

**MASTER** (Gives relationship of taxa to family and between cited names (synonyms) and valid names)

Field Number	Field name	Field type *=Key Field	Comments
1	TaxonCode	A15*	-> 1:1 link to FAMTRIBE, GENUS, SPECIES -> 1:many link to TSTAT, HKNEW, HOSTS, DIST
2	ValGenus	A21	
3	ValSpecies	A22	
4	HomCode	A1	“Tiebreaker” to separated unresolved homonyms. Also indicates unavailable names subsequently associated with available names.
5	ValAuthor	A42	
6	CitGenus	A21	
7	CitSubgen	A21	
8	CitSpecies	A22	
9	CitSubsp	A24	
10	CitAuthor	A42	
11	Family	A3	-> Family (Lookup table)
12	ValDate	A4	Date of availability of Valid name [lowest hierarchical level mentioned in name]
13	CitDate	A4	Date of availability of Cited name [lowest hierarchical level mentioned in name]

**FAMTRIB** (Gives original publication where family group name was made available;  
1:1 relationship with mater table)

Field number	Field name	Field type *=Key Field	Comments
1	TaxonCode	A15*	-> 1:1 link to MASTER
2	RefCode	A15	-> Refs (Lookup table); reference code for paper citing new family group name
3	PageRef	A10	Pages in reference citing new family group name
4	H_levelTax	A21	Name of the higher level taxon (up one hierarchical level)
5	Of_for_to	A4	“Reminder” to be “read” with Status (Field 6)
6	Status	A2	-> Status (Lookup table)
7	CitGenus	A21	Type genus name
8	CitAuthor	A42	Author of type genus
9	Code	A15	-> uses Master table as a Lookup table: enters Taxon Code, Cited Genus and Cited author of the type genus
10	Notes	M2	

**GENUS** (Gives original publication where genus group name was made available; 1:1 relationship with mater table)

Field number	Field name	Field type *=Key Field	Comments
1	TaxonCode	A15*	-> 1:1 link to MASTER
2	RefCode	A15	-> Refs (Lookup table: enters reference code for original publication where genus group name made available)
3	PageRef	A10	Pages in reference citing new genus group name
4	Code	A15	-> uses Master table as a Lookup table: enters Taxon Code, Cited genus, Cited species and Cited author of type species [Fields 5-7])
5	CitGenus	A21	
6	CitSpecies	A22	
7	CitAuthor	A42	
8	TypeDesign	A2	-> Status (Lookup table: mode of selection of type species)
9	Designator	A15	-> Refs (Lookup table: enters reference code for subsequent type designations)
10	PageDesign	A5	Pages in reference [Field 9] citing subsequent type designation
11	Status	A2	-> Status (Lookup table: hierarchical level of new genus group name [new genus or subgenus])
12	Notes	M2	

**SPECIES** (Gives original publication where species group name was made available; 1:1 relationship with mater table)

Field number	Field name	Field type *=Key Field	Comments
1	TaxonCode	A15*	-> 1:1 link to MASTER
2	Region	A1	Zoogeographic region in which type locality is situated
3	Country	A3	-> Country (Lookup table: enters Region, Country and State for type locality of primary type)
4	State	A2	State within country in which type locality is situated
5	RefCode	A15	-> Refs (Lookup table: (Lookup table: enters reference code for original publication where name made available)
6	PageRef	A15	Pages citing new species group level taxon
7	Figures	A31	Enter number of figures representing new species
8	Sex	A2	“M” (Male) and/or “F” (Female) [in that order] for sexes described
9	PrimType	A2	Status of primary type: holotype, lectotype, etc. (LT, HT, NT, ST)
10	CurrStat	A2	->Status (Lookup table) hierarchical level of new species group name [new species, subspecies, etc.]
11	TypeSex	A1	Sex of primary type
12	Designator	A15	-> Refs (Lookup table: enters reference code of publication citing subsequent primary type designation)
13	Pages	A9	Pages citing subsequent primary type designation
14	Depository	A4	-> Coll (Lookup table: acronym of primary type depository)
15	Notes	M2	
16	TypeNumber	A5	(Primary type number: BMNH only)
17	DeposB	A4	(Alternative type depository: Syntypes only)
18	DeposC	A4	(Alternative type depository: Syntypes only)

**TSTAT** (Gives details of taxonomic changes and direct comparisons between taxa)

Field number	Field name	Field type *=Key Field	Comments
1	TaxonCode	A15*	-> 1:many link to MASTER
2	Status	A2*	-> Status (Lookup table:
3	Code	A15*	-> Master (Lookup table: enters Cited name [genus, subgenus, species, subspecies, author] – fields 8-12)
4	RefCode	A15*	-> Refs (Lookup table: enters Reference code from reference citing taxonomic change/comparison)
5	PageRef	A15*	Pages citing taxonomic change/comparison
6	RefCodeB	A15*	-> Refs (Lookup table: enters Reference code of subsequent paper citing original paper [for nomina nuda, etc.] – Field 4)
7	Author	A10*	Redundant field (originally for authority responsible for suggesting subsequently published taxonomic changes)
8	CitGenus	A21	Generic name of taxon cited in publication
9	CitSubgen	A21	Subgeneric name of taxon cited in publication
10	CitSpecies	A22	Species name of taxon cited in publication
11	CitSubsp	A24	Subspecies name of taxon cited in publication
12	CitAuthor	A42	Author of name of taxon cited in publication
13	Of_for_to	A4	“Reminder” to be “read” with Status Code (Field 2)
14	PagesB	A15	Pages in reference (Field 6) citing original paper [for nomina nuda, etc.]
15	Notes	M2	Notes

**HKNEW**

Field Number	Field name	Field type *=Key Field	Comments
1	TaxonCode	A15*	-> 1:many link to MASTER
2	Keyword	A2*	-> Keywords (Lookup table)
3	RefCode	A15*	-> Refs (Lookup table: enters Reference code from reference publication described by keyword)
4	PageRef	A15	Pages including subject described by keyword
5	Notes	M2	Notes relating to keyword
6	Category	A1	Category of keyword (1 – taxonomic; 2 biological; 3 - economic)

## HOSTS

Field Number	Field name	Field type *=Key Field	Comments
1	TaxonCode	A15*	-> 1:many link to MASTER
2	PrimHosFam	A4*	-> fill-link to Hostfam via Alt-H or Alt-N; -> H-fam (Lookup table: enters four letter abbreviation of associate's family)
3	HosGenus	A25*	-> fill-link to Hostfam via Alt-H or Alt-N (enters genus name of associate)
4	HosSpecies	A23*	-> fill-link to Hostfam via Alt-H or Alt-N (enters species name of associate)
5	HosAuthor	A35*	-> fill-link to Hostfam via Alt-H or Alt-N (enters author's name of associate)
6	RefCode	A15*	-> Refs (Lookup table: enters Reference code from publication where associate is cited)
7	ParTypeA	A2*	-> P-type (Lookup table: enters two-letter code for parasitoid type)
8	ParTypeB	A2*	-> P-type (Lookup table: enters two-letter code for parasitoid type)
9	ParTypeC	A2*	-> P-type (Lookup table: enters two-letter code for parasitoid type)
10	ParTypeD	A2*	-> P-type (Lookup table: enters two-letter code for parasitoid type)
11	Relation	A3*	-> Relation (Lookup table: enters three-letter code for relationship between parasitoid and associate)
12	ReliableA	A1	- Reliable (Look-up table: enters one-letter code for reliability of parasitoid or host identification)
13	Pageref	A15	Pages from publication where associate is cited
14	Keyword	A2	-> Keywords (Lookup table: for entry of unnatural occurrence of parasitoid, eg. Biocontrol, Stored products, Greenhouses)
15	ReliableB	A1	- Reliable (Look-up table: enters one-letter code for reliability of parasitoid or host identification)
16	Comment	A2	To indicate primary ("or") or secondary ("rv") reference
17	CommonName	A1	To indicate if name is a scientific or common ("Y") name (Redundant field)
18	Notes	M2	
19	HosNumber	A5	<u>Unique</u> host code number (fields 2-5)

## DIST

Field number	Field name	Field type *=Key Field	Comments
1	TaxonCode	A15*	-> 1:many link to MASTER
2	Region	A1*	Zoogeographic region from which chalcidoid taxon is recorded
3	Country	A3*	-> Country (Lookup table: enters Region, Country and State from which chalcidoid taxon is recorded)
4	State	A2	State within country from which chalcidoid taxon is recorded
5	RefCode	A15*	-> Refs (Lookup table: enters Reference code from publication where chalcidoid taxon is cited)
6	PageRef	A15*	Pages from publication where chalcidoid taxon is cited
7	Keyword	A2	-> Keywords (Lookup table: for entry of unnatural occurrence of parasitoid, eg. Biocontrol, Stored products, Greenhouses)
8	Reliable	A1	- Reliable (Look-up table: enters one-letter code for reliability of chalcidoid identification)
9	Comment	A2	To indicate primary (“or”) or secondary (“rv”) reference
10	Notes	M2	



## REFS

Field number	Field name	Field type *=Key Field	Comments
1	RefCode	A15*	-> 1:many link to REFEXT, FAMTRIB, GENUS, SPECIES, TSTAT, HKNEW, HOSTS, DIST
2	Author	A52	
3	Year	A4	
4	Letter	A2	
5	PubDate	D	Used to give exact date of publication (see Note 1 below)
6	Title	A188	
7	JourBook	A110	
8	Volume	A20	
9	Pages	A36	
10	Location	A27	
11	Source	A28	
12	Check	A11	
13	ChalcFam	A20	
14	KeywordA	A2	
15	KeywordB	A2	
16	KeywordC	A2	
17	LanguageA	A2	
18	LanguageB	A2	
19	LanguageC	A2	
20	M-Y	A1	Used to signify that EXACT date of publication not known (see Note 1 below)
21	PDF_file	A1	

## NOTES

### 1. Date of publication

The actual date of publication of the paper/book is added to the “PubDate” (Publication date) field. This is a “date” field and has a specific format: day-mon-year, e.g. 29-Aug-2008. If you do not know the exact day within the month then use the last day of that month and enter a tilde (~) in the “M-Y” field (on the form immediately to right of the “PubDate” field. Similarly for unknown date in year then use last day of year and add an apostrophe (') in this field. See also below:

- < denotes that publication date is known to be before this date
- > denotes that publication date is known to be after this date
- ~ denotes that publication date was sometime in month given
- ' denotes that publication date was sometime in year given

# has been used for denote that publication date was sometime in month given

## REFEXT

Field number	Field name	Field type *=Key Field	Comments
1	RefCode	A15*	-> 1:1 link to REFS
2	Translate	A56	
3	Notes	A114	
4	Publisher	A126	
5	ExtAuthor	A143	
6	ExtTitle	A142	
7	ExtJournal	A155	
8	Editor	A103	

# Fgnames

Field number	Field name	Field type *=Key Field	Comments
1	FamCode	A3*	<- lookup table from MASTER (3-letter code)
2	FamGroup	A21	Family group name (Family/subfamily/tribe)
3	Family	A21	Family-level family group name (for UCD)
4	Subfam	A21	Subfamily-level family group name (for UCD)
5	Tribe	A21	Tribe-level family group name (for UCD)
6	SuperfamFK	N	Gives number relating to superfamily group (1 Serphitoidea; 2 Chalcidoidea; 3 Mymarommatoidea)
7	SortOrder	N	For Mike Sadka – gives the order in which superfamily group appears in Taxonomic Tree on UCD

## Status

Field number	Field name	Field type *=Key Field	Comments
1	Code	A2*	<- lookup table from FAMTRIB, GENUS, SPECIES, TSTAT (2-letter code)
2	Meaning	A60	Meaning of code
3	Of_for_to	A4	“Reminder” to be “read” with Status Code

## H-fam

Field number	Field name	Field type *=Key Field	Comments
1	Code	A4	Code for family of Associate (4 letters: format for animal associates as “AaAa”; non-animal associates as “Aaaa”)
2	Family	A18	Family name in full
3	SuperFam	A30	Superfamily to which family belongs
4	Order	A13	Order to which family belongs

Coll

Field number	Field name	Field type *=Key Field	Comments
1	Acronym	A4	Four letter Acronym/Code for type depository
2	Depository	A150	Name and address/location of type depository in full

## Country

Field number	Field name	Field type *=Key Field	Comments
1	Code	A3	Unique three-number code reflecting combined zoogeographic region, country and state
2	Country	A3	Three letter code for country
3	Full-name	A30	Full name of zoogeographic region, country or state
4	State	A2	Two letter code for state within a country (only Australia, Brazil, Canada, China, India, Indonesia, Malaysia, Russia, USA, USSR (partially), Federal Yugoslav Republic, and Great Britain [but see Note 3 below]).
5	Region	A3	One-letter code for Zoogeographic region
6	UCD_name	A60	Combination of Country and State as it will appear on UCD [When being downloaded from Paradox for UCD a script removes field 3 and replaces it with this field and renames it "Full-name"]

## IMPORTANT NOTES

1. The **first record** in this table is kept **blank** to prevent the user inadvertently filling in Afghanistan erroneously when filling in a lot of values. It is thought that a blank value is better than an erroneous value for Afghanistan.
2. Care must be taken not to enter an erroneous value when using a wild card in a search, e.g. finding Mauritius using "Maur.." will initially find Mauritania; using "..China" will initially find Indochina and not Peoples' Republic of China.
3. Some countries do have a subdivision (**Argentina, Chile, Ecuador, France, Greece, Italy, Leeward Islands, Papua New Guinea, Spain, Turkey, United Kingdom, Yemen**) but this is to be used or interpreted with care. In general these subdivisions are only used for parts of the country that might be considered as separate entity. For instance **Corsica** will be recorded as "FRA CS" whereas mainland **France** will be recorded as "FRA", but this may also include **Corsica** (because most records refer to **France** only without referring to which part or whether or not the record includes **Corsica**). In other words a record of "FRA" MUST NOT be regarded as only mainland **France**. The **United Kingdom** is a problem. In general the island of Ireland (Northern Ireland and Eire) is taken as one entry, thus disregarding political boundaries. The **United Kingdom** politically includes **Northern Ireland**, but for historical reasons (within this database) here it really only includes **Wales, England and Scotland** (i.e. Great Britain). The **Channel Islands** and **Isle of Man** are treated separately, even though they are part of the British Isles.



## Relation

Field number	Field name	Field type *=Key Field	Comments
1	Code	A3*	<-look up table from HOSTS. Three-letter code specifying relationship between chalcidoid parasitoid and associate.
2	Relation	A18	Relationship between chalcidoid parasitoid and associate in full.
3	DiplayOrder		

## Keywords

Field number	Field name	Field type *=Key Field	Comments
1	KeyWords	A2	<-look up table from HKNEW, HOSTS and DIST. Two-letter code specifying a predefined keyword.
2	Meaning	A50	Full meaning of keyword
3	Category	A1	Defines three different groups of keywords: taxonomic (1), biological (2), economic (3).

## Reliable

Field number	Field name	Field type *=Key Field	Comments
1	Score	A1	A single letter or number score that defines the reliability of the host/parasitoid record.
2	Meaning	A50	Full meaning of reliability score.

## Language

Field number	Field name	Field type *=Key Field	Comments
1	Code	A2	Code specifying the primary language used in the publication
2	Language	A15	

## Trans

Field number	Field name	Field type *=Key Field	Comments
1	Code	A2	Code specifying the summary language used in the publication
2	Language	A15	

## *HOSTFAM*

Field number	Field name	Field type *=Key Field	Comments
1	HosGenus	A25*	Generic name of associate
2	HosSpecies	A23*	Species name of associate
3	HosAuthor	A35*	Author of associate's name
4	PrimHosFam	A4*	-> H-fam (Look-up table). Enters four-letter code for family to which associate belongs
5	HosNumber	A5	Unique number for host.

## NOTES

1. All fields are copied across to the hosts table when Alt-H (“H” for “Host”) is pressed whilst the cursor is on the required record. This type of table (here called a “copy (editable) table”) is used in preference to a straight look-up table because it is often necessary to edit the table (e.g. add in new host names). It is also much easier to add in a new unique associate number (HosNumber) using the Alt-N command (see Note 2).
2. When entering a new associate complete fields 1-4 as required. Ensure that the table NEWHOST is open on the desktop and that the four “Associate” fields are blank on the relevant HOSTS table record. Press Alt-N (“N” for “New”) whilst the cursor is on the new “Associate” record in the *HOSTFAM* table. A script will then automatically copy fields 1-4 across to the NEWHOST table, add “1” on to the highest (last) HosNumber in the NEWHOST table, return to the *HOSTFAM* table, enter the new, unique HosNumber, then go to the open HOSTS table and copy all fields (1-5) to the relevant fields in the HOSTS table. **[IMPORTANT NOTE:** Due to some glitch in the relevant script there is a slight problem. If you press end edit (F2) at any point between entering the new associate name, but before pressing Alt-N then the associate record will be duplicated (one record with the new HosNumber and one without). The record without the new HosNumber will have to be deleted. You can do this most easily by adding a letter (e.g. “a”) on to the end of the HosSpecies of the record with the new HosNumber (this will allow you to move out of that record), going to the duplicate record without the HosNumber, delete that record, go to the complete record and remove the additional letter that you have just added).

### *Newhost*

Field number	Field name	Field type *=Key Field	Comments
1	HosGenus	A25*	Generic name of associate
2	HosSpecies	A23*	Species name of associate
3	HosAuthor	A35*	Author of associate's name
4	PrimHosFam	A4*	-> H-fam (Look-up table). Enters four-letter code for family to which associate belongs
5	HosNumber	A5	Unique number for host.

### **NOTE**

This table is used in conjunction with the *HOSTFAM* table for adding in new associate names when ALT-N is used. It records the new name and looks for the highest number (in hosNumber) in the sequence and adds on "1" to provide a new, unique HosNumber. It was instigated when it was thought that a third edition of the Chalcidoidea database on CD was going to be published. The table would record all the new host/associate names that had been added to the database since the previous edition to make Dick Yu's life a little easier.

## *JOURNALS*

Field number	Field name	Field type *=Key Field	Comments
1	Journal/Book /Meeting	A110*	Full name of the journal, book or meeting
2	On-line	A7	Field, not yet used, but is meant to give the address of the on-line version of the journal/book. Its length will have to be increased if used.

### **NOTE**

The full journal name is copied across to the REFS table when Alt-J (“J” for “JOURNAL”) is pressed whilst the cursor is on the required record. This type of table (here called a “copy (editable) table”) is used in preference to a straight look-up table because it is often necessary to edit the table (e.g. add in new journal names).

## **WWWIMAOK**

Provides information for photograph and video images used in the UCD.

Field Number	Field name	Field Type *= Key field	Comments
1	TaxonCode	A15*	Links the record to the Cited Name in the MASTER table
2	ImageNo	A8*	A unique number given to link the image to information given here in Fields 3-6
3	Comments	A255	Comments about the image, e.g. sex, biology.
4	PhotoBy	A40	Name of the person responsible for the photograph
5	Copyright	A50	The copyright holder of the image
6	isVideo	A1	Indicates whether the image is a photograph or a video.