

TWC/23/16 ORIGINAL: English DATE: June 3, 2005 INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS GENEVA

# TECHNICAL WORKING PARTY ON AUTOMATION AND COMPUTER PROGRAMS

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DATABASE TO SEARCH FOR TWC DOCUMENTS

Document prepared by experts from Germany

#### DATABASE TO SEARCH FOR TWC DOCUMENTS

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#### Introduction

1. The following is a proposal for the development of a database to search for documents of the UPOV Technical Working Party on Automation and Computer Programs (TWC). With this database it would be possible to store all documents with additional information and to search for documents and their history.

#### Present status of 'Index to TWC documents'

2. Starting with the information from document TWC/20/5 "TELECOMUNICATIONS, EXCHANGEABLE SOFTWARE AND CONTACTS" Part "Index to TWC Documents 1986 to 2001" we can have different arrangements in groups. The document TWC/20/5 consists of five parts. Here we develop a database regarding the second part of the document TWC/20/5 'Index to TWC Documents'. Figure 1 shows the structure of tables in TWC/20/5.

Figure 1: Structure of tables in document TWC/20/5 'Telecommunications, Exchangeable Software and Contacts'

Ref	Group	Title	Author	Date			
DISTINCTNESS							
18/02	A	Use of COY-D and COY-U approach in more than one location in forage crops	Gregoire	09.05.00			
18/04	A	Efficiency of incomplete block designs in winter rape, spring rape and yellow mustard	Kristensen	11.05.00			
18/05	-	On the possibility of application of incomplete block designs in DUS trials with groups of genotypes	Pilarczyk	16.05.00			
18/06	A/V	The Efficiency of different designs in DUS Trail on pea varieties	Pilarczyk	16.06.00			
18/07	-	Design and Analysis of DUS special tests	Talbot	16.05.00			
18/10	-	The combined-over-years- distinctness and uniformity criteria (revised document TWC/15/7)	Talbot, Watson	19.05.00			
17/08	A	Efficiency of IB designs in spring rape and yellow mustard	Kristensen	02.06.99			
17/10	_	Early decision-making in DUS testing	Talbot	03.06.99			
17/11	A	Reduction of herbage DUS trial size by cyclic planting of reference varieties	Watson	22.06.99			
16/12	A	Efficiency of different designs in spring rape	Kristensen, Jensen	18.05.98			
16/04	-	Some remarks on COYD	Piepho	05.05.98			
16/03	-	Distinctness and GxE interactions	Piepho, Laidig	06.05.98			
16/02	A	Application of incomplete block designs in DUS trials	Pilarczyk	29.03.98			
15/07	-	Users notes for COYD and COYU procedures	Talbot, Watson, Weatherup	09.05.97			
15/06	-	Use of COYD and COYU amongst UPOV members	Law	13.05.97			
14/16	-	COYD long-term LSD	Kristensen	04.06.96			

14/7	-	The combined over-years distinction criterion	Talbot	08.05.96
13/07	A	Analysis of single-year trial results using long-term LSD for herbage species	Weatherup	18.04.95

- 3. The following groups have been defined up to now:
- 1. Grouped by subject matter:
  - Distinctness
  - Uniformity
  - Identifying similar varieties
  - Sequential acceptance sampling
  - Visually scored data
  - Image analysis
  - Biochemical and molecular data
  - Miscellaneous
  - Other subjects are possible
- 2. Grouped by crops
  - G general
  - A agriculture
  - V vegetables
  - F fruit
  - O ornamental and forest tree
  - Other groups are possible
- 3. Grouped by session
  - TWC/18 Session
  - TWC/19 Session
  - TWC/20 Session
  - TWC/21 Session
  - TWC/22 Session
  - Other sessions are possible

New database for 'Index to TWC documents'

- 4. For storing the information in the database we use five tables (T01 to T05):
- T01\_Documents storage the information to the special document
  - Document Id primary key
  - Document\_Code reference number assigned by the UPOV office
  - Document\_Title title of the document
  - Document\_Date date of writing the document
  - Document\_Object an OLE-Object with the document in PDF-format
- T02\_Authors storage the information to the authors of the documents
  - Author\_Id primary key
  - Author\_Name name of the author

- Author\_Organ name of the organisation
- Author\_Country name of the country from the author
- Author\_City name of the city from the author
- T03\_Sessions storage the information to sessions where the document was presented
  - Session\_Id primary key
  - Session\_Code UPOV-code to identify the session
  - Session\_Country country where the session was
  - Session\_City city where the session was
  - Session\_Date the month and the year when the session was
- T04\_Groups storage the information to the groups by crops
  - Group\_Id primary key
  - Group\_Code a short code of the groups by crops
  - Group\_Description the description of the groups by crops
- T05 Subjects storage the information to the subjects
  - Subject\_Id primary key
  - Subject\_Description the description of the subjects

To link the five tables, four other tables are necessary:

- T06\_Document\_Group (Document\_Id, Group\_Id)
- T07\_Document\_Author (Document\_Id, Author\_Id)
- T08\_Document\_Session (Document\_Id, Session\_Id)
- T09\_Document\_Subject (Document\_Id, Subject\_Id)

The linking is for all tables on the same way. As an example the relation between the tables T01\_Documents and T04\_Groups:

T01\_Documents(Document\_Id) 1- $\infty$  (Document\_Id)T06\_Document\_Group(Group\_Id)  $\infty$ -1 (Group\_Id)T04\_Groups

We use a 1 to  $\infty$  relation because it is possible that one document is in more than one group and in one group there is more than one document.

The table T10\_Document\_Documentprev is a special table for the history of the documents.

- Document Id identify the document
- Document\_Id\_previous identify the previous document

One document can have more than one previous version and one document can be for more than one the previous version.

In Figure 2, the current structure of the database is shown with tables and relations between them.

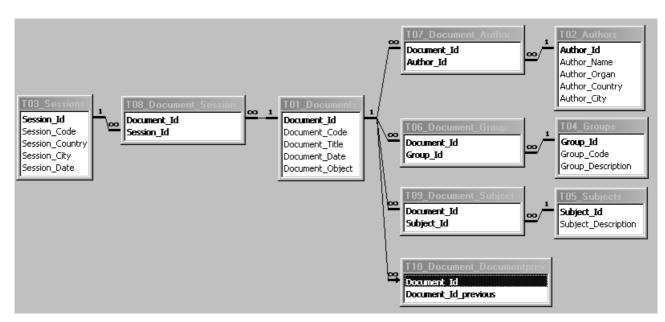


Figure 2: Relations between the tables in the database

5. Figure 3 shows the form to search on the database. In this version we have the possibility to search for session-code, subject-description, group-description, code of the document, name of the author, title of the document and the period of writing the document. The search terms can be combined with "or" or with "and". In the middle of the form, the search results are displayed. The further Information to the documents are on the registers. With double-click on Document\_Object it is possible to open the document as a PDF-file. Figure 4 shows the form opened by clicking on the button "Other Document". Here are displayed all documents which are connected to the actual record. The search results from the forms in Figure 3 and Figure 4 can also be printed.

88 F	F21_Search					<u>_ 0 ×</u>
Ses	ssion Code	Subject Description Group Description Document Code Au	thor Name		oR	Clear Search
Doc	cument Title	From	To	· ·		Print
	Document Code	Document Title	Doc Date	Doc Object	Other Document	
►	TWC/17/8	Efficiency of incomplete block desings in Spring Rape and Yellow Mustard	01.06.1999			
	TWC/17/2	On efficiency of resolvable incomplete block designs in DUS trial on	01.06.1999			
	TWC/18/02	Use of COY-D and COY-U aproach in more than one location in forage crops	09.05.2000			
	TWC/18/4	Efficiency of incomplete block desings in Winter Rape Spring Rape and Yellow	11.05.2000	723		
	TWC/18/6	The efficiency of different designs in DUS trial on pea varieties	16.05.2000	723		
	TWC/18/9	Types of Characteristics and Their Scale Levels	12.06.2000	1921 -		
	TWC/18/06	The Efficiency of different desings in DUS Trail on pea varieties	16.06.2000			
	TWC/19/3	The efficiency of incomplete block desings in DUS trial on pea varieties	17.04.2001	1921 -	:8	
	Subjects Groups	Authors Sessions				
	Subject Description					
	Distinctness					
	<u> </u>					
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Figure 3: Form to search in the database

88	F01_Documents				
	Document Code	Document Title	Doc Date	Doc Object	Doc_Code previous
►	TWC/18/9	Types of Characteristics and Their Scale Levels	12.06.2000	122	
	TWC/19/10	Types of Characteristics and Their Scale Levels	04.06.2001	715 1	TWC/18/9
	TWV/35/17	Types of Characteristics and their Scale Levels	25.06.2001	755	TWC/18/9
	TWA/30/8	Draft for TGP/8 "Good Statistical Practices For DUS Testing" Section 4: Types	03.09.2001	122	TWV/35/17
	TWA/30/8	Draft for TGP/8 "Good Statistical Practices For DUS Testing" Section 4: Types	03.09.2001	75	TWC/19/10
	TW0/34/10	Draft for TGP/8 "Good Statistical Practices for DUS Testing	24.09.2001	755	TWC/19/10
	TWF/32/11	Draft for TGP/8 "Good Statistical Practices for DUS Testing" Section 4: Types	01.10.2001	- 192 1	TWC/19/10
	TGP/8.4 D1	Types of Characteristics and Their Scale Levels	17.06.2002	1122	TWC/19/10
	TGP/8.4 D2	Types of Characteristics and Their Scale Levels	10.06.2003	192	TGP/8.4 D1
	TGP/8.3 D3	Types of Characteristics and Their Scale Levels	14.06.2004	125	TGP/8.4 D2
	Print				<b>P</b> +  -
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Figure 4: Form to display connected documents

### Discussion

6. A new database to store information about TWC documents and the document itself is presented. The database can continue to collect such information as that in document TWC/20/5 'Telecommunications, exchangeable software and contacts' part 'Index to TWC Documents'. There are forms in the database for data entry and for searching procedures. The database can help members of TWC in their work to prepare new documents. The database with all documents which are available can be distributed by CD-ROM or integrated into the UPOV website. It is also proposed for discussion responsibilities for data entry and for assignment of subjects like 'Distinctness', 'Uniformity', etc.

7. It would also be possible to use the database for the documents of other Technical Working Parties.

8. Proposals to develop the database (information, structure, service) are welcome.

[End of document]