

 CROPFINDER

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## What is the Crop Finder tool?

- CropFinder is web enabled tool that allow the user to design his output, using the information stored in the database, and try to find information in CropFinder – ICIS DMS database structure with up to 12 query restrictions.
- The two functions of CropFinder are:
  - Design Outputs
  - Design Queries

## Design Outputs.

The user can select what fields wants in his output:

- Factor

The list of distinct factor names from the Factor table.

- Study

The list of fields from the Study table.

- Traits

The list of distinct trait/scale from the Variate table.

# Design Output screen

## Output Field Selection

Select output name

Type Output name

New Output

Field Output order

Remove Output

Save

Exit

Select Output fields

- Factors
- Study
- Traits

## Select Output fields option (wheat example):

Select Output fields

Factors

- CROSS NAME
- CYCLE
- LOCATION
- SELECTION HISTORY
- STUDY
- SUMMARY
- BLOCK
- CID
- ENTRY NUMBER
- GID
- LOCNO

Select Output fields

Factors

Study

- EDATE
- INVESTID
- OBJECTIV
- PMKEY
- SDATE
- SNAME
- STUDYID
- STYPE
- TITLE

Traits

Select Output fields

Factors

Study

Traits

- 1R(1B)\_VEERY\_TRANSLOCATION\_TEXT
- ALTERNARIA\_TRITICINA\_0-9T
- ALTERNARIA\_TRITICINA\_N/T/S/M/V
- ALUMINIUM\_TOLERANCE\_0-9T
- APHID\_INCIDENCE\_N/T/S/M/V
- AWNS\_TEXT
- BARLEY\_LEAF\_RUST\_Modified\_Cobb\_Scale
- BARLEY\_STRIPE\_H\_GRAMINEARUM\_0-9T

- GRAIN\_SIZE\_1-5 Real
- GRAIN\_YIELD\_g/plot
- GRAIN\_YIELD\_kg/ha
- GRAIN\_YIELD\_kg/plot
- GRAIN\_YIELD\_qq/ha
- GRAIN\_YIELD\_t/ha
- GRAINS/M2\_integer
- GRAINS/SPIKE\_NO\_GRAINS/SPIKE
- GRAINS/SPIKELET\_integer
- GROUND\_COVER\_AT\_5\_LEAF\_STAGE\_%
- GROWTH\_STAGE\_ZADOKS\_OR\_DECIMAL\_C

# Query screen

## Advanced query

Select Output :

	Numeric values	Operator	Units
Factor & Study data 1	<input type="text"/>	<input type="text"/>	<input type="text"/>
Factor & Study data 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
Factor & Study data 3	<input type="text"/>	<input type="text"/>	<input type="text"/>

### Text values

Factor & Study data 4	<input type="text"/>	<input type="text"/>
Factor & Study data 5	<input type="text"/>	<input type="text"/>
Factor & Study data 6	<input type="text"/>	<input type="text"/>

	Numeric values	Operator	Units
Traits data 1	<input type="text" value="GRAIN_YIELD_t/ha"/>	<input "="" type="text" value="&gt;="/>	<input type="text" value="18"/>
Traits data 2	<input type="text" value="PLANT_HEIGHT_cm"/>	<input "="" type="text" value="&lt;="/>	<input type="text" value="120"/>
Traits data 3	<input type="text" value="DAYS_TO_MATURITY_days"/>	<input "="" type="text" value="&lt;="/>	<input type="text" value="180"/>

### Text values

Traits data 4	<input type="text"/>	<input type="text"/>
Traits data 5	<input type="text"/>	<input type="text"/>
Traits data 6	<input type="text"/>	<input type="text"/>

## Query output

Download

GRAIN_YIELD_t/ha	PLANT_HEIGHT_cm	DAYS_TO_MATURITY_days	TID	CROSS NAME	GID	SELECTION HISTORY	SNAME
10.11	85	115	12008				21 ESWYT
10.11	85	115	12008	OASIS/SKAUZ//4*BCN	393205	CMSS93Y04054M-1M-0Y	21 ESWYT
10.19	91	115	12008				21 ESWYT
10.19	91	115	12008	OASIS/STAR//3*STAR	369670	CMSS92M04523M-1Y-8M-1Y-0Y	21 ESWYT
10.27	75	120	12008				21 ESWYT
10.27	75	120	12008	PUNJAB 96	376804	-OPAK	21 ESWYT
10.36	97	110	12008				21 ESWYT
10.36	97	110	12008	INQALAB 91	1491661	PB19545-9A-0A-0PAK	21 ESWYT
10.41	99	115	12008				21 ESWYT
10.41	99	115	12008	SIRKKU	1127595	CMBW91Y01627S-13Y-010M-010Y-010M-2Y-0M	21 ESWYT
10.49	96	115	12008				21 ESWYT
10.49	96	115	12008	PFAU/WEAVER	342202	CMBW90M4-30-0Y	21 ESWYT
10.5	96	115	12008				21 ESWYT
10.5	96	115	12008	PFAU/WEAVER	342202	CMBW90M4-30-0Y	21 ESWYT
10.60	95	115	12008				21

## Advantages

- The user can select any field in the database
- Many query conditions are possible
- Download facility for output
- Easy to use
- Scripts available in order to create the database and Control tables of CropFinder

## Disadvantages

- DMS data will be imported into Sql Server database.
- Windows environment in the server side.
- .....

## Improvements

- Changes on backend (database structure) in order to improvement the time response.
- Include the “%” character for search in character fields.
- Timeout property for search engine could be change in parameters file.

## Next steps..

- Test with other databases engines like MySql or PostgreSQL.
- Add Ajax technology.
- Test with others ICIS DMS crops
- Development an administrative interface in order to make “user friendly” management of the tool. E.g. Add/remove fields.
- Implement improvements like : Column order in the output, description of acronyms, statistics, etc. suggested by IRRI partners
- Other suggestions?

## URL for :

- Wheat :

<http://sas.cimmyt.org/cfiwis>

- Maize :

<http://sas.cimmyt.org/cropfinderimis>