

Cashew museum – Magnificent display at DCR, Puttur

Cashew (*Anacardium occidentale* L.), is an important plantation crop, introduced into India during the 1560s. Cashew is an important export-oriented horticultural crop supporting the livelihood of farmers along the east coast and west coast in India, and provides employment to rural poor. India discovered its potential as a commercial crop having huge export potential and presently ranks second in area and production in the world.

The research efforts in cashew were intensified during the 1950s with the sanction of ad-hoc schemes by ICAR to different universities. Since then agro-techniques were standardized and different universities, development departments, state-owned corporations, Krishi Vigyan Kendras, non-governmental organizations and ICAR institutes undertook extension efforts to popularize the modern techniques of crop production. Farmers remained reluctant to adopt the new technologies primarily due to lack of awareness and poor socio-economic conditions. The traditional extension approaches rely on training and visit, literature, conducting demonstrations, visits to research institutes etc. Plant health clinic/museums (PHCM) are also aimed to provide solutions to the field problems mainly with respect to pest, disease and nutrient deficiencies. Due to the perennial nature of cashew and its seasonality of production, providing field exposure about all different aspects is not possible during a particular leg of the visit of farmers to research organizations.

Keeping these in mind, it was felt that a modern plant health clinic museum on cashew incorporating modern information and communication technologies (ICTs) can provide a one-stop point in the extension of cashew related technologies to farmers, students, researchers and other visitors. The museum was established with the support of Rashtriya Krishi Vikas Yojana – Remunerative Approaches for Agriculture and Allied Sector Rejuvenation



A view of the mural display in plant health clinic museum established at DCR, Puttur

(RKVY-RAFTAAR), Govt. of Karnataka. The main features of the plant health clinic museum are listed below:

- The kiosk in the museum provides one-stop point for the visitors to get all the relevant information about cashew cultivation and processing. The plant health can be compared with the images and videos available in the kiosk through different custom made software for pest attack, disease incidence and nutrient deficiency symptoms. It also provides options for managing problems.
- Special frames with digital display: These display frames provide visitors with the information on all aspects of cashew cultivation, management, processing and value addition through videos.
- Digital translates and bromides: These are illuminated film or transparency lit from behind or above, which provide visual treats of all the relevant information on various facets of development and care for cashew orchards to the visiting farmers. From the translates, the information can be grasped readily by the visitors as they move around the museum.
- Press button information board: In this, pressing a button activates information content on a particular aspect. It helps the farmers and visitors to learn about the attributes of the popular varieties of cashew. Users can find out the qualities of each variety,

compare among other varieties and see the type of cashew apple and nut of each variety.

- **Storytelling board:** The storytelling boards engage the visitors' interest by presenting the information in an appealing Audiovisual format. It is dedicated to impress the farmers in various alternative ways to improve the income from cashew orchards.
- **Scrolling translites:** Cashew being cultivated in different states having different languages, a museum in a single language cannot serve the purpose of visitors from different states. Scrolling translites help to increase the linguistic capacity of the museum where maximum information in all possible languages can be provided.
- **Sample enclosures:** The glass enclosures showcase specimens, samples and models of different items related to cashew.
- **Murals and Model:** It is an artwork in 2D and 3D providing information on any theme directly on a wall, ceiling or inside the museum. A distinguishing

characteristic of mural painting at DCR museum is that the architectural elements of historical and current events of cashew crop are represented in harmonious painted 3D artwork. This creates interest of people of all age groups and is one of the best exhibitions that aid in easy learning.

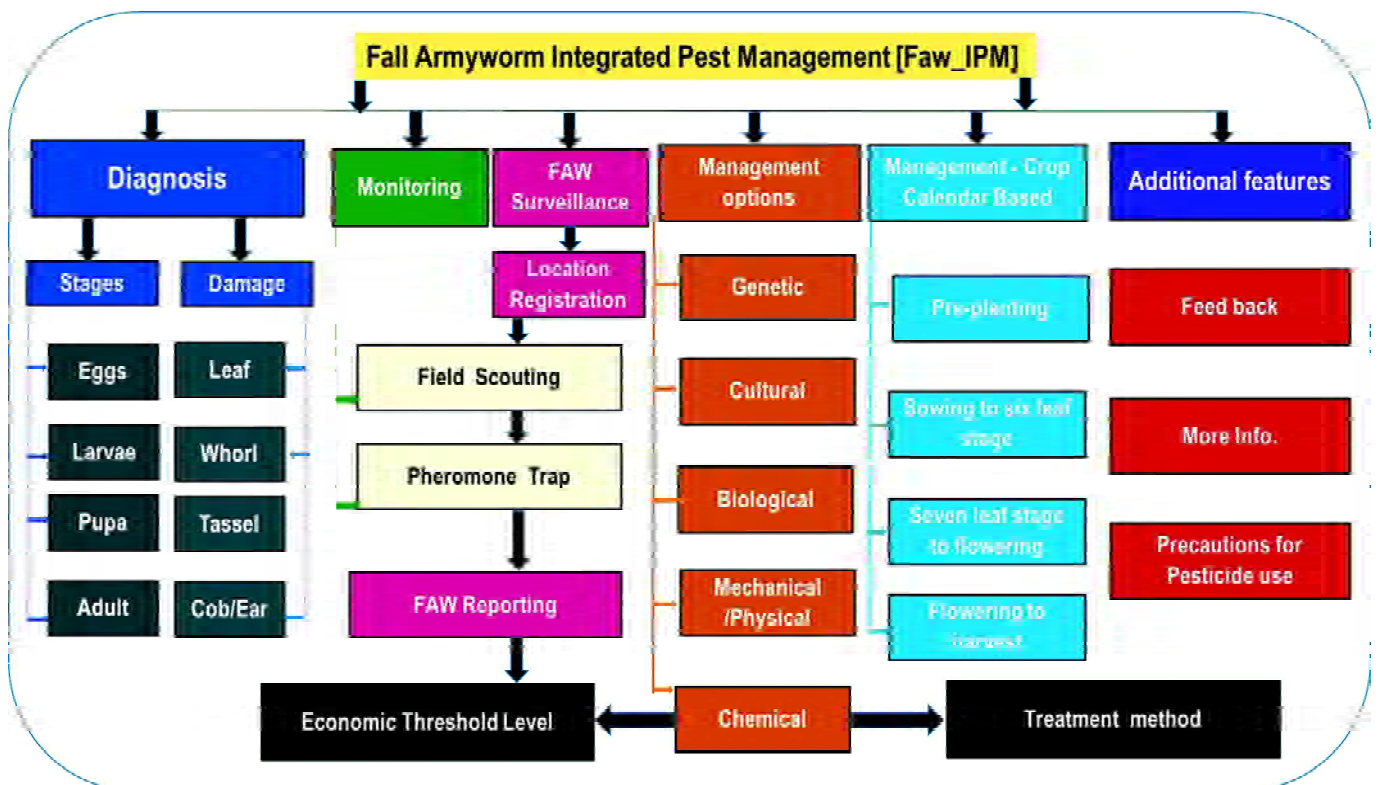
The museum will be a visual treat to the visitors, a knowledge bank of cashew crop and cater to the diagnostic needs of the visiting farmers, students and processors in the most effective manner. The PHCM being developed as an interactive tool of learning enthralls the visitors with long-lasting memory of PHCM.

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Mobile App for Fall Armyworm Integrated Pest Management (Faw_IPM)

The fall armyworm (FAW), *Spodoptera frugiperda* (JE Smith) (Lepidoptera:Noctuidae) invaded Southern India in May 2018 and spread across almost all maize growing locations of the country. FAW continues to be an insect

of economic importance on maize and also has potential to inflict economic damage to other cereal and millet crops. Considering that no eradication has happened elsewhere in the world and that the transboundary



Architecture of Faw_IPM Mobile App