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Appendix A. Simple COM – MoT (Excel Macro) Interface

A user-friendly Excel interface is created in order to handle the MoT Models. This Interface will be further developed in order to take into account the entire Pesticide Formulation Framework. The interface will facilitate the user in Designing a Pesticide formulated products in much more familiar environment of Microsoft Excel without having prior knowledge of Modeling tools like MoT.

The facilities available presently in this interface are described below;

Figure below shows the developed Excel interface for MoT, which will appear on the screen. Five different buttons are available on the interface, which have different functions.
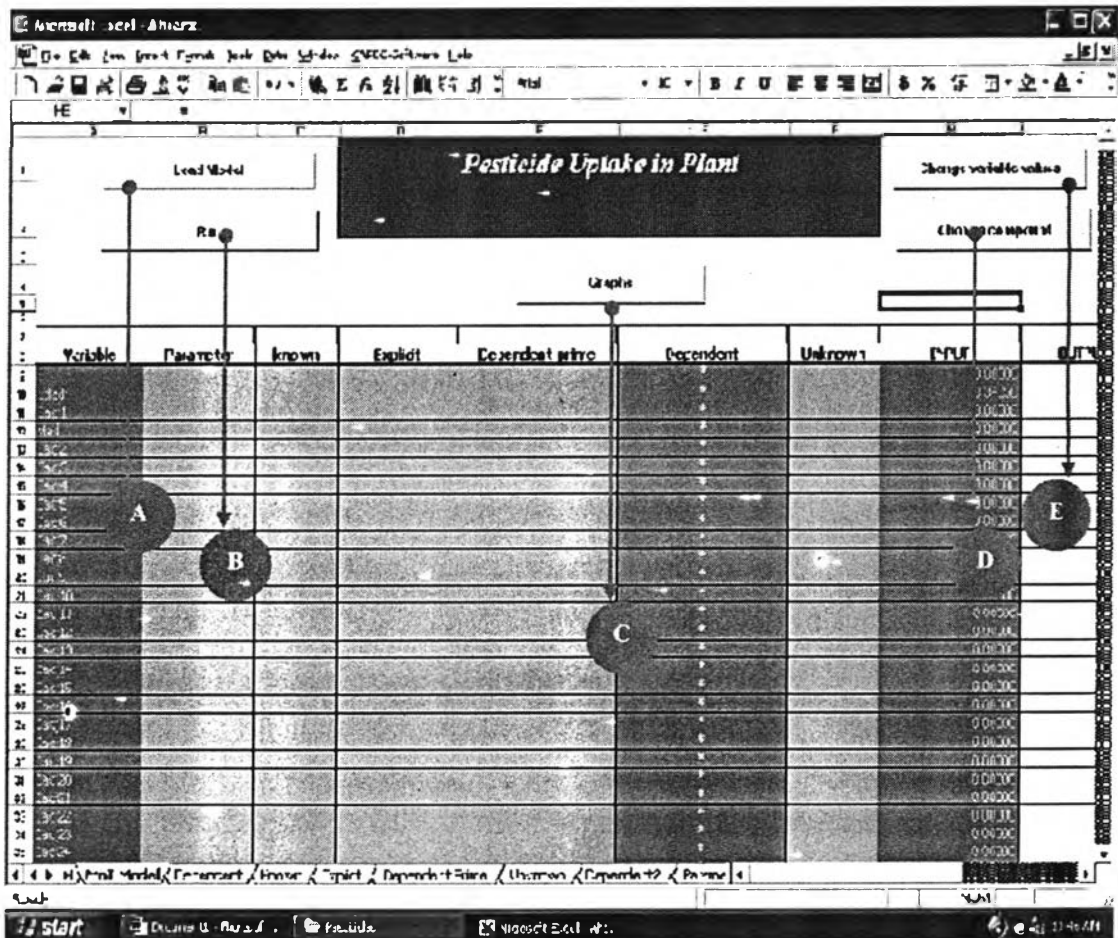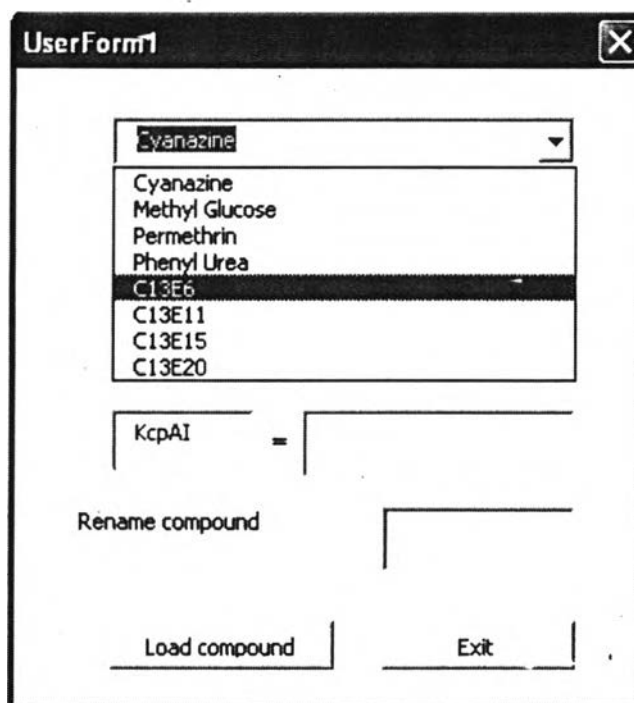

The first step will be to load the model this can be done with the help of load button. After the Load button(A) is pushed the interface will ask the user to choose the type

of model and since presently only Uptake model is present in the interface therefore the following window will appear,

Select MoT model to load [X]

pesticide uptake
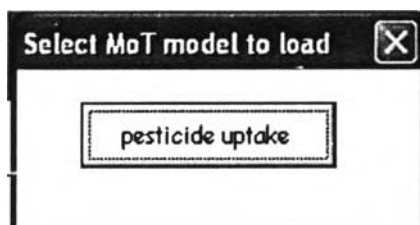
After the Pesticide Model is chosen the model will automatically get loaded. The default model presently available in the interface is for Cyanazine but if at some point the user need to change the pesticide or surfactant than this could be done using the Change compound button(D).On pressing this button the following screen will appear asking the user to select the compound and providing relevant parameter values.

UserForm1 [X]

Cyanazine ▼

Cyanazine
Methyl Glucose
Permethrin
Phenyl Urea
C13E6
C13E11
C13E15
C13E20

KcpAI =

Rename compound

Load compound   Exit

If the user wish to change some of values of variables present in the model than this could be done using Change variable values button (E) and the following screen will appear once this button is pushed.
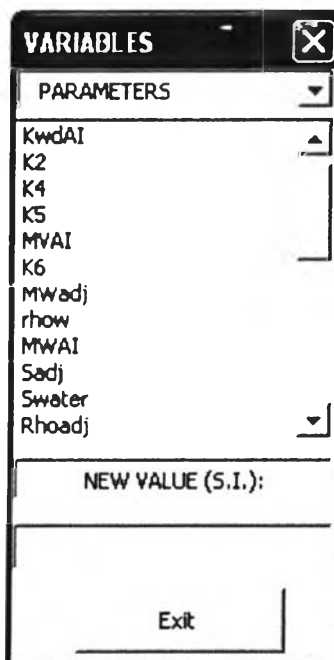
Now after making necessary changes in values if the model needs to be run than this could be done using the Run Button (B),Following screen start when the user will press run button ,
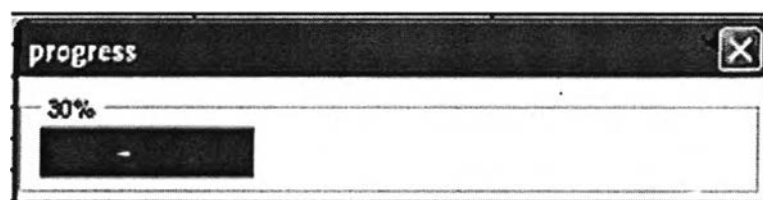
The progress represent that the model is running and solving equations in order to obtain results.The final values required can either be seen on main screen or if user desire to view the graph than this could be done using the Graph Button (C) as shown in next screen where the user can choose the variable depending on his or her interest
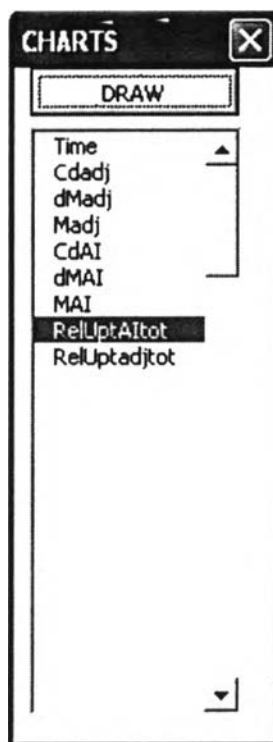
Presently this excel interface handles only uptake model but will be developed further to provide user a simple and efficient procedure for efficient pesticide formulation design.
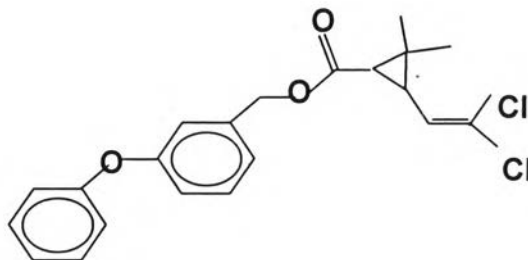
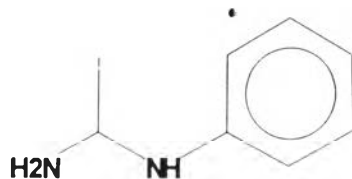# Appendix B. Structures of Active ingredient and Surfactants

C1: Active ingredient

A) Cyanazine
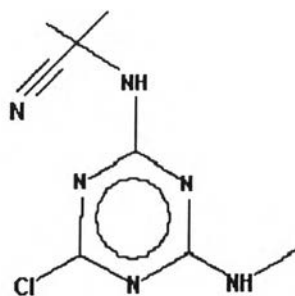
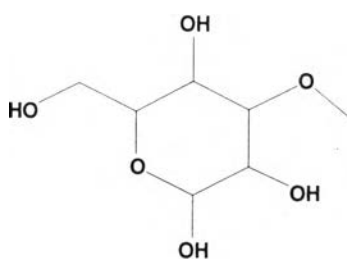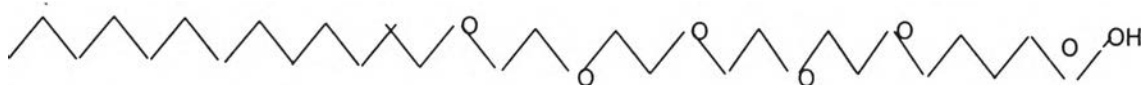B) Permethrin

C) Phenyl Urea
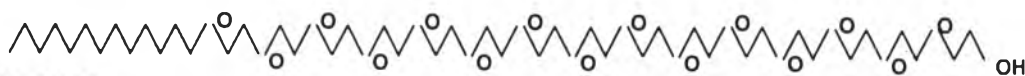
D) Methyl Glucose

C2: Surfactants

E) C13E6
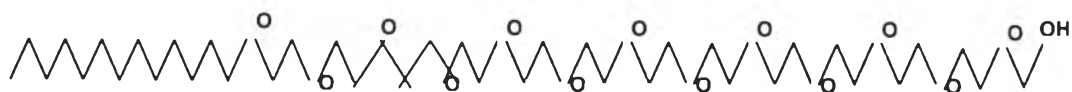

F) C13E11

G) C13E15

H) C13E20

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