PlantsVN – a tool for creating and managing plant database of Vietnam's Flora

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The role of the plant database in the plant diversity conservation

1. Plant database allows to document the plant diversity of an geographic region, but also of a botanic garden
2. Plant database supports the learning process: by creating, updating, browsing plant database the user can enhance his/her knowledge in plant diversity

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The role of the plant database of a botanic garden in the plant diversity conservation

Plant database of a botanic garden can play a very important role in promoting education:

1. Learning plant diversity can be more successful by combining field work and working with plant database
2. This should be easily achieved if we have plant database of botanic gardens: the botanic gardens are located not far and people can often visit them and then create and use own plant database to fix the knowledge.

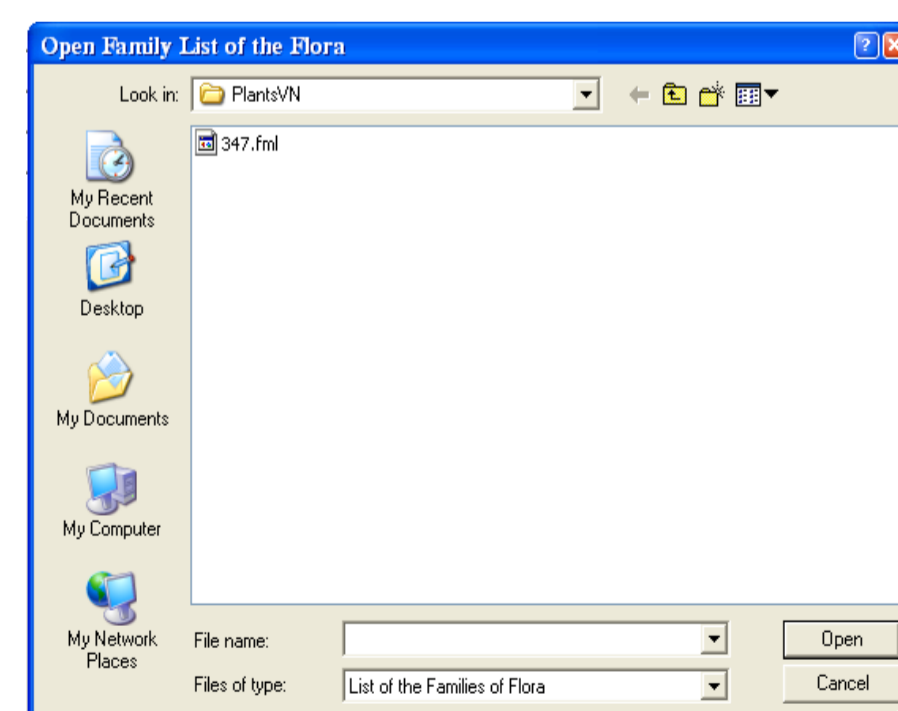## PlantsVN - A tool for creating and managing plant databases of Vietnam's Flora

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PlantsVN

- PlantsVN was designed based on the structure of Vietnam's Flora, from division to family
- Only plant families of Vietnam's Flora have been included
- The families are arranged in an evolutionary order
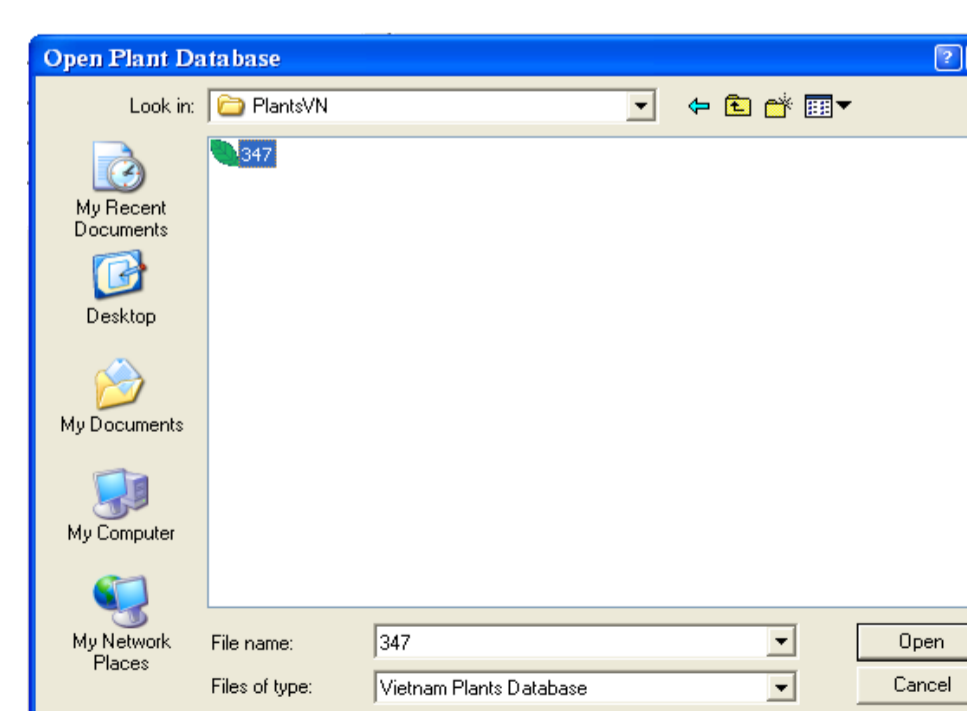

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- The flora structure is saved in a file with extention '347.fml'
- The main name of this file is the number of vascular plant families of the flora
- Based on this file of flora structure we can create initial 'empty' plant database without any genus or species '347.plt'
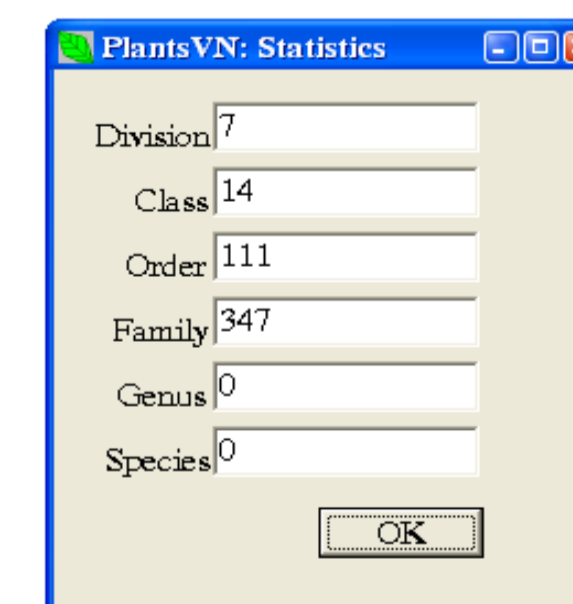

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Loading flora structure file for creating new database
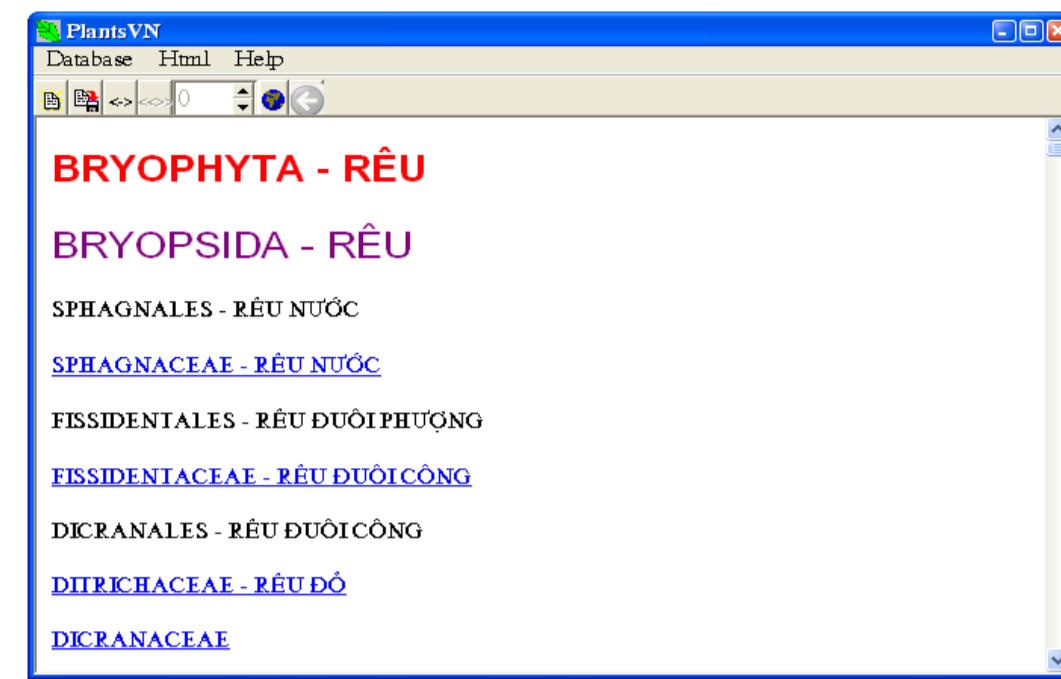

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Empty database '347.plt'

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Statistics of the empty plant database '347.plt' created based on the flora structure file '347.fml'
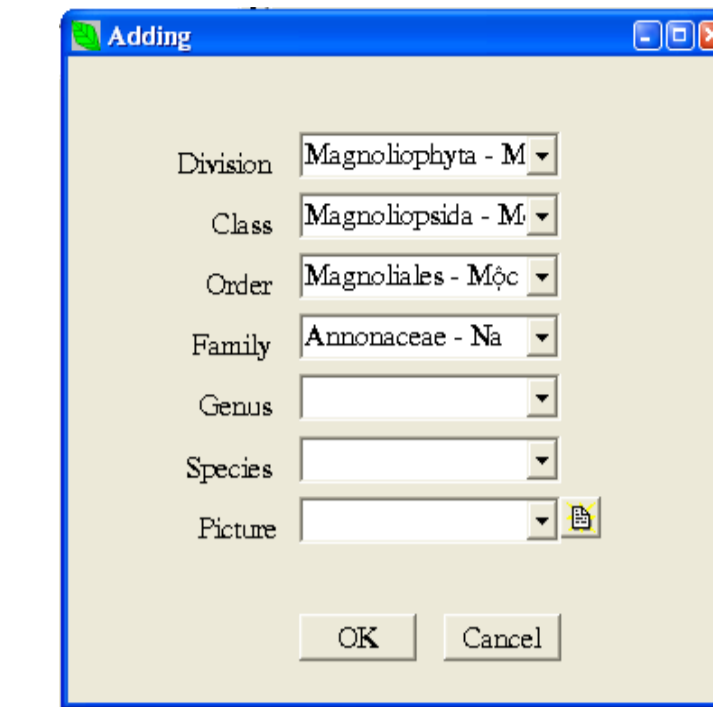
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Displaying empty database in htm-format

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- After creating empty database we can add data to the new database through a dialog box
- Adding data to the database is made by declaring one picture at once: what species does it represent
- For every picture there will be one record created with all systematic information from division to species and also name of the picture file
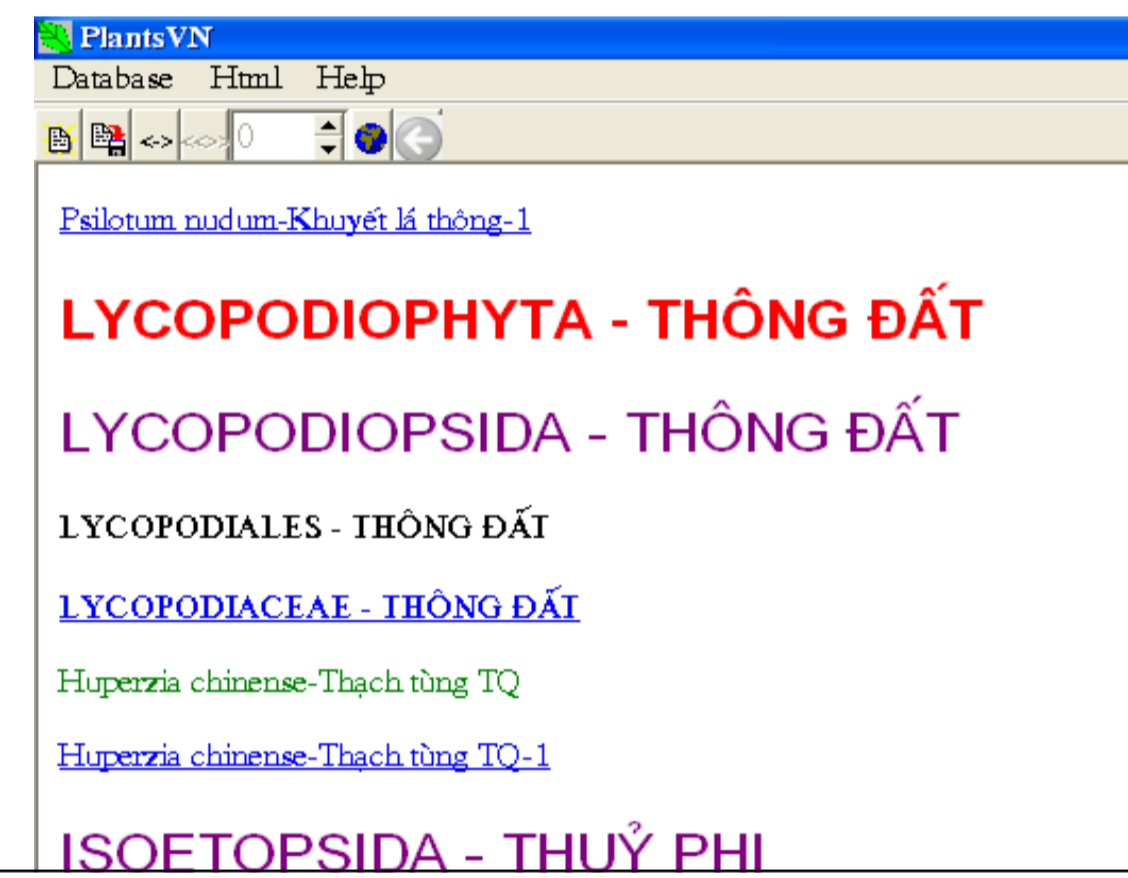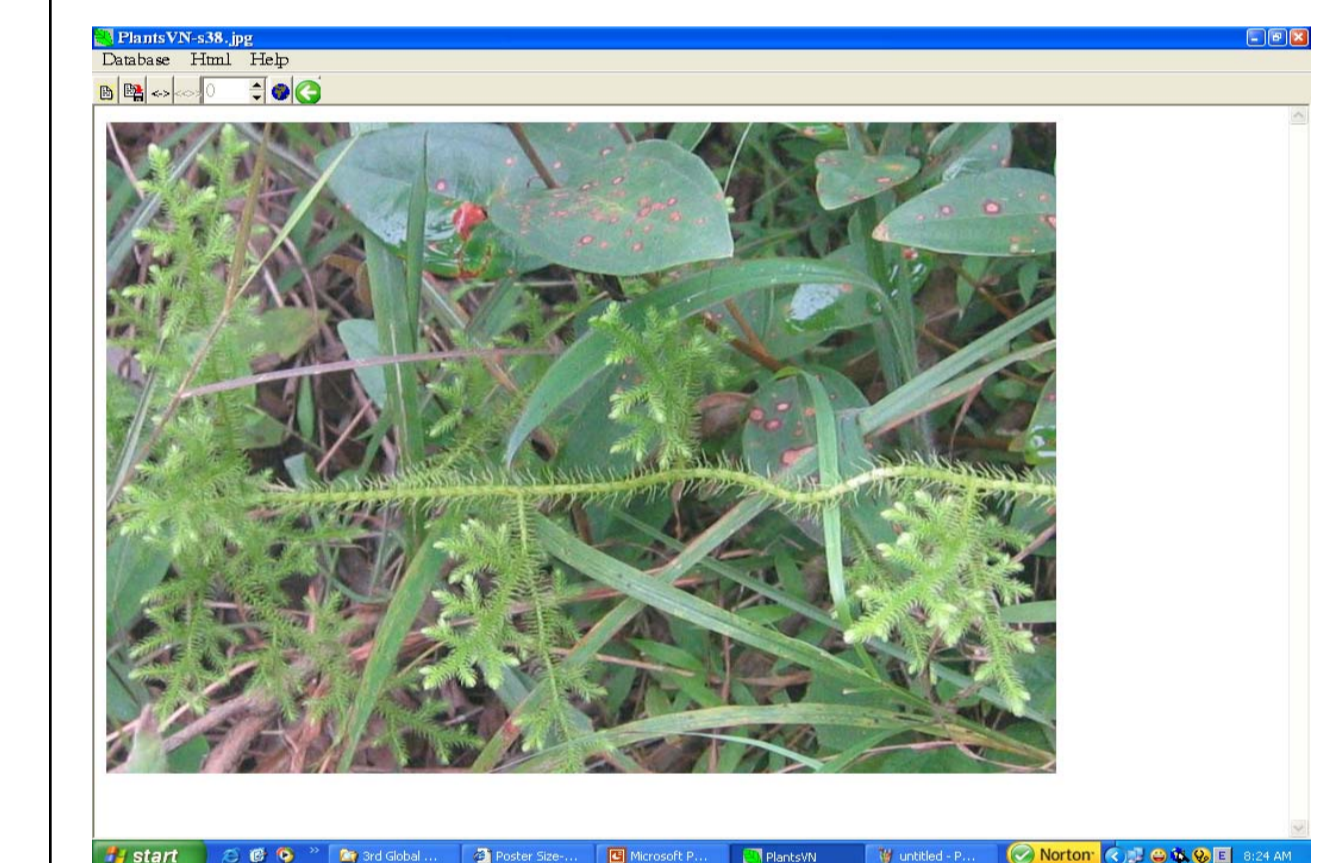

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Dialog box for adding data

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- After adding data the user can display the database in htm-format to acsess pictures of individual species: by clicking on the globe-button on the toolbar or by chosing option 'create' under the menu 'Html'
- Click on a link of the htm-page we can see a picture of the species
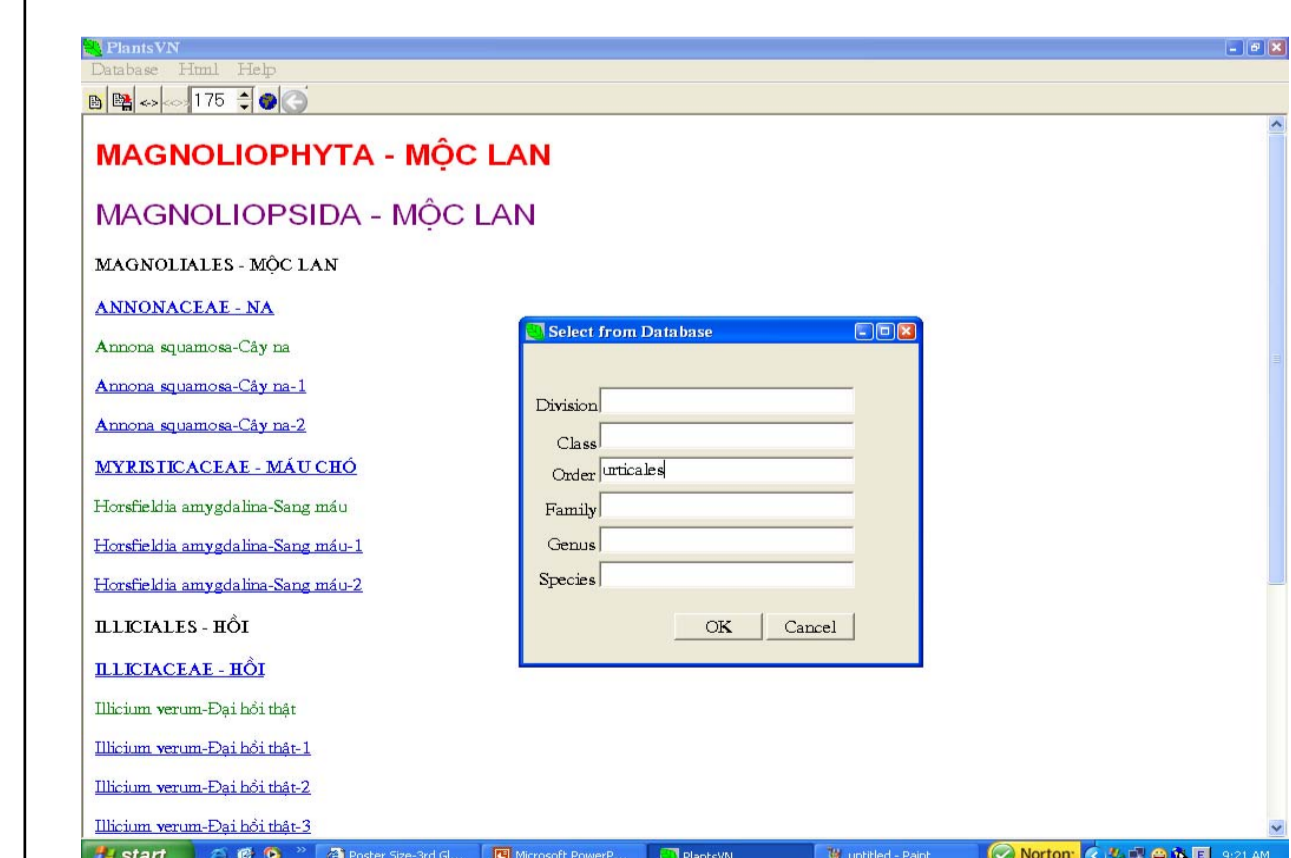

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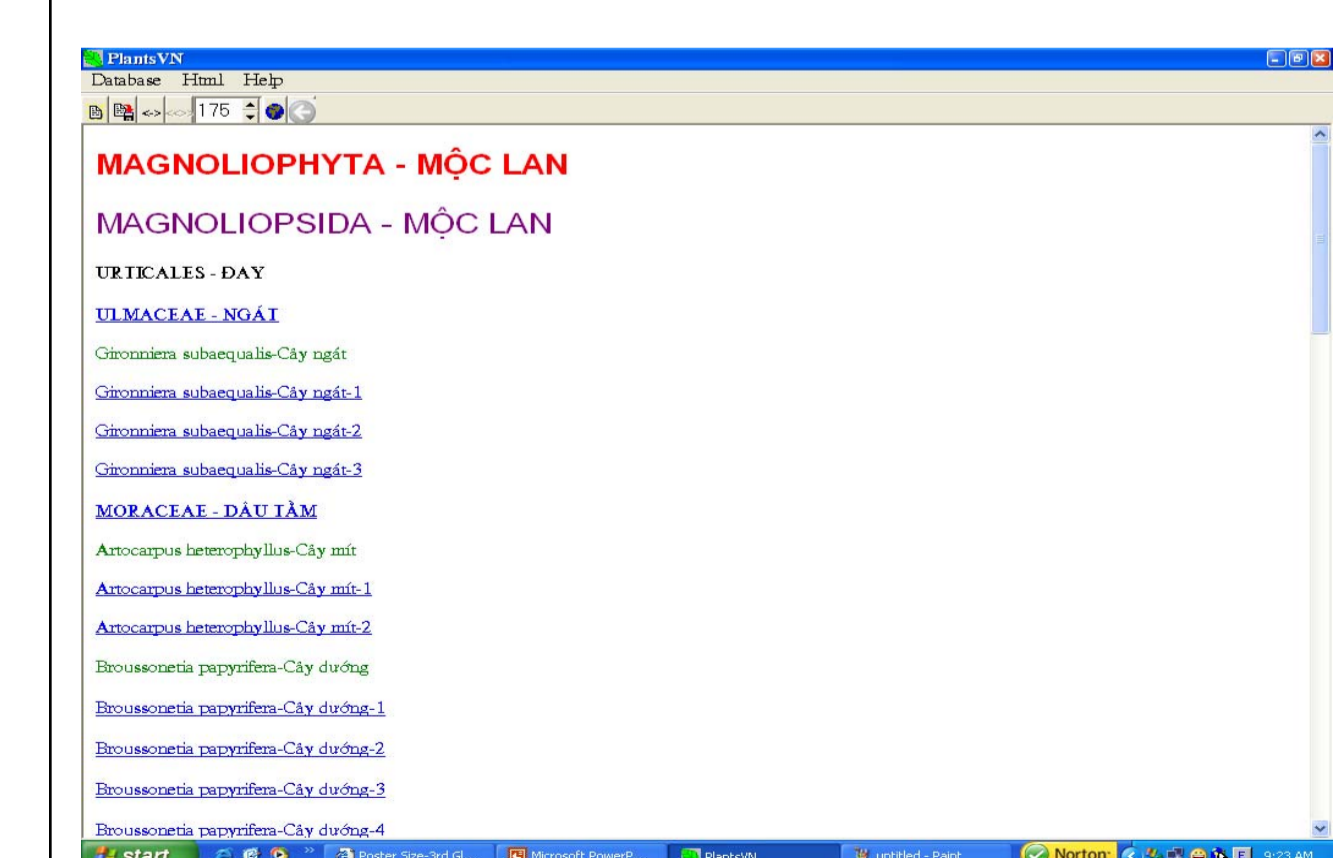

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The user can choose a division, a class, on order, a family, a genus, or a species:

1. Choose the option 'Select from database' under the menu 'Database'
2. Type the name of a taxon in the appropriate edit-field in the appeared dialog box
3. Click the OK-button

→ Links to all the pictures of the species belonged to the current taxon will be displayed in a htm-format page

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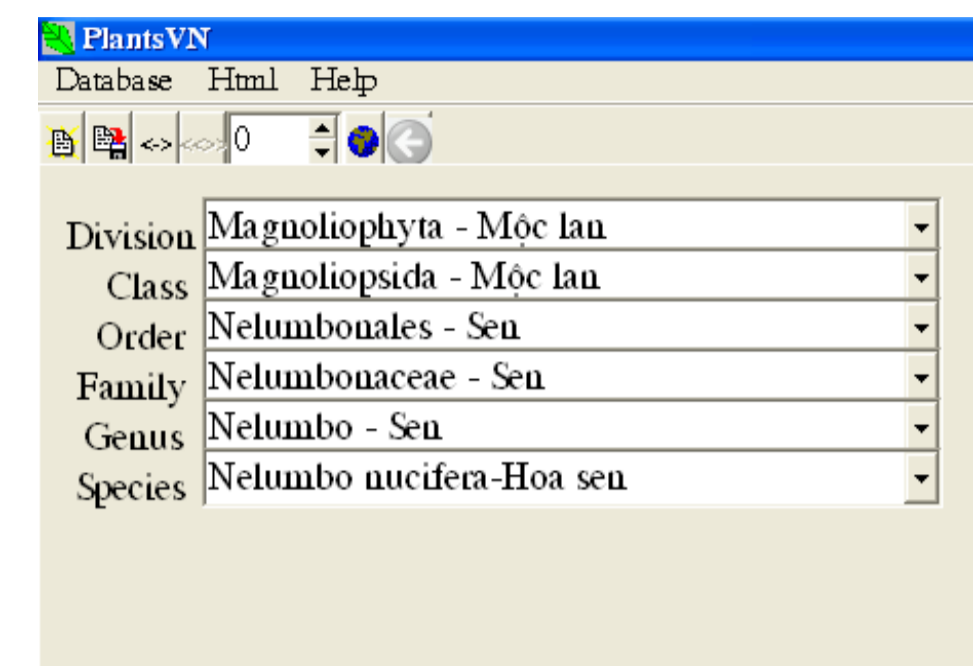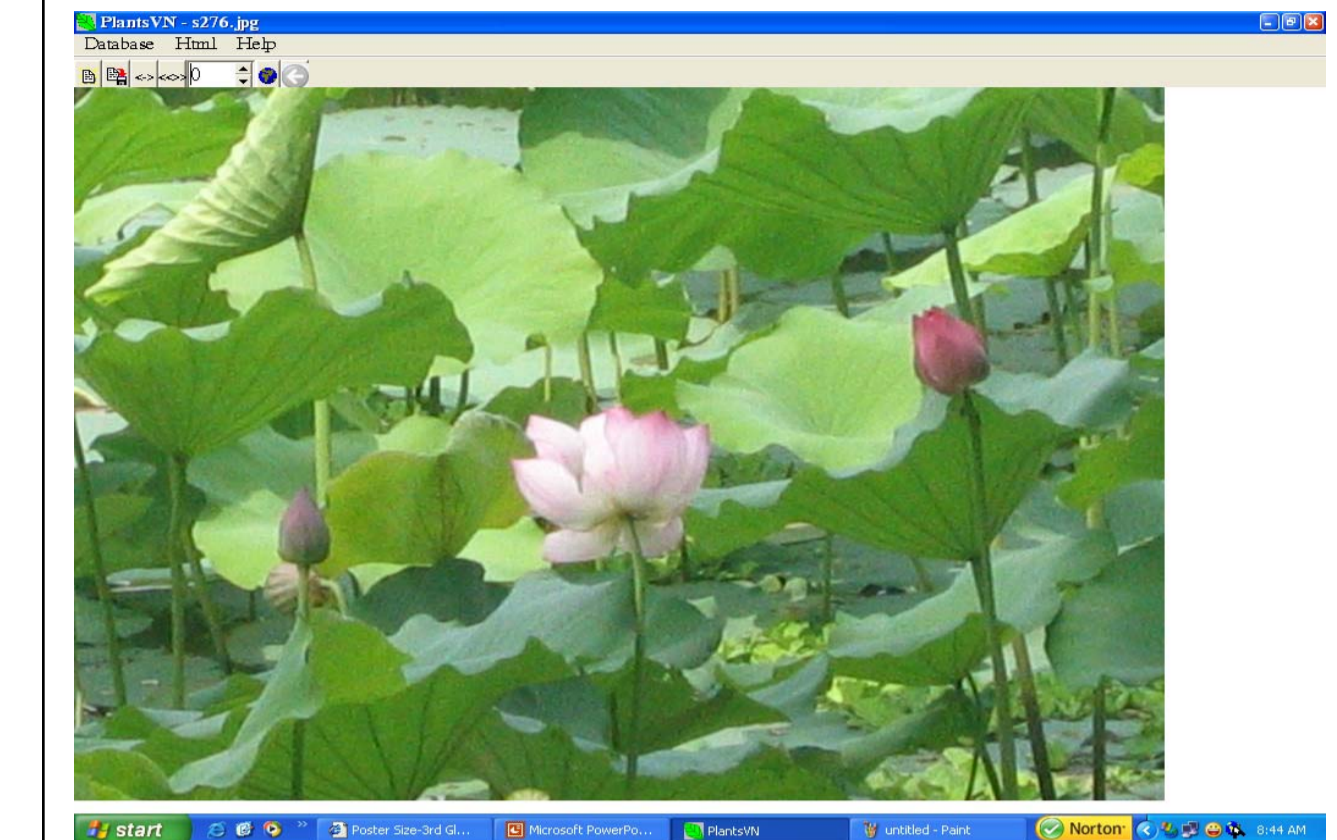## PlantsVN

The user can also choose a species to view all of its pictures with resizing ability:

1. Click on two-way row button ⟷ on the toolbar
2. Choose the species in the panel appeared
3. Click again the above mentioned button
4. Click the double two-way row button ⟷ on the toolbar to switch from one picture to another
5. Change the value in the spin-edit button to change the size of the picture
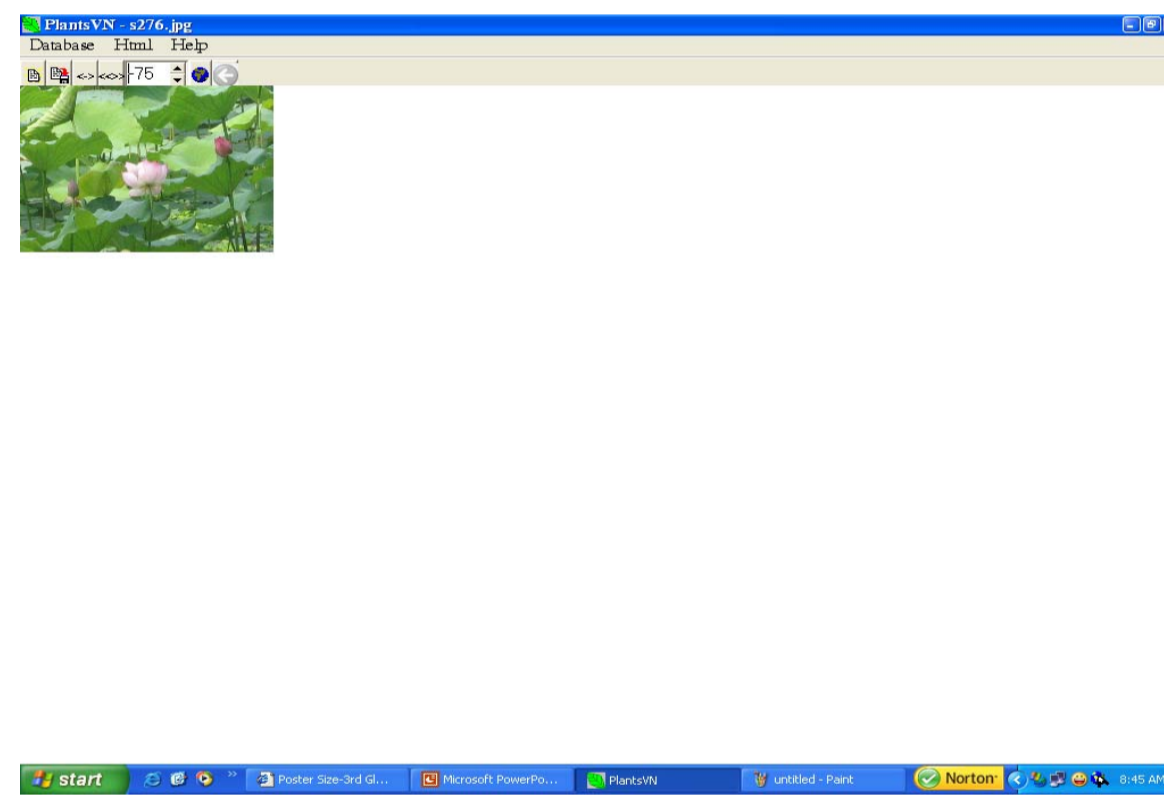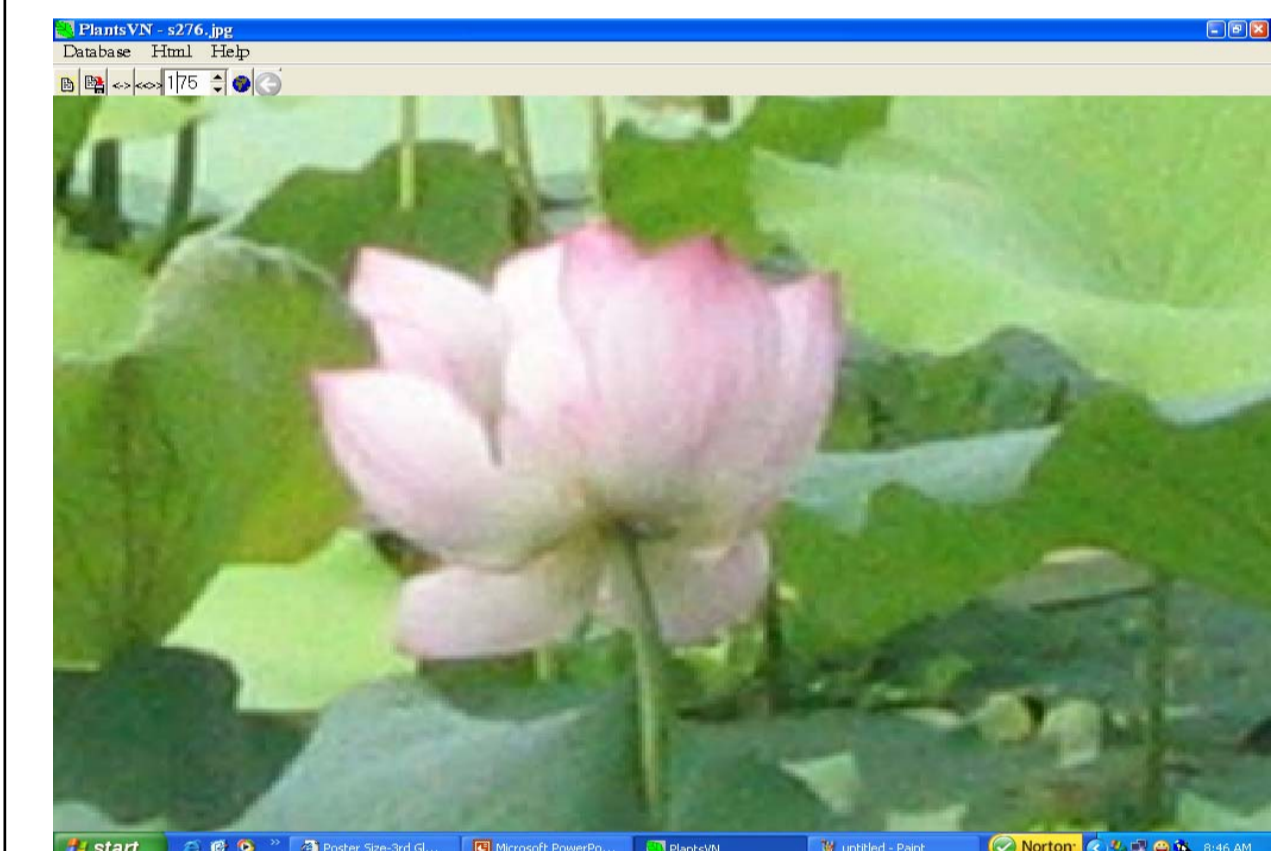6. Click on two-way row button again to choose another species

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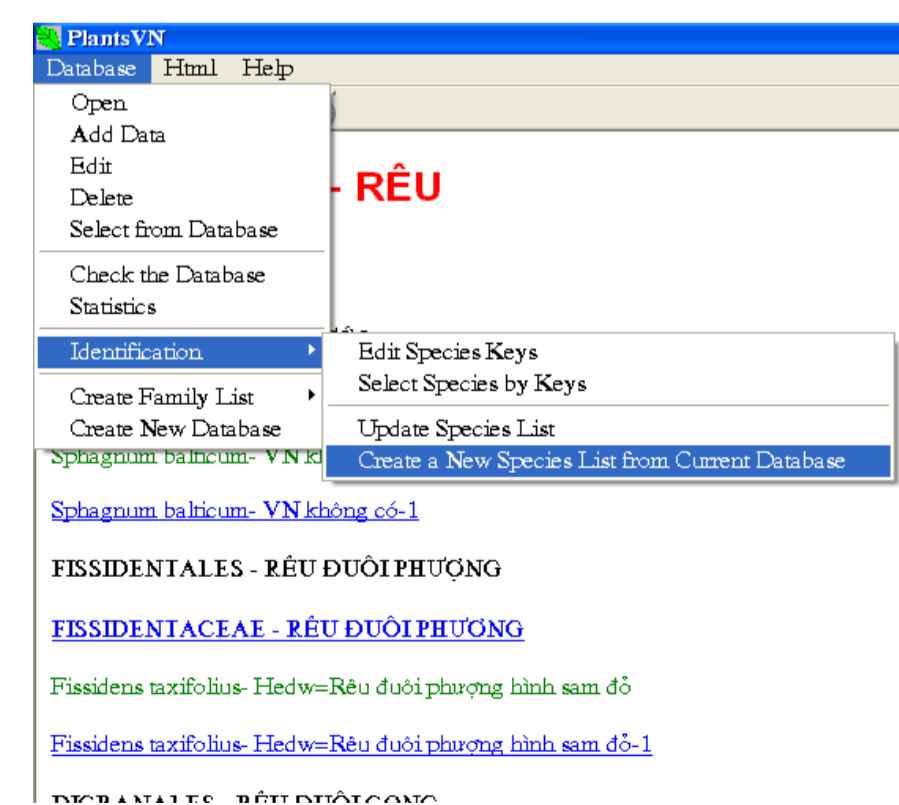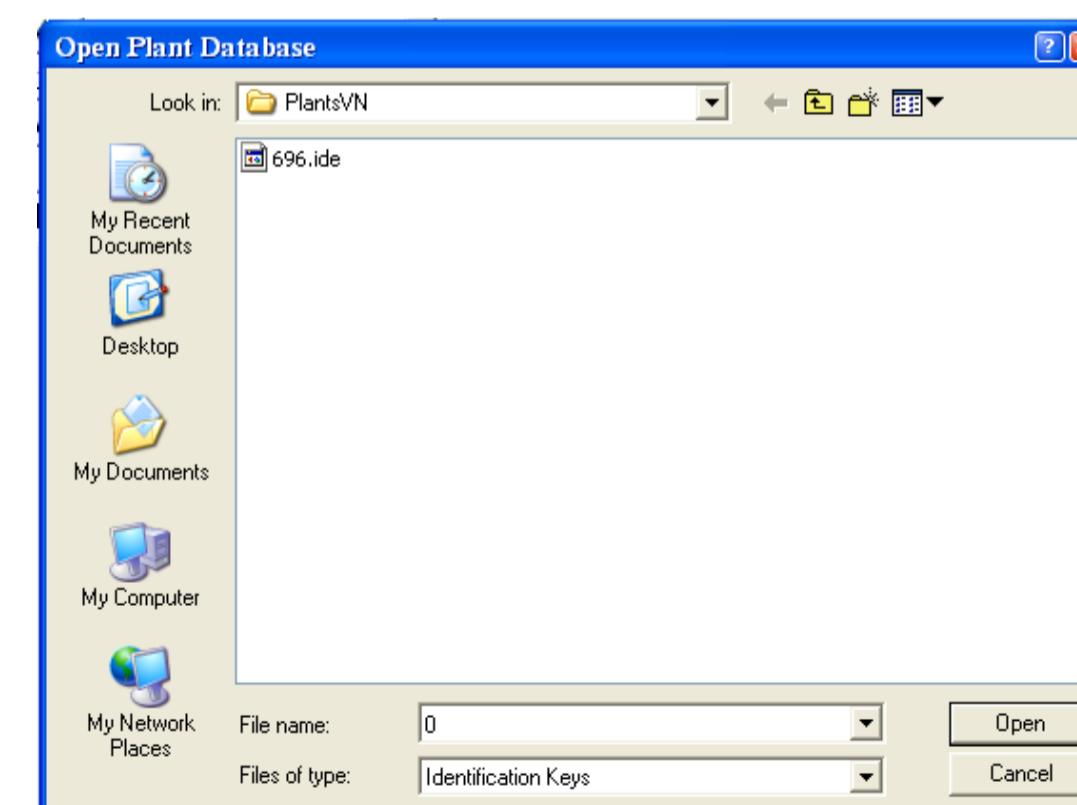

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- The basis for identification is a list of records with two fields: *species name* and *identification string*. The length of the list is depending on the number of species represented by pictures in the database
- When the data has been added to the database, the user can create a species list for identification keys by chosing '*Create a new Species List from current database*' in the submenu '*Identification*' of the menu '*Database*'
- As the result, a file (.ide) of a list of species with empty identification keys field will be created
- To enter the identification keys for a species, choose the option '*Edit species keys*' in the option '*Identification*' of the menu '*Database*'
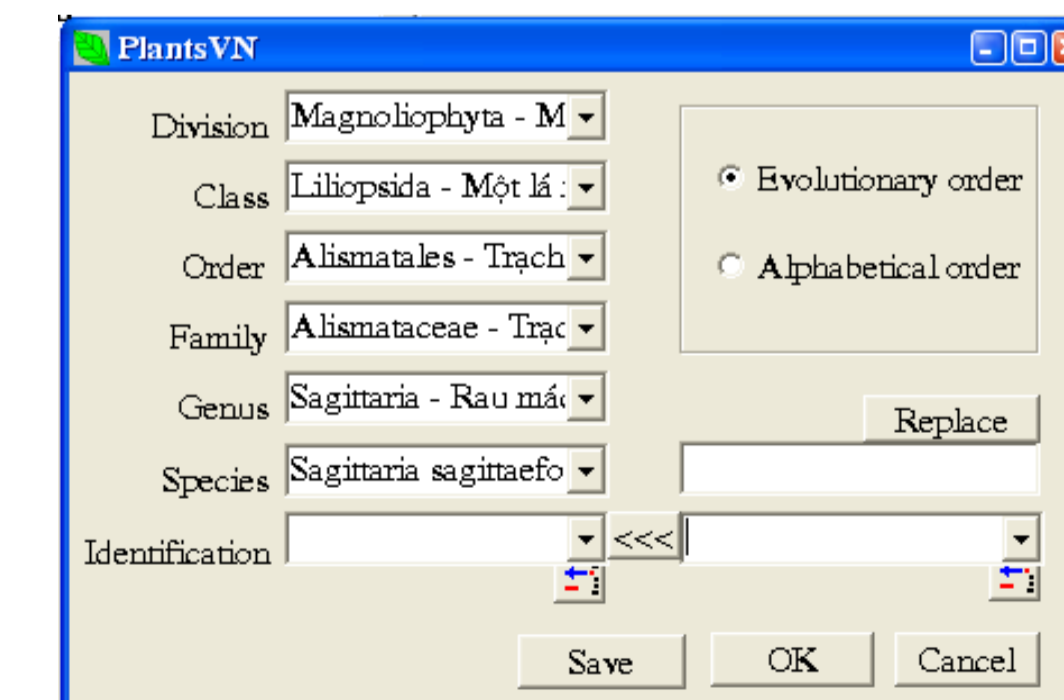

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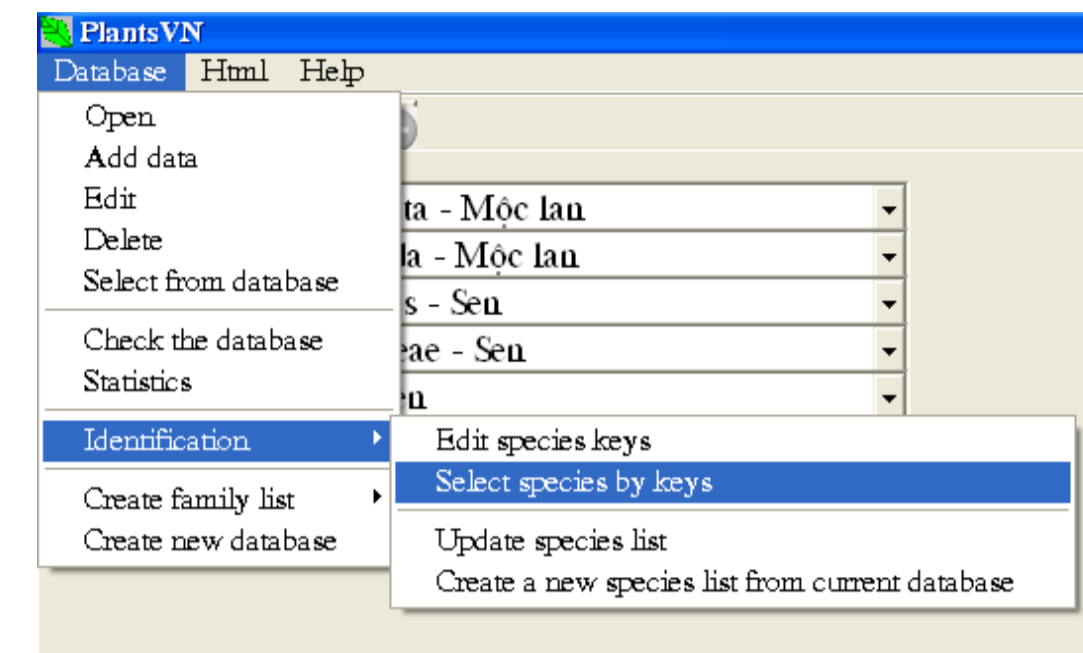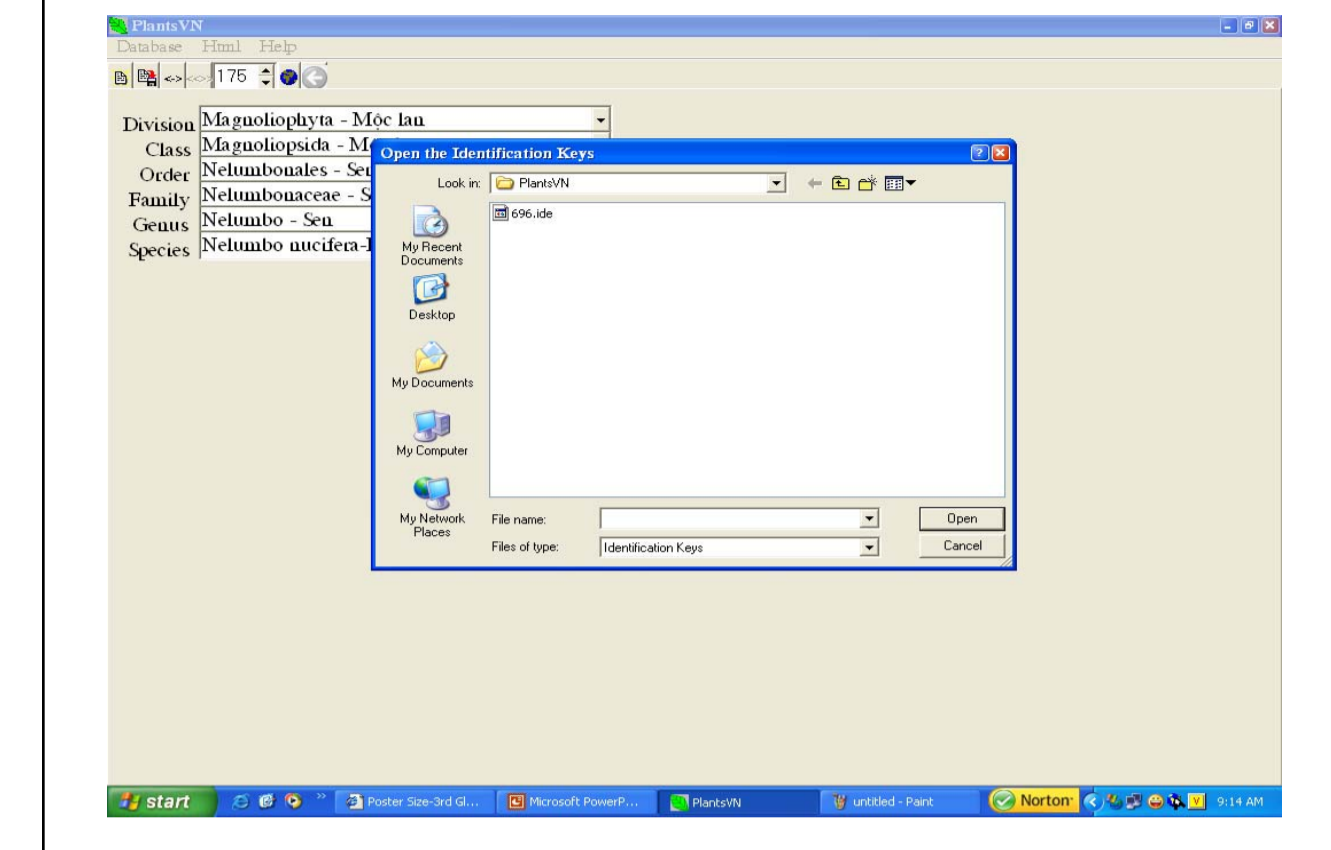

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Once the identification keys entered for some or all species, the user can select species according to the identification keys:

1. Choose option 'Select species by keys' in the option 'Identification' of the menu 'Database'
2. Choose an '.ide' file of a list of species with identification keys in the appeared dialog box
3. Choose the identification keys in the appeared dialog box 'Select by identification keys' and press ok-button to see the species matched in a htm-format page

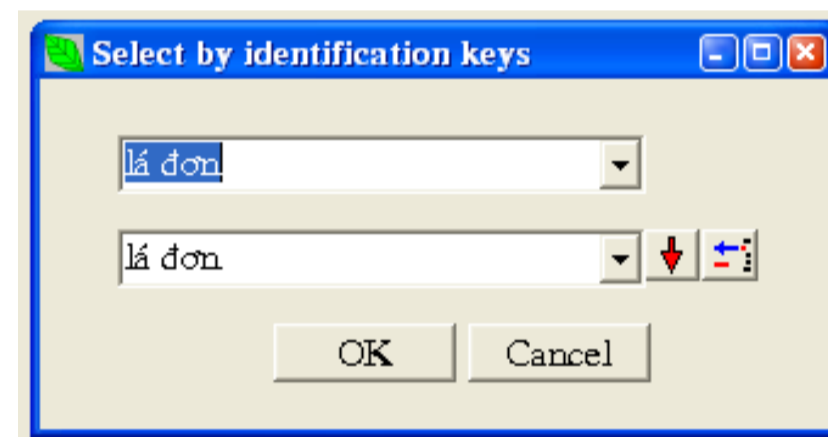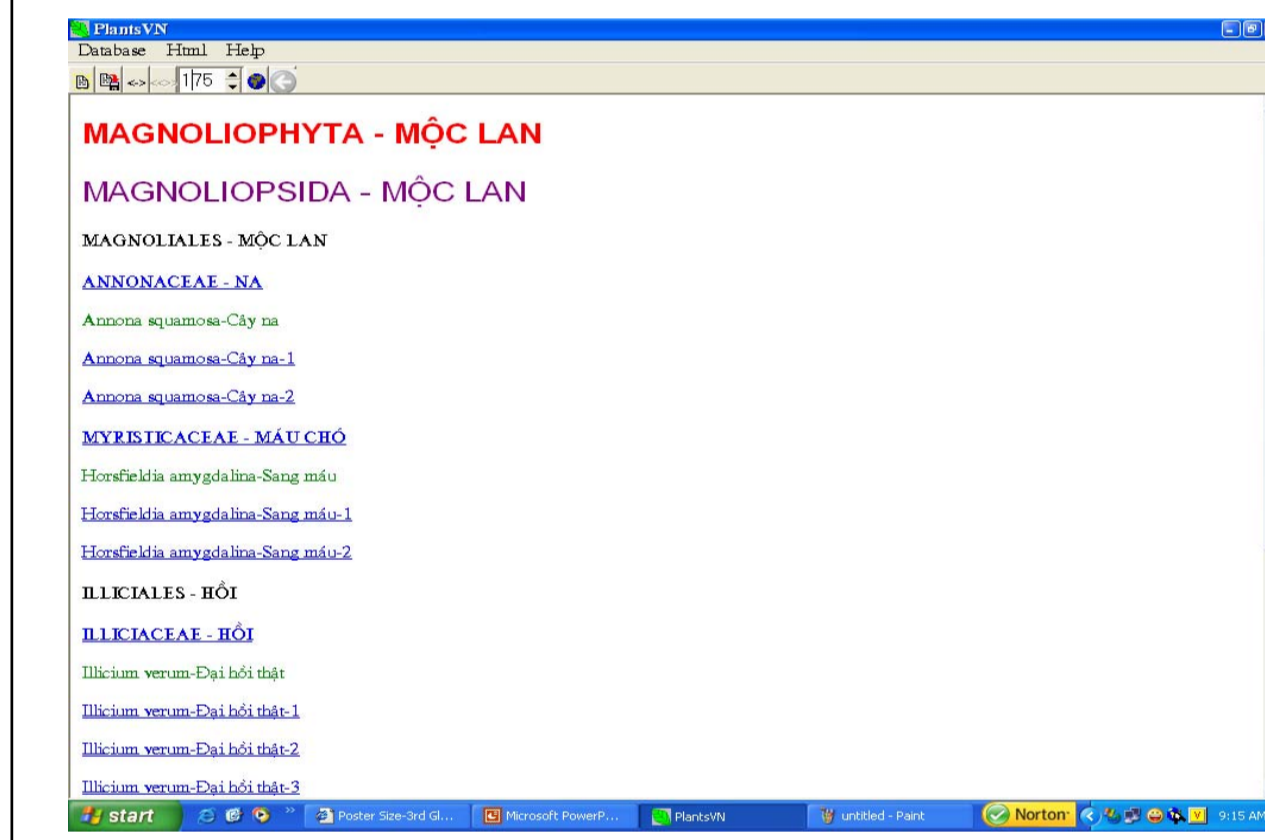## PlantsVN

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THANK YOU!