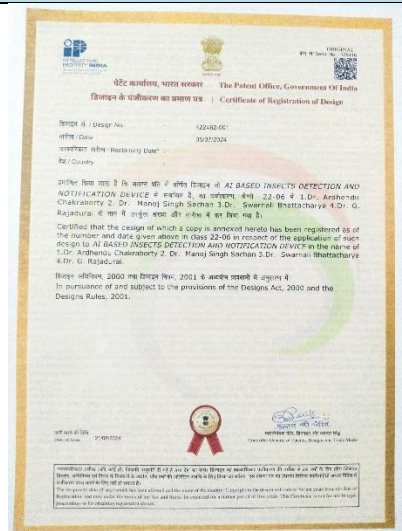

S. No.	Patent	Description	Certificate
12	<p>Certificate Type: Registration of Design</p> <p>Design No.: 440826-001</p> <p>Date: 16/12/2024</p> <p>Title of Design: <i>Farming Risk Analyzing Device For Crop Insurance</i></p> <p>Class: 14-02</p> <p>Inventors/Applicants:</p> <p>Dr. Lahar Jyoti Bordoloi Dr. Y Prabhavati Devi Dr. Utpal Kumar Bhattacharyya Dr. B. Shrishailam Dr. Hidangmayum Lembisana Devi Dr. Sarangthem Zeshmarani Dr. Soibam Khogen Singh Phuritshabam Chandramani Singh Nzanthung T. Yanthan K. Samuel Sangtam Ronchamo Kikon Imtisenla Walling</p>	<p>Handheld Farming Risk Analyzer integrates soil sensors, weather data, and AI to assess pests, irrigation, and risks. Provides multilingual guidance, suggests tailored crop insurance, enables direct applications offline. Solar-powered, rugged; empowers proactive farming and income security.</p>	


S. No.	Patent	Description	Certificate
13	<p>Certificate Type: Registration of Design</p> <p>Design No.: 455462-001</p> <p>Date: 16/04/2025</p> <p>Title of Design: <i>Self watering climate control container for Horticulture crop growth</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants:</p> <p>Dr. Hidangmayum Lembisana Devi</p> <p>Dr. Brijendra Singh</p> <p>Dr. R. K. Roshan</p> <p>Dr. Khwairakpam Lily Devi</p> <p>Dr. Kunzes Angmo</p> <p>Dr. Nagung Camder Tok</p> <p>Dr. Thingreingam Irenaeus KS</p> <p>Dr. Agniva Halder</p> <p>Dr. Gayatri Deb</p> <p>Dr. Phool Kumari</p> <p>Dr. Utpal Giri</p> <p>Ms. Neha Kumari Mandal</p>	<p>Self-watering container with capillary irrigation, soil sensors, LED lights, motorized vents, fans, and heating mat creates optimal microclimate. App-controlled, touchscreen displays data; supports multi-crop growth. Portable, energy-efficient for homes, offices, classrooms.</p>	


S. No.	Patent	Description	Certificate
14	<p>Certificate Type: Registration of Design</p> <p>Design No.: 433255-001</p> <p>Date: 08/10/2024</p> <p>Title of Design: <i>Plant Disease and Nutrient Scanner Device</i></p> <p>Class: 10-04</p> <p>Inventors/Applicants:</p> <p>Dr. Lahar Jyoti Bordoloi Dr. Laishram Kanta Singh Dr. Athokpam Haribhushan Dr. H. Vanlalhmuliana Dr. Mandira Chakraborti Longjam Boris Singh Dr. Khwairakpam Premlata Devi Dr. Harendra Verma Dr. Tarun Kumar Das Dr. Tanya R. Marak Puja Basumatary Dr. Abhijit Debnath</p>	<p>The Plant Disease and Nutrient Scanner Device is a handheld tool equipped with advanced biosensors to detect microbial DNA and chemical markers directly from plant surfaces and soil. The device analyzes microbial ecosystems to identify potential diseases and nutrient deficiencies early. An AI platform updates its predictive models, ensuring continual improvement in accuracy. Insights are displayed on a touchscreen interface, providing actionable recommendations for farmers.</p>	 <p>The image shows a certificate from the Patent Office, Government of India, titled 'Certificate of Registration of Design'. It certifies the design of a 'PLANT DISEASE AND NUTRIENT SCANNER DEVICE' in Class 10-04. The certificate lists the inventors and applicants: Dr. Lahar Jyoti Bordoloi, Dr. Laishram Kanta Singh, Dr. Athokpam Haribhushan, Dr. H. Vanlalhmuliana, Dr. Mandira Chakraborti, Longjam Boris Singh, Dr. Khwairakpam Premlata Devi, Dr. Harendra Verma, Dr. Tarun Kumar Das, Dr. Tanya R. Marak, Puja Basumatary, and Dr. Abhijit Debnath. The certificate is dated 08/10/2024 and includes a QR code and a red ribbon seal.</p>


S. No.	Patent	Description	Certificate
15	<p>Certificate Type: Registration of Design</p> <p>Design No.: 457805-001</p> <p>Date: 05/06/2025</p> <p>Title of Design: <i>Mushroom Disease Detection Tray</i></p> <p>Class: 10-05</p> <p>Inventors/Applicants: Dr. Jai Prakash Rai Dr. Prem Shanker Dr. Telem Ratan Singh Aditya Shivendra Kumar Singh Pavithra K.</p>	<p>Portable mushroom scanner with high-res camera, LED lights, and AI detects Dry Bubble, mold. Tray captures images, shows green-yellow-red status on touchscreen. Offline, battery-powered, USB-charged; logs data for farm integration.</p>	 <p>The certificate is issued by the Patent Office, Government of India, for the design of a 'Mushroom Disease Detection Tray'. It includes the design number 457805-001 and the date of registration 05/06/2022. The certificate is signed by the Controller General of Designs, Government of India.</p>
16	<p>Certificate Type: Registration of Design</p> <p>Design No.: 434445-001</p> <p>Date: 10/12/2024</p> <p>Title of Design: <i>Organic Aphid Repellent Sprayer</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants: Dr. Megha Raghavan Dr. Biman De Dr. Jotish Nongthombam Debashis Datta Dr. R. K. Roshan Dr. Mandira Chakraborti Dr. Nongmaithem Jyotsna</p>	<p>The sprayer delivers a fine mist of neem oil solution through its adjustable nozzle, ensuring even coverage of crops. The sealed cartridge system allows users to load pre-measured neem oil solutions safely. As the user pumps the sprayer, the pressurized chamber propels the solution through the nozzle, where the spray density can be adjusted to suit specific crops. The durable construction ensures long-term use while adhering to organic farming principles.</p>	 <p>The certificate is issued by the Patent Office, Government of India, for the design of an 'Organic Aphid Repellent Sprayer'. It includes the design number 434445-001 and the date of registration 10/12/2024. The certificate is signed by the Controller General of Designs, Government of India.</p>



S. No.	Patent	Description	Certificate
	Dr. Y Prabhavati Devi Dr. Lydia Zimik Dr. KhumloLevish Chongloi Dr. Laishram Kanta Singh Dr. Sougrakpam Roma Devi		
17	Certificate Type: Registration of Design Design No.: 450502-001 Date: 06/03/2025 Title of Design: <i>AI-Powered Crop Monitoring and Prediction Device</i> Class: 15-03 Inventors/Applicants: Dr. Athokpam Haribhushan Dr. Lahar Jyoti Bordoloi Basu Langpoklakpam Dr. Pangeijam Bijaya Devi Rita Nongthombam Dr. N. Kiruthika Dr. Lily Ngullie Dr. R. K. Roshan Dr. Agniva Halder Dr. Ratan Das Dr. Amit Raj.	The AI-Powered Crop Monitoring and Prediction Device addresses the core challenges in modern agriculture with an integrated, intelligent approach. By fusing sensor technology, machine learning, and sustainable energy use, it equips farmers with actionable insights for better decision-making. Its real-time monitoring and predictive capabilities help increase crop productivity, optimize resource usage, and reduce environmental impact. With its robust, weatherproof design and scalability, this invention paves the way for widespread adoption of precision agriculture across diverse farming contexts.	


S. No.	Patent	Description	Certificate
18	<p>Certificate Type: Registration of Design</p> <p>Design No.: 422462-001</p> <p>Date: 05/07/2024</p> <p>Title of Design: <i>AI Based Insect Detection and Notification Device</i></p> <p>Class: 22-06</p> <p>Inventors/Applicants: Dr. A. Chakraborty Dr. M.S. Sachan Dr. S. Bhattacharya Dr. G. Rajadurai</p>	The Innovative device, introduces a significant advancement in Pest management for agriculture, by utilizing cutting-edge artificial intelligence, the device aims to revolutionize how farmers detect and manage insect infestations, offering real-time monitoring and targeted pest control to ensure healthier crops and more sustainable farming practices.	 <p>The certificate is issued by the Patent Office, Government of India, for the design of an AI-based insect detection and notification device. It is registered under Design No. 422462-001 on 05/07/2024. The certificate is valid for 10 years from the date of registration. The design is described as an AI-based insect detection and notification device. The certificate is issued to the inventors/applicants: Dr. A. Chakraborty, Dr. M.S. Sachan, Dr. S. Bhattacharya, and Dr. G. Rajadurai.</p>
19	<p>Certificate Type: Registration of Design</p> <p>Design No.: 441919-001</p> <p>Date: 25/12/2024</p> <p>Title of Design: <i>Advanced AI-Powered Plant Breeding Device</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants: Dr. Athokpam Haribhushan Rike Chelchak A. Sangma Dr. Ashima Suklabaidya Dr. S. Rajesh Kumar Singh Dr. Ayam Gangarani Devi Dr. Arati Ningombam Dr. Ayam Pushparani Devi Dr. Nongmaithem Leindah Devi</p>	Compact AI-powered plant breeding device integrates genetic sequencing, epigenetic profiling, environmental simulation, and analytics. Portable, weather-resistant for lab, greenhouse, field use. Accelerates resilient, high-yield crop development with real-time data, reducing time and resources. Enables rapid cycles for climate-adapted agriculture and food security.	 <p>The certificate is issued by the Patent Office, Government of India, for the design of an advanced AI-powered plant breeding device. It is registered under Design No. 441919-001 on 25/12/2024. The certificate is valid for 10 years from the date of registration. The design is described as an advanced AI-powered plant breeding device. The certificate is issued to the inventors/applicants: Dr. Athokpam Haribhushan, Rike Chelchak A. Sangma, Dr. Ashima Suklabaidya, Dr. S. Rajesh Kumar Singh, Dr. Ayam Gangarani Devi, Dr. Arati Ningombam, Dr. Ayam Pushparani Devi, and Dr. Nongmaithem Leindah Devi.</p>



S. No.	Patent	Description	Certificate
	Dr. Poornima R Dr. Utpal Kumar Bhattacharyya Dr. H. Lembisana Devi Dr. Laikangbam Shalini		
20	Certificate Type: Registration of Design Design No.: 427595-001 Date: 20/08/2024 Title of Design: <i>Poultry Brooding Machine</i> Class: 30-99 Inventors/Applicants: Dr. Rakesh Kumar Chaurasia Dr. V. B. Sharma	An innovative, low-cost poultry brooder designed for use in remote villages without access to electricity.	


S. No.	Patent	Description	Certificate
21	<p>Certificate Type: Registration of Design</p> <p>Design No.: 455444-001</p> <p>Date: 15/04/2025</p> <p>Title of Design: <i>Automated Food Packaging Device</i></p> <p>Class: 15-10</p> <p>Inventors/Applicants: Dr. Y. Prabhabati Devi Dr. Ankita Sharma Dr. Parvati Dr. Reema Devi Dr. Sayanika Borah Dr. Anjali Verma Dr. Rambhai Boghabhai Bharai Dr. Satish Sharma Dr. Ankur Sharma Richa Vishal Sharma</p>	<p>The claimed portion of the design of Automated Food Packaging Device consists of stainless steel housing, a programmable micro-controller unit, precision weighing scale, heat-sealing mechanism, roll fed biodegradable packaging film and a touch sensitive user interface. Designed for both solid and semi-liquid foods, the system reduces manual handling, minimizes contamination risks and ensures consistent packaging quality.</p>	

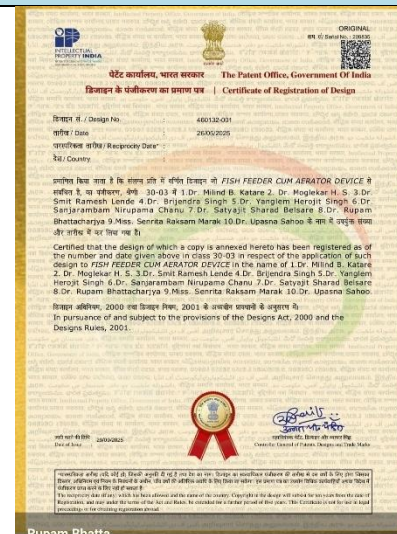
S. No.	Patent	Description	Certificate
22	<p>Certificate Type: Registration of Design</p> <p>Design No.: 433255-001</p> <p>Date: 08/10/2024</p> <p>Title of Design: <i>Plant Disease and Nutrient Scanner Device</i></p> <p>Class: 10-04</p> <p>Inventors/Applicants: Dr. Lahar Jyoti Bordoloi Dr. Laishram Kanta Singh Dr. Athokpam Haribhushan Dr. H. Vanlalhmuliana Dr. Mandira Chakraborti Longjam Boris Singh Dr. Khwairakpam Premlata Devi Dr. Harendra Verma Dr. Tarun Kumar Das Dr. Tanya R. Marak Puja Basumatary Dr. Abhijit Debnath</p>	<p>Portable AI-powered scanner detects plant diseases, pests, and nutrient deficiencies using advanced biosensors. Provides real-time diagnostics, actionable recommendations via touchscreen. Rugged, lightweight for field use; enhances crop health, productivity, and sustainable farming.</p>	



S. No.	Patent	Description	Certificate
23	Certificate Type: Registration of Design Design No.: 456381-001 Date: 23/04/2025 Title of Design: <i>Chilli Crop Diagnostic Device</i> Class: 15-03 Inventors/Applicants: Dr. Nongmaithem Jyotsna Tabitha Donbiaksiam Vishal Kumar	Portable chilli scanner with multispectral imaging detects leaf diseases, deficiencies, dehydration. Retractable soil probe measures pH, moisture, temperature. Ambient sensors track humidity, light. Touchscreen delivers AI recommendations, Bluetooth syncs to app for tracking. Durable, standalone for remote fields; boosts yield, cuts costs.	 <p>The certificate is for the design of a 'CHILLI CROP DIAGNOSTIC DEVICE'. It is issued to the applicants: Dr. Nongmaithem Jyotsna, Tabitha Donbiaksiam, and Vishal Kumar. The design is registered in Class 15-03. The certificate includes the text: 'Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 15-03 in respect of the application of such design to CHILLI CROP DIAGNOSTIC DEVICE in the name of L. Dr. Nongmaithem Jyotsna, Tabitha Donbiaksiam, Vishal Kumar.' It also mentions the date of registration as 23/04/2025 and the Design Act, 2000.</p>
24	Certificate Type: Registration of Design Design No.: 455051-001 Date: 11/04/2025 Title of Design: <i>AI - Powered Fish and Water Monitoring Device</i> Class: 10-05 Inventors/Applicants: Dr. Shah Mustahid Hussain Dr. Soibam Khogen Singh Shiva Rajak Dr. Sudhansu Shekhar Mahanand Dr. Ningthoukhongjam Soranganba Reshmi Debbarma	AI-powered, solar-charged device monitors water quality, pathogens, and fish health via multisensors, biosensors, and AI vision. Modular, wireless; predicts issues, auto-controls systems. Reduces mortality, optimizes resources, boosts yields. Ideal for remote aquaculture, promotes sustainability.	 <p>The certificate is for the design of an 'AI-POWERED FISH AND WATER MONITORING DEVICE'. It is issued to the applicants: Dr. Shah Mustahid Hussain, Dr. Soibam Khogen Singh, Shiva Rajak, Dr. Sudhansu Shekhar Mahanand, Dr. Ningthoukhongjam Soranganba, Reshmi Debbarma, and Dr. Ningthoukhongjam Soranganba. The design is registered in Class 10-05. The certificate includes the text: 'Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 10-05 in respect of the application of such design to AI-POWERED FISH AND WATER MONITORING DEVICE in the name of L. Dr. Shah Mustahid Hussain, Dr. Soibam Khogen Singh, Shiva Rajak, Dr. Sudhansu Shekhar Mahanand, Dr. Ningthoukhongjam Soranganba, Reshmi Debbarma, Dr. Ningthoukhongjam Soranganba.' It also mentions the date of registration as 11/04/2025 and the Design Act, 2000.</p>


S. No.	Patent	Description	Certificate
	Nongthongbam Sureshchandra Singh Thongam Monika Devi Dr. Pradyut Biswas Dr Brajamani Sourabh Debbarma Joynal Abedin		
25	Certificate Type: Registration of Design Design No.: 447020-001 Date: 05/02/2025 Title of Design: <i>Water Quality and Fish Behavior Analysis Device</i> Class: 10-05 Inventors/Applicants: Dr. Soibam Khogen Singh Thongam Monika Devi Dr. Shah Mustahid Hussain Dr. Jotish Nongthombam Dr. Nagung Camder Tok Dr. Pradyut Biswas Dr. N. Kiruthika Dr. S. Senthilnathan, Reshmi Debbarma Dr. Ningthoukhongjam Soranganba Er. Gunajit Oinam Joynal Abedin	Water Quality and Fish Behavior Analysis Device	

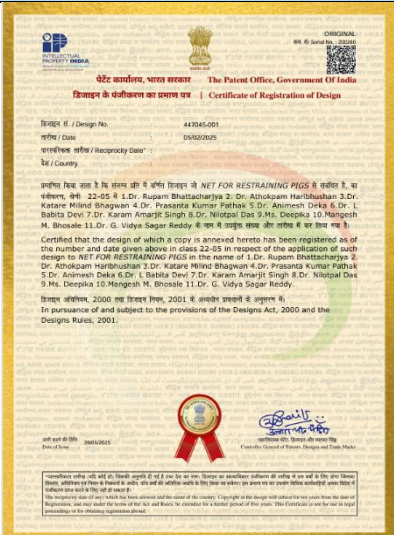
S. No.	Patent	Description	Certificate
26	<p>Certificate Type: Registration of Patent</p> <p>Patent No.: 548570</p> <p>Date: 26/08/2022</p> <p>Title of Design: <i>Power-Operated Mini Rhizome Planter</i></p> <p>Inventors/Applicants: K. N. Dewangan Thaneswer Patel Sarju Thokchom B.Surya Kumar Chhetry Bishorjit Ningthoujam</p>	A power-operated mini rhizome planter works by a combination of mechanical actions, typically driven by a power source (like a power tiller) and the planter's ground wheels, to mechanize the process of creating a furrow, precisely placing rhizomes (such as ginger or turmeric) at specific intervals and depths, and covering them with soil.	 <p>The certificate is issued by the Patent Office, Government of India, for the invention of a Power-Operated Mini Rhizome Planter. It details the patent number 548570, application number 20223104854, and the date of filing 26/08/2022. The inventors are K. N. Dewangan, Thaneswer Patel, Sarju Thokchom, B.Surya Kumar Chhetry, and Bishorjit Ningthoujam. The certificate is dated 26/08/2022 and is valid for 20 years from the date of filing.</p>
27	<p>Certificate Type: Registration of Design</p> <p>Design No.: 431518-001</p> <p>Date: 24/09/2024</p> <p>Title of Design: <i>Manually Operated Gun Type Kiwi Pollinator</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants: Priyam Goswami Thaneswer Patel Himangshu Bora Bishorjit Ningthoujam Subhabrata Basu</p>	The manually operated gun type kiwi pollinator works by using a compressed air mechanism to accurately dispense a calibrated amount of pollen, typically mixed in a liquid suspension or as a dry powder diluent, onto the stigma of a female kiwifruit flower.	 <p>The certificate is issued by the Patent Office, Government of India, for the design of a Manually Operated Gun Type Kiwi Pollinator. It details the design number 431518-001, the date of filing 24/09/2024, and the inventors Priyam Goswami, Thaneswer Patel, Himangshu Bora, Bishorjit Ningthoujam, and Subhabrata Basu. The certificate is dated 24/09/2024 and is valid for 10 years from the date of filing.</p>

S. No.	Patent	Description	Certificate
28	<p>Certificate Type: Registration of Design</p> <p>Design No.: 426137-001</p> <p>Date: 07/08/2024</p> <p>Title of Design: <i>Drone For Crop Protection</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants: Dr. Athokpam Haribhushan Dr. Gayatri Sinha Dr. H. Vanlalhmuliana Dr. T. Vanlalngurzauva Dr. Sankhyashree Roy Lipika Nath Dr. Anoop Kumar Dr. Pangeijam Bijaya Devi Dr. Julius Uchoi R. Lalchhandami Dr. Abhijit Debnath</p>	<p>Drones for crop protection are advanced agricultural tools equipped with high-resolution cameras and multispectral sensors that enable early detection of crop issues such as pests, diseases, and irrigation problems. They provide real-time aerial surveillance, allowing precise monitoring and targeted treatment to maximize crop yields and reduce costs. Drones also support efficient pesticide spraying, often delivering chemicals more safely and cost-effectively compared to manual methods. Different drone types, including fixed-wing, multirotor, and VTOL drones, offer various advantages such as extended flight times, maneuverability, and terrain adaptability to suit diverse farm sizes and conditions.</p>	


S. No.	Patent	Description	Certificate
29	<p>Certificate Type: Registration of Design</p> <p>Design No.: 460132-001</p> <p>Date: 26/05/2025</p> <p>Title of Design: <i>Fish Feeder cum Aerator Device</i></p> <p>Class: 30-03</p> <p>Inventors/Applicants:</p> <p>Dr. Milind Katare Dr. Moglekar H.S Dr. Smit Ramesh Lendi Dr. Brijendra Singh Dr. Yangleem Herojit Singh Dr. Sanjarambam Nirupama Chanu Dr. Satyajit Sharad Balsare Dr. Rupam Bhattacharjya Mis Senrita Raksam Marak Dr. Upasana Sahoo</p>	<p>A Fish Feeder cum Aerator device is a dual-purpose tool designed for fish ponds or tanks that combines two essential functions: feeding fish and aerating the water. The aeration component of the device introduces air into the water, increasing dissolved oxygen levels, which is crucial for fish health and growth. The feeder component automates the distribution of fish food, ensuring regular and controlled feeding intervals.</p>	 <p>The image shows a Certificate of Registration of Design issued by the Patent Office, Government of India. The certificate is for Design No. 460132-001, dated 26/05/2025. The title of the design is 'FISH FEEDER CUM AERATOR DEVICE' in Class 30-03. The inventors/applicants listed are Dr. Milind B. Katare, Dr. Moglekar H. S., Dr. Smit Ramesh Lendi, Dr. Brijendra Singh, Dr. Yangleem Herojit Singh, Dr. Sanjarambam Nirupama Chanu, Dr. Satyajit Sharad Balsare, Dr. Rupam Bhattacharjya, Mis Senrita Raksam Marak, and Dr. Upasana Sahoo. The certificate includes a QR code and a red circular seal of the Patent Office, Government of India. The name 'Rupam Bhatta' is visible at the bottom of the certificate.</p>

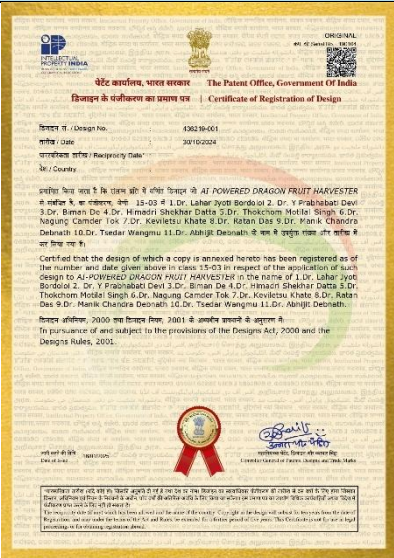
S. No.	Patent	Description	Certificate
30	<p>Certificate Type: Registration of Design</p> <p>Design No.: 431461-001</p> <p>Date: 07/04/2025</p> <p>Title of Design: <i>Manually Operated Kiwi Pollen Collector</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants: Priyam Goswami Thaneswer Patel Himangshu Bora Bishorjit Ningthoujam Subhabrata Basu</p>	A small mechanical battery-operated device used for the collection of pollen from the anthers of male kiwi flower.	 <p>The certificate is for the design of a manually operated kiwi pollen collector, registered in class 15-03. It lists the inventors/applicants: Priyam Goswami, Thaneswer Patel, Himangshu Bora, Bishorjit Ningthoujam, and Subhabrata Basu. The certificate is issued by the Patent Office, Government of India, on 07/04/2025.</p>
31	<p>Certificate Type: Registration of Design</p> <p>Design No.: 446936-001</p> <p>Date: 05/02/2025</p> <p>Title of Design: <i>Horticulture Pollinating Smart Machine</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants: Dr. Lalu Prasad Yadav Dr. Sanjay Kumar K. Dhinesh Babu Dr. Aniket V. Chandanshive Dr. Sonal Mishra Dr. Janani P</p>	The design consists of autonomous robotic arms equipped with soft adaptive grippers and multi spectral cameras to identify and gently handle flowers. AI powered algorithms, analyzed flower maturity and optimize pollination timing. Integrated sensors measure environmental factors such as temperature, humidity and light intensity to optimize optimal pollination condition. The device mimics natural pollinator behaviour by using gentle vibration, air currents, or artificial pollen applicators to transfer pollen between flowers. The device reduces dependency on natural pollinators, ensures controlled	 <p>The certificate is for the design of a horticulture pollinating smart machine, registered in class 15-03. It lists the inventors/applicants: Dr. Lalu Prasad Yadav, Dr. Sanjay Kumar, K. Dhinesh Babu, Dr. Aniket V. Chandanshive, Dr. Sonal Mishra, and Dr. Janani P. The certificate is issued by the Patent Office, Government of India, on 05/02/2025.</p>


S. No.	Patent	Description	Certificate
	Dr. Esther Lalruatsangi Lalit Yadav Mr. Lovekesh Sawle Dr. N. Khumdemo Ezung	pollination in adverse conditions and supports precision agriculture. It is particularly beneficial for crops like tomatoes, berries and apples, requiring targeted and consistent pollination efforts.	
32	Certificate Type: Registration of Design Design No.: 452270-001 Date: 20/03/2025 Title of Design: <i>Condensation Testing Unit Using Porous Plate</i> Class: 23-04 Inventors/Applicants: Maibam Romio Singh Asis Giri Akoijam Rima Devi Bishorjit Ningthoujam Huidrom Dayananda Singh Ningthoujam Ghanashyam Singh Samiksha Giri	It enhances the processes of heat and mass transfer during condensation within or on a porous medium.	

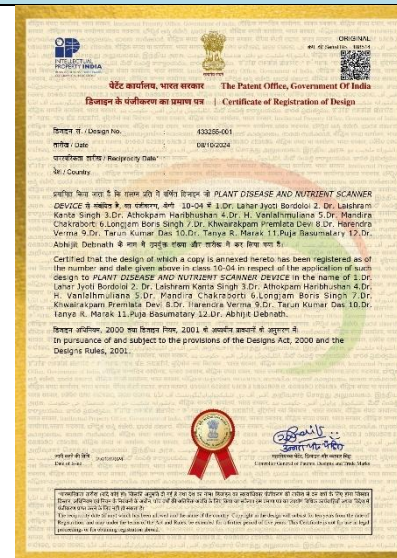
S. No.	Patent	Description	Certificate
33	<p>Certificate Type: Registration of Design</p> <p>Design No.: 447045-001</p> <p>Date: 05/02/2025</p> <p>Title of Design: <i>Net for Restraining Pigs</i></p> <p>Class: 22-05</p> <p>Inventors/Applicants:</p> <p>Dr. Rupam Bhattacharjya Dr. Athokpam Haribhushan Dr. Katara Milind Bhagwan Dr. Prasanta Kumar Pathak Dr. Animesh Deka Dr. L Babita Devi Dr. Karam Amarjit Singh Dr. Nilotpal Das Ms. Deepika Mangesh M. Bhosale Dr. G. Vidya Sagar Reddy</p>	<p>Pig restraint nets, made from durable UV-coated HDPE or nylon, safely capture pigs for exams, transport, or research without injury. Alternatives include manual restraint, slings with habituation, or hog snares. Gentle handling, positive reinforcement, non-slip flooring ensures stress reduction and safety for pigs and handlers.</p>	

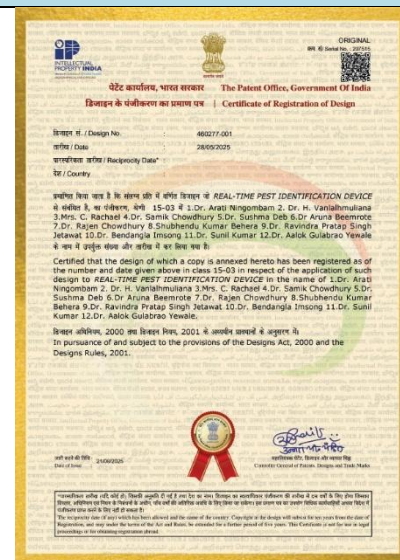
S. No.	Patent	Description	Certificate
34	<p>Certificate Type: Registration of Patent</p> <p>Patent No.: 202531081094 A</p> <p>Date: 05/09/2025</p> <p>Title of Patent: <i>A Mechanical Soil-Moisture-Responsive Drip Irrigation Controller with Hybrid Self-Cleaning and Feedback Mechanism</i></p> <p>Inventors/Applicants: Dr. Sanjarambam Nirupama Chanu Dr. Milind B Katare Dr. Kalpana Gairola Dr. Hijam Jiten Singh Dr. Huidrom Dayananda Singh Dr. Thingujam Bidyalakshmi Devi Bishorjit Ningthoujam</p>	<p>The current invention is a power-free drip irrigation system and method for soil-moisture-motivated irrigation for precision water management in agriculture and horticulture applications.</p>	

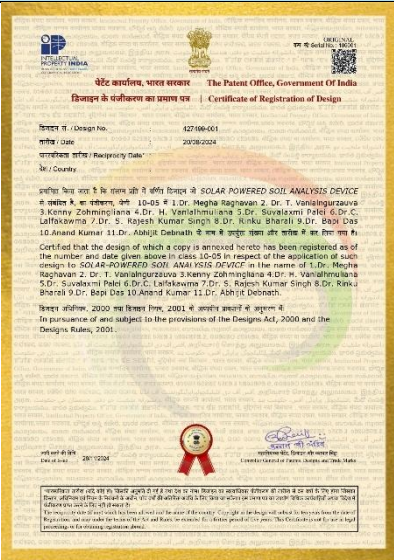
S. No.	Patent	Description	Certificate
35	<p>Certificate Type: Registration of Design</p> <p>Design No.: 449344-001</p> <p>Date: 25/02/2025</p> <p>Title of Design: <i>Ortable Soil Testing Device System</i></p> <p>Class: 10-05</p> <p>Inventors/Applicants: Kangjam Sonamani Singh Dr. Shilpa Kaushik Modi Pranav Raj Supunya Nath Dr. Pratik Nagesh Bobade Dr. Prabhat Kumar Dr. Sonal Mishra Dr. N. Khumdemo Ezung Vanita Rani Jagriti Baghel</p>	<p>The design consist of multiple sensors, including pH, moisture, temperature and nutrient sensors, alongwith a microprocessor for data processing and a wireless module for IoT connectivity. The device works by inserting the probes into the soil, where it collects and analyse key parameters, transmitting the data to a mobile or web-based dashboard. AI powered algorithms interpret the results, providing farmers with insights on soil health, nutrient deficiencies and optimal fertilization strategies. This device is essential for sustainable agriculture, helping farmers optimize crop growth, reduce excessive fertilizer use and enhanced yield quality.</p>	

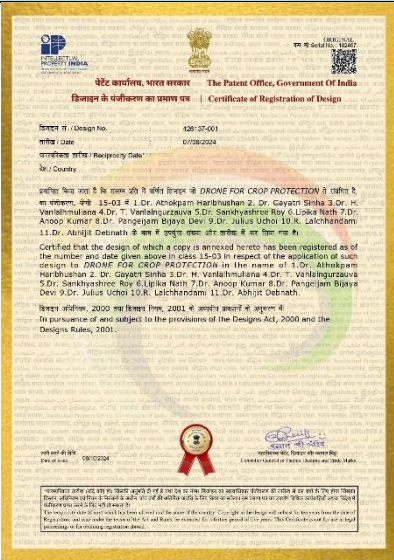
S. No.	Patent	Description	Certificate
36	<p>Certificate Type: Registration of Design</p> <p>Design No.: 436219-001</p> <p>Date: 30/10/2024</p> <p>Title of Design: <i>AI - Powered Dragon Fruit Harvester</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants:</p> <p>Dr. Lahar Jyoti Bordoloi Dr. Y. Prabhabati Devi Dr. Birman Dr. Himadri Shekar Datta Dr. Thokchom Motilal Singh Dr. Nagung Camder Tok Dr. Keviletsu Khate Dr. Ratan Das Dr. Manik Chandra Debnath Dr. Tsedar Wangmu Dr. Abhijit Debnath</p>	AI- Powered Dragon Fruit Harvester.	



S. No.	Patent	Description	Certificate
37	<p>Certificate Type: Registration of Design</p> <p>Design No.: 438802-001</p> <p>Date: 28/11/2024</p> <p>Title of Design: <i>Multilingual Advisory Device for Farmers</i></p> <p>Class: 14-01</p> <p>Inventors/Applicants:</p> <p>Dr. Sesenlo Kath Dr. Ruokuovilie Mezhatso Dr. Lahar Jyoti Bordoloi Dr. Brijendra Singh Dr. Manik Chandra Debnath Dr. N. Khumdemo Ezung Phuritshabam Chandramani Singh Debashis Datta Dr. Hari Charan Kalita Dr. Sayanika Borah Dr. Ayam Gangarani Devi</p>	<p>Portable AI farming assistant for smallholders offers multilingual voice/touch guidance on crops, irrigation, pests, weather, markets. Built-in soil sensors; rugged, solar-powered, offline-capable. Empowers women and marginalized farmers with real-time, sustainable decisions.</p>	 <p>The image shows a certificate from the Patent Office, Government of India, titled 'Certificate of Registration of Design'. It contains the following details:</p> <ul style="list-style-type: none"> Design No.: 438802-001 Date: 28/11/2024 Reciprocity Date: 28/11/2024 Country: India Design Title: MULTILINGUAL ADVISORY DEVICE FOR FARMERS Inventors/Applicants: Dr. Sesenlo Kath, Dr. Ruokuovilie Mezhatso, Dr. Lahar Jyoti Bordoloi, Dr. Brijendra Singh, Dr. Manik Chandra Debnath, Dr. N. Khumdemo Ezung, Phuritshabam Chandramani Singh, Debashis Datta, Dr. Hari Charan Kalita, Dr. Sayanika Borah, Dr. Ayam Gangarani Devi. Class: 14-01 Registered: 28/11/2024 Office: 1102/2024 <p>The certificate also includes a red ribbon seal and a signature of the Controller General of Patents, Designs and Trade Marks.</p>



S. No.	Patent	Description	Certificate
38	<p>Certificate Type: Registration of Design</p> <p>Design No.: 433255-001</p> <p>Date: 08/10/2024</p> <p>Title of Design: <i>Plant Disease and Nutrient Scanner Device</i></p> <p>Class: 10-04</p> <p>Inventors/Applicants: Longjam Boris Singh Dr. Khwairakpam Premlata Devi Dr. Lahar Jyoti Bordoloi Dr. Laishram Kanta Singh Dr. Athokpam Haribhushan Dr. H. Vanlalhmuliana Dr. Mandira Chakraborti Dr. Harendra Verma Dr. Tarun Kumar Das Dr. Tanya R. Marak Puja Basumatary Dr. Abhijit Debnath</p>	Plant Disease and Nutrient Scanner Device with the utilisation of biosensors, AI Integration, Real Time Analysis in a portable design.	


S. No.	Patent	Description	Certificate
39	<p>Certificate Type: Registration of Design</p> <p>Design No.: 460277-001</p> <p>Date: 28/05/2025</p> <p>Title of Design: <i>Real time pest identification device</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants: Dr. Arati Ningombam Dr. H. Vanlalhmuliana Mrs. C. Rachael Dr. Samik Chowdhury Dr. Sushma Deb Dr Aruna Beemrote Dr. Rajen Chowdhury Shubhendu Kumar Behera Dr. Ravindra Pratap Singh Jetawat Dr. Bendangla Imsong Dr. Sunil Kumar Dr. Aalok Gulabrao Yewale</p>	<p>AI-powered device uses NLP, ML, and Generative AI to detect fake news in real-time from text/multimedia feeds. Analyzes syntax, semantics; predicts misinformation trends; simulates scenarios. Cross-references verified sources, scores credibility. Cloud-updated, intuitive interface delivers reports, confidence, recommendations.</p>	 <p>The image shows a certificate from the Patent Office, Government of India, for the registration of a design. The design is titled 'REAL-TIME PEST IDENTIFICATION DEVICE' and is classified under class 15-03. The certificate is dated 28/05/2025 and is issued to the inventors/applicants listed in the table. The certificate includes a QR code and a red seal of the Patent Office.</p>

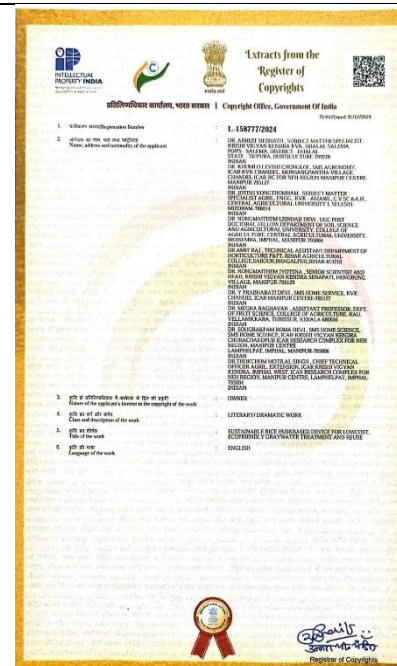
S. No.	Patent	Description	Certificate
40	<p>Certificate Type: Registration of Design</p> <p>Design No.: 427499-001</p> <p>Date: 01/02/2024</p> <p>Title of Design: <i>Solar-Powered Soil Analysis Device</i></p> <p>Class: 10-05</p> <p>Inventors/Applicants:</p> <p>Dr. Megha Raghavan Dr. T. Vanlalngurzauva Kenny Zohminglana Dr. H. Vanlalhmuliana Dr. Suvalaxmi Palei Dr.C. Lalfakawma Dr. S. Rajesh Kumar Singh Dr. Rinku Bharali Dr. Bapi Das Anand Kumar Dr. Abhijit Debnath</p>	<p>Solar-powered handheld device analyzes soil in real-time with built-in sensors for pH, moisture, nutrients, and temperature. AI processes data, delivers instant fertility reports and fertilizer recommendations via touchscreen. Rugged, offline-capable, with cloud sync for trend tracking. Empowers farmers to optimize inputs, boost yields sustainably.</p>	

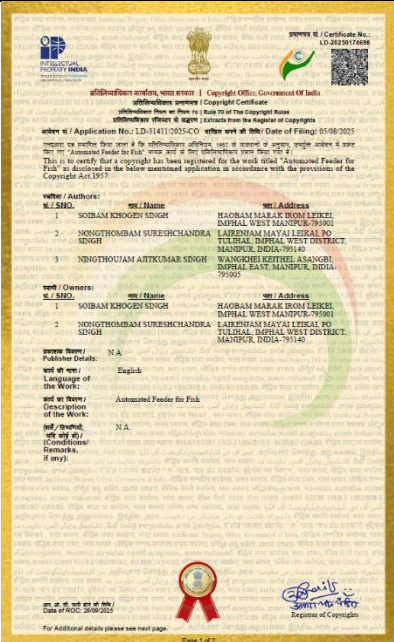
S. No.	Patent	Description	Certificate
41	<p>Certificate Type: Registration of Design</p> <p>Design No.: 426137-001</p> <p>Date: 07/08/2024</p> <p>Title of Design: <i>Drone for Crop Protection</i></p> <p>Class: 15-03</p> <p>Inventors/Applicants:</p> <p>Dr. Athokpam Haribhushan Dr. Gayatri Sinha Dr. H. Vanlalhmuliana Dr. T. Vanlalngurzauva Dr. Sankhyashree Roy Lipika Nath Dr. Anoop Kumar Dr. Pangeijam Bijaya Devi Dr. Julius Uchoi R. Lalchhandami Dr. Abhijit Debnath</p>	<p>Autonomous drone with multispectral cameras and AI identifies pests, diseases, and nutrient stress in crops. Solar-assisted, it sprays targeted biopesticides via precision nozzles, reducing chemical use. GPS-guided flights, real-time app alerts, and data analytics optimize protection, boost yields sustainably.</p>	

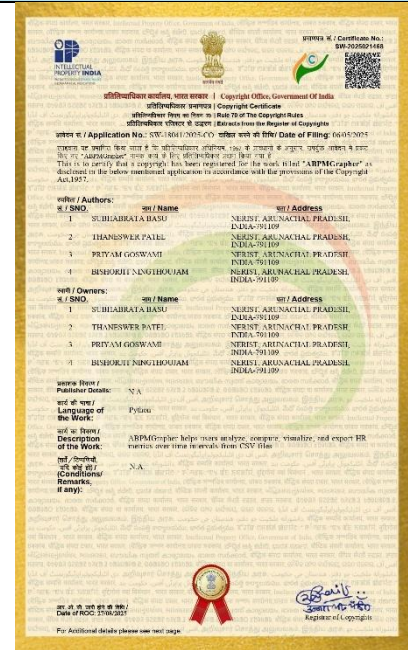
S. No.	Patent	Description	Certificate
42	<p>Certificate Type: Copyright Registration No.: CF-5747/2024 Date: 22/08/2024</p> <p>Title of Design: <i>Integrated Hori-Cum-Fish Farming: A viable option for Agribusiness</i></p> <p>Class: Cinematograph Film Work</p> <p>Inventors/Applicants: Mr. Shyam KR. Dr. Abhijit Debnath Dr. Amulya Kumar Mohanty Dr. Arun KR. Singha Dr. Rajumoni Bordoloi Dr. Rubin Debbarma Dr. Tanmoy Bhowmik</p>	<p>Combines orchards, vegetables, and fish ponds for symbiotic nutrient recycling, higher yields, and diversified income. Sustainable agribusiness model boosts profitability and resource efficiency.</p>	
43	<p>Certificate Type: Copyright Registration No.: CF-5830/2024 Date: 30/12/2024</p> <p>Title of Design: <i>Integrated Duck-Cum-Fish Farming- A Sustainable Approach For Livelihood Security by KVK Dhalai</i></p> <p>Class: Cinematograph Film Work</p> <p>Inventors/Applicants: Dr. Abhijit Debnath Mr. Shyam KR. Dr. Amulya Kumar Mohanty Dr. Arun KR. Singha Dr. Rajumoni Bordoloi Dr. Rubin Debbarma Dr. Tanmoy Bhowmik</p>	<p>Ducks forage in ponds, enriching water with manure for fish feed; fish stir nutrients for plankton. Boosts protein yield, cuts costs, ensures sustainable rural livelihoods.</p>	

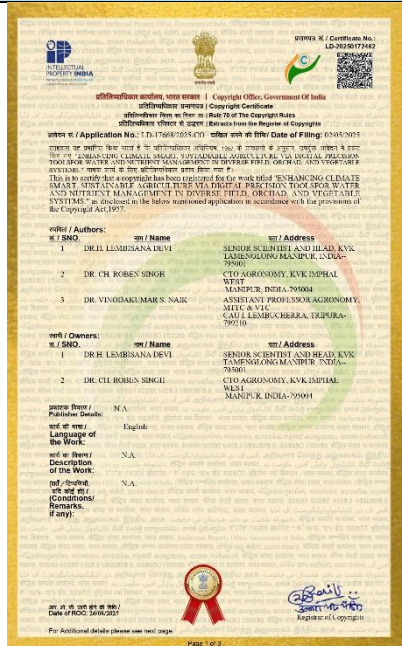
S. No.	Patent	Description	Certificate
			<div style="text-align: right;">   Signature of Controller </div>

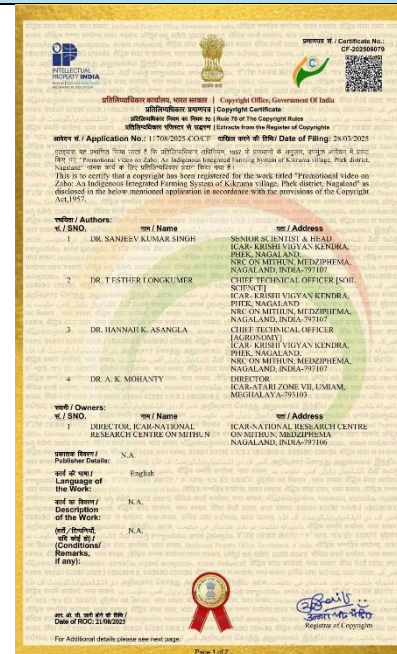
S. No.	Patent	Description	Certificate
44	<p>Certificate Type: Copyright</p> <p>Registration No.: CF-202505929</p> <p>Date: 18/09/2024</p> <p>Title of Design: <i>Integrated Pig Cum Fish Farming- A Sustainable Approach for Livelihood Security by KVK Dhalai</i></p> <p>Class: Cinematograph Film Work</p> <p>Inventors/Applicants:</p> <p>Dr. Abhijit Debnath</p> <p>Mr. Shyam KR.</p> <p>Dr. Amulya Kumar Mohanty</p> <p>Dr. Arun Kr. Singha</p> <p>Dr. Rajumoni Bordoloi</p> <p>Dr. Rubin Debbarma</p> <p>Dr. Tanmoy Bhowmik</p>	Pigs' manure fertilizes ponds, fueling plankton for fish growth; fish aerate water. Yields pork and fish, slashes feed costs, secures sustainable rural income.	

S. No.	Patent	Description	Certificate
45	<p>Certificate Type: Copyright</p> <p>Registration No.: L-158777/2024</p> <p>Date: 31/12/2024</p> <p>Title of Design: <i>Sustainable Rice Husk based Device for Low cost, Ecofriendly Graywater Treatment and Reuse</i></p> <p>Class: Cinematograph Film Work</p> <p>Applicants/Inventors:</p> <p>Dr. Abhijit Debnath Dr. Khumlo Levish Chongloi Dr. Jotish Nongthombam Dr. Nongmaithem Leindah Devi Dr. Amit Ra Dr. Nongmaithem Jyotsna Dr. Y Prabhabati Devi Dr. Megha Raghavan Dr. Sougrakpam Roma Devi Dr. Thokchom Motilal Singh</p>	<p>The device operates on the principle of natural adsorption and filtration. Gray water is introduced into the system, where it passes through multiple layers, each designed to target different types of contaminants. The rice husk acts as the primary filtration medium, leveraging its porous structure to trap organic matter, oils, and particulates. As the water moves downward through the system, gravity aids in pushing the water through the filter layers, which further removes impurities. The filtered water is then collected for reuse in non-potable applications, reducing the overall demand for fresh water.</p>	 <p>The image shows a copyright certificate from the Copyright Office, Government of India. It is for the design 'Sustainable Rice Husk based Device for Low cost, Ecofriendly Graywater Treatment and Reuse' registered under number L-158777/2024 on 31/12/2024. The certificate lists the applicants/inventors: Dr. Abhijit Debnath, Dr. Khumlo Levish Chongloi, Dr. Jotish Nongthombam, Dr. Nongmaithem Leindah Devi, Dr. Amit Ra, Dr. Nongmaithem Jyotsna, Dr. Y Prabhabati Devi, Dr. Megha Raghavan, Dr. Sougrakpam Roma Devi, and Dr. Thokchom Motilal Singh. It also includes a QR code and a red circular stamp at the bottom right.</p>

S. No.	Patent	Description	Certificate
46	<p>Certificate Type: Copyright</p> <p>Registration No.: LD-31411/2025-CO</p> <p>Date: 05/08/2025</p> <p>Title of Design: <i>Automated Feeder for Fish</i></p> <p>Class: Cinematograph Film Work</p> <p>Applicants/Inventors:</p> <p>Soibam Khogen Singh Nongthombam Sureshchandra Singh Ningthoujam Ajitkumar Singh Pradyut Biswas Gusheinzed Waikhom Reshmi Debbarma Sampa Baidya</p>	<p>The AI-Powered Crop Monitoring and Prediction Device addresses the core challenges in modern agriculture with an integrated, intelligent approach. By fusing sensor technology, machine learning, and sustainable energy use, it equips farmers with actionable insights for better decision-making. Its real-time monitoring and predictive capabilities help increase crop productivity, optimize resource usage, and reduce environmental impact. With its robust, weatherproof design and scalability, this invention paves the way for widespread adoption of precision agriculture across diverse farming contexts.</p>	

S. No.	Patent	Description	Certificate
47	<p>Certificate Type: Copyright</p> <p>Registration No.: SW-18041/2025-CO</p> <p>Date: 06/05/2025</p> <p>Title of Design: <i>ABPM Grapher</i></p> <p>Class: Cinematograph Film Work</p> <p>Inventors/Applicants:</p> <p>Subhabrata Basu Thaneswer Patel Priyam Goswami Bishorjit Ningthoujam</p>	It helps users analyze, compute, visualize, and export HR metrics over time intervals from CSV files	 <p>The image shows a yellow copyright certificate from the Copyright Office, Government of India. It certifies the registration of the work 'ABPM Grapher' as a Cinematograph Film Work. The certificate lists four authors: Subhabrata Basu, Thaneswer Patel, Priyam Goswami, and Bishorjit Ningthoujam, all residing in Nurgat, Arunachal Pradesh, India. The application number is SW-18041/2025-CO, and the date of filing is 06/05/2025. The certificate also includes a QR code and a signature of the Registrar of Copyrights.</p>

S. No.	Patent	Description	Certificate
48	<p>Certificate Type: Copyright</p> <p>Registration No.: LD-20250182462</p> <p>Date: 02/05/2025</p> <p>Title of Design: <i>Enhancing Climate Smart, Sustainable Agriculture Via Digital Precision Tools for Water and Nutrient Management in Diverse Field, orchard and Vegetable System</i></p> <p>Class: Cinematograph Film Work</p> <p>Inventors/Applicants:</p> <p>Dr. H. Lembisana Devi</p> <p>Dr. Ch. Roben Singh</p> <p>Dr. Vinodakumar S. Nail</p> <p>Dr. H. Dr. Sudhansu Shekhar Mahanand</p> <p>Dr. Nagung Camder Tok</p> <p>Dr. Abhijit Saha</p> <p>Dr. Thingreingam Irenaeus KS</p> <p>Dr. Sagarika Bhowmik</p> <p>Dr. Shekhar Dhondiram AM Khade</p> <p>Dr. Keviletsu Khate</p> <p>Arvind Mohanan</p> <p>Dr. Laikangbam Shalini</p> <p>Dr. Carolyn Zothansiami</p>	Enhancing Climate Smart, Sustainable Agriculture Via Digital Precision Tools for Water and Nutrient Management in Diverse Field, orchard and Vegetable System	

S. No.	Patent	Description	Certificate
50	<p>Certificate Type: Copyright</p> <p>Registration No.: 11708/2025-CO/CF</p> <p>Date: 28/03/2025</p> <p>Title of Design: <i>Zabo-an indigenous IFS of Kikruma village Phek district Nagaland</i></p> <p>Class: Cinematograph Film Work</p> <p>Inventors/Applicants:</p> <p>Dr. Sanjeev Kumar Singh Dr. T Esther Longkumer Dr. Hannah K Asangla Dr. A.K Mohanty Dr. Girish Patil S</p>	Promotional video	 <p>The image shows a Copyright Certificate issued by the Copyright Office, Government of India. It certifies the registration of a cinematograph film work titled 'Zabo-an indigenous IFS of Kikruma village Phek district Nagaland'. The certificate lists the authors and owners, including Dr. Sanjeev Kumar Singh, Dr. T Esther Longkumer, Dr. Hannah K Asangla, and Dr. A.K Mohanty. It also mentions the registration number 11708/2025-CO/CF and the date of filing 28/03/2025. The certificate is signed by the Registrar of Copyrights and includes a QR code for verification.</p>