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Expert System for Management of Malformation Disease of Mango (ESMMDM)

For the software, please contact dkcnduat@yahoo.com.

The Expert System for Management of Malformation of Disease of Mango (ESMMDM) helps to predict the disease incidence and suggests appropriate integrated management strategy. The expert system is based on the information generated from long term research on the etiology, epidemiology and management under both laboratory and field conditions as mentioned in details in the Research Publications on Mango Malformation and Comprehensive Account of Research Findings Reported in Papers in the Website.



**EXPERT SYSTEM FOR
MANAGEMENT OF
MALFORMATION DISEASE
OF MANGO**

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The expert system begins by confirming the occurrence of the malformation disease. At the second stage it collects information about the symptoms and in the third stage it draws an inference and presents the user a package for treatment. Then it generates a report of the current case which includes the details of the symptoms and the treatment package. The report is stored in a file named ESMMDM.txt in the current directory. This file can be opened in any text editor like Notepad, Wordpad, Word or VI editor. This file is in the printable form and can be used to generate the hardcopy of the report. However, this file is overwritten every time the software is run. For the second stage a series of questions were designed to reach the correct inference about the particular case. The questionnaire is in the form of multiple choices aided by color photographs on the symptoms. User is required to select

one of the options from an interactive control. Once the user makes a selection, depending on the input answer, the next question will appear on the screen.

The ESMMDM is a window-based, user-friendly, interactive software designed for the Windows platform. The user interface was developed with the questionnaire supported by combo boxes, radio buttons and a few text boxes. There are appropriate color photographs help the user to accurately define the problems. The questions were designed in simple natural language. To keep the system simple enough, only one question is asked at a time. However, to add flexibility to the software the answers to the previous questions can be modified at any time. The software can be used by any person with or without any expertise in the field of computers.

Preliminary testing of this system was done involving small clientele groups in and around Uttar Pradesh. The software can be further upgraded and refined for effective development of IPM strategy after the interaction with farmers and agricultural extension officers who will take this software to actual field use.

Research Publication on ESMMDM:

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