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Dengue fever has emerged as a persistent public health crisis in Pakistan, with major outbreaks reported annually in urban centers such as Lahore, Karachi, Islamabad, Peshawar, and Rawalpindi. The *Aedes aegypti* mosquito, the primary vector of dengue, chikungunya, and Zika, thrives in urban habitats with stagnant water, poor sanitation, and inadequate

vector control. Alongside *Aedes albopictus* and *Culex quinquefasciatus*, these species pose significant risks of arboviral diseases.

Transmission occurs when infected mosquitoes bite humans after acquiring the virus from an infected host, amplifying outbreaks in densely populated areas. Preventive strategies recommended by the National Institute of Health (NIH) include personal protection (long-sleeved shirts & full-length pants during early morning & late afternoon), community-level (homes, schools & public areas) sanitation, and coordinated government interventions; however, weak surveillance and poor waste management undermine control efforts.



QUALITY PRO & NPMA PRO BOARD

The NPMA announced the 2025-2026 Board of Directors for both QualityPro and NPMA PRO. PPMA research indicates that disease-spreading pests are a top concern for consumers this summer, with a notable increase in online discussions about pests.

The Professional Pest Management Alliance (PPMA) continues to build momentum with its public service announcement (PSA) program, achieving impressive results in terms of airings and impressions. PPMA's AI research reveals a significant increase in online activity related to pest concerns, with spiders and termites seeing the largest increases in engagement. The research also highlights spikes in mosquito activity in Tennessee and D.C. bed bug concerns in Wyoming, and mouse issues in Montana.



STRUCTURAL INTEGRATED PEST MANAGEMENT (IPM) IN PAKISTAN

The Pakistan pest management industry is undergoing a transformative shift, driven by cutting-edge technology and a stronger commitment to sustainability, according to the International Pest Control trend. Innovations such as AI-powered monitoring, laser weeding, and smart rodent traps are reshaping pest control, while Integrated Pest Management (IPM) strategies reduce reliance on chemical pesticides. Advancements in artificial intelligence (AI) and the Internet of Things (IoT) are revolutionizing pest monitoring. AI-powered cameras and sensors now track pest activity 24/7, analyzing movement patterns to improve targeted interventions.



WHAT IS PEST WARNING & QUALITY CONTROL OF PESTICIDES?

The Government of Punjab Agriculture Department established the Directorate General of Pest Warning & Quality Control of Pesticides to oversee pest monitoring and plant protection activities across the province.

The initiative began in 1977 with pest scouting on cotton, which yielded promising results. In 1984, the Project Directorate was formally created in Multan to ensure judicious pesticide use, focusing initially on cotton crops. Owing to its success, the program was later expanded to cover all major crops, vegetables, and orchards across Punjab.



The fall armyworm pest on maize the invasive fall armyworm (*Spodoptera frugiperda*). Launched by INRAE, France's National Research Institute for Agriculture, Food and Environment, the project will provide farmers, advisors, and phytosanitary services with tools for early detection, as this pest threatens maize and over 80 other crops.

CABI scientists, including Dr. Marc Kenis, Dr. Yelitza Colmenarez, and Dr. Stefan Toepfer, will lead research on biological control and develop an Integrated Pest Management (IPM) toolbox tailored for Europe. Dr. Kenis noted that while the pest has already spread across Africa, Asia, and recently parts of Europe, EUFAWREADY aims to deliver solutions that reduce reliance on synthetic pesticides and strengthen food security.

CABI JOINS 25-STRONG PARTNERSHIP FOR PROJECT TO ENHANCE EUROPE'S READINESS FOR INVASIVE FALL ARMYWORM CROP PEST

CABI has joined a 25-member multi-stakeholder partnership under the new EU-funded EUFAWREADY project, aimed at strengthening Europe's preparedness against

