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On AKITU File, One of a Taxon-based Entomology
Database KONCHU Produced at Computer
Center of Kyushu University ¹⁾

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Abstract. A database file AKITU, one of a publically available "Entomology Database KONCHU", is produced at Computer Center of Kyushu University. It is based on the journal Akitu, new series (1974-1993), published by the Kyoto Entomological Society. The AKITU file includes 1,195 records and each one includes 13 items in the same manner as in the other files in the KONCHU. Several searches on the AKITU file were executed and the examples using the database management system SIGMA are presented. The AKITU file is available on an on-line network INTERNET.

Key words: AKITU file; entomology database; network; public use.

Introduction

A publically available entomology database KONCHU is a general database name which includes various files of bibliographical and image databases. It is a taxon-based entomology database based on the main Japanese entomological journals and open to the public at Computer Center of Kyushu University (Tadauchi, 1987, 1994; Tadauchi & Takematsu, 1995). An AKITU file was produced as one of the database KONCHU and the outline of the file with examples of use of the file is presented in this paper.

The AKITU file is based on the journal Akitu, new series, which is published by the Kyoto Entomological Society. The new series of the journal was first published in 1974 and was ended in 1993 with one supplement. The contents of it was published in 1993 by the Kyoto Entomological Society without the supplement.

The number of records in our AKITU file is 1,195 including the supplement. The name of the AKITU file for retrieval is "S.A71414B. AKITU" (copyright of the AKITU file: O. Tadauchi & Y. Takematsu). The records of old series of the Akitu will also be added to the AKITU file in future.

¹⁾ Contribution from the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka (Ser. 4, No. 111).

Access to the KONCHU and the AKITU file

The AKITU file is publically available as one of the public database KONCHU managed by a text database management system, "SIGMA" (Arikawa et al., 1987, 1988).

A user who wants to use the KONCHU must register at Computer Center of Kyushu University in advance. Through principal inter-university networks, such as TISN (192 Kbps), WIDE (192-384 Kbps) and SINET (512 Kbps), which are connected with an INTERNET in the world network, the KONCHU is available virtually anywhere in the world. A guide on how to access to Computer Center of Kyushu University is shown in "A guide to on-line databases at University Computer Centers in Japan" edited yearly by the Committee of Libraries and Databases, University Computer Centers, Japan.

Data format in the AKITU file

Items and tags

One record treated in the AKITU file is the same in all the other bibliographical files in the KONCHU and is made for one taxon in a given paper. The AKITU file mainly consists of insect records, with a small amount of spider ones. One record includes 13 items with tags (abbreviations) in capital letters in parentheses as follows:

- 1) taxon name (scientific name) (TAX)
- 2) taxon name (Japanese name) (JTAX)
- 3) author name (AU)
- 4) title (T)
- 5) journal (J)
- 6) volume number, given page for the taxon, page for the paper (VNP)
- 7) published year (Y)
- 8) order name (OR)
- 9) family name (FAM)
- 10) synonym (SYN)
- 11) distributional area (DST)
- 12) key words (KEY)
- 13) note (NOTE)

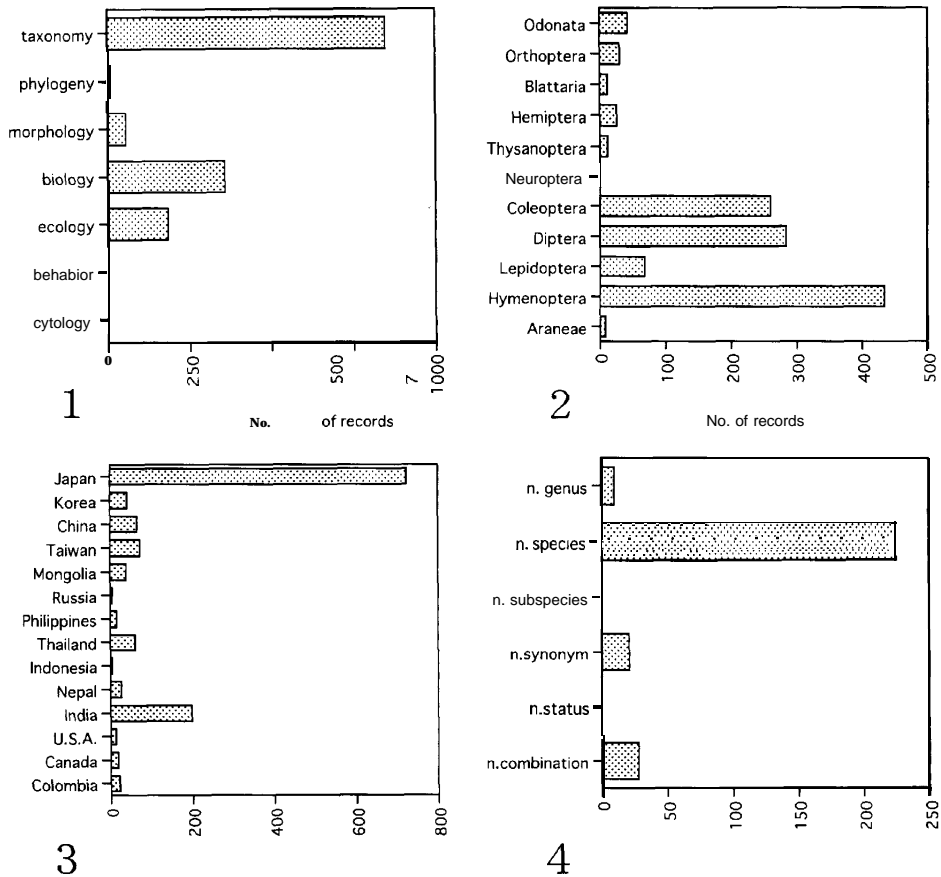
Results of some searches on the AKITU file

The AKITU file is managed by a text database management system SIGMA. A command SEARCH in the SIGMA system is used for retrieval of the AKITU file. Outline and usage of the SIGMA and KONCHU are shown in Arikawa et al. (1987, 1988) and Tadauchi (1987, 1994), respectively.

Some searches were executed using some keywords for examining the AKITU file.

1. Fields (Fig. 1)

The AKITU file mainly consists of taxonomic records (key word: "(KEY)...taxonomy", 849 records) and biological ones (357), followed by ecology (184), morphology (56), phylogeny (9), behavior (2) and cytology (1).



Figs. 1-4. The number of records for some key words retrieved on the AKITU file. 2: fields; 3: orders; 4: countries; 5: new taxa.

2. Orders (Fig. 2)

The records of the file are composed of three main orders, Hymenoptera (key word: "(OR)...Hymenoptera"; 434 records), Diptera (284) and Coleoptera (260) followed by Lepidoptera (68), Odonata (43), Orthoptera (30), Hemiptera (26), Blattaria (12), Thysanoptera (12) Araneae (8) and Neuroptera (4) in decreasing order.

3. Distributional area (Fig. 3)

The distributional data in the item (DST) in the file are mainly made up of Japanese records (key word: "(DST)...Japan"; 723 records), followed by India (198), Taiwan (72), China (65), Thailand (61), Korea (42), Mongolia (40), Nepal (26), Colombia (22), Canada (19), Philippines (16), U.S.A. (13), Russia (4) and Indonesia (4) in decreasing order.

4. New taxa (fig. 4)

New taxa in the file are as follows: new species (key word: "(KEY)... new species"; 225 records), new genus (10), new subspecies (4), new synonym (21), new combination (28) and new status (1).

Examples of the searches on the AKITU file are shown in Examples 1 and 2.

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References

- Arikawa, S. *et al.*, 1987. A text database management system SIGMA, Version 2. *Koho, Computer Center, Kyushu Univ.*, 20: 517-581 (in Japanese).
- Arikawa, S. *et al.*, 1988. SIGMA: A text database management system. *RIFISTechn. Rep., Res. Inst. Fundam. Inform. Sci., Kyushu Univ.*, CS-3: 1-16.
- Kyoto Entomological Society, 1993. *Contents. AKITU New Series Nos. Z-137 (1974-1993)*. Lab. Ent., Fac. Agr., Kyoto Pref. Univ., Kyoto, 10 pp.
- Tadauchi, O., 1987. A public database of entomology KONCHU and its usage. *Koho, Computer Center, Kyushu Univ.*, 20: 597-614 (in Japanese).
- Tadauchi, O., 1994. ESAKIA file, one of the public taxon-based entomology database KONCHU produced at the Computer Center of Kyushu University. *Esakia*, (34): 227-237.
- Tadauchi, O. and Y. Takematsu, 1995. Two files, AKITU and TMU, in a taxon-based entomology database KONCHU produced at Computer Center of Kyushu University for public use on an on-line network. *Jpn. J. Ent.*, 63: 539-540.

```

READY
SIGMA
SIGMA>SEARCH
      RECORD DELIMITERS
D01:=#
D02:=
      ITEM DELIMITERS
D02:=!
D03:=
      KEYWORDS
A01:=(OR)...Hymenoptera
A02:=(FAM)...Aphidiidae
A03:=(DST)...Japan
A04:=(DST)...Korea
A05:=(KEY)...new species
A06:=
      LOGICAL FORMULAS
Z01:=A1
Z02:=A2
Z03:=A3
Z04:=A4
Z05:=A5
Z06:=Z1.Z5
Z07:=Z2.Z3
Z08:=Z2.Z4
Z09:=Z2.Z5
Z10:=Z8.Z5
Z11:=
REPORT(Y/N)?Y
FILE:=S.AKITU
      RETRIEVED TEXTS
QUESTION 01 (Z01) =          434          434
QUESTION 02 (Z02) =          166          166
QUESTION 03 (Z03) =          723          723
QUESTION 04 (Z04) =           42           42
QUESTION 05 (Z05) =          225          225
QUESTION 06 (Z06) =           91           91
QUESTION 07 (Z07) =           22           22
QUESTION 08 (Z08) =           9            9
QUESTION 09 (Z09) =           26           26
QUESTION 10 (Z10) =           0            0
TOTAL =          977          977
CPU (SEC/1000) =          140          140
FILE:=
DO:REFILE
REPORT(Y/N)?N
QUESTION:=8
NEW RECORD DELIMITER:=#
NUMBERING(N/Y)?N
OUTPUT-FILE:=T
#
(TAX) Ephedrus plagiator (Nees)
(JTAX)
(AU) TAKADA, Hajimu
(T) Zoological collectings by the Hungarian Natural History Museum in Korea
31. Aphidiidae (Hymenoptera)
(J) AKITU, New Series
(VNP) (4): 1-2, (1-8)
(Y) 1976
(OR) Hymenoptera, ハチ目
(FAM) Aphidiidae, アブラバチ科
(SYN) Bracon plagiator Nees;Ephedrus (E.) plagiator
(DST) Xorea;Japan;Taiwan;North China;Pakistan;Central Asia;Europe
(KEY) taxonomy;in list
(NOTE)
#

```

Example 1. An example shows a research of the numbers of records on the AKITU file using key words of “alfalfa weevil”, “biology”, “host”, “Ichneumonidae” and displays the first record including the four key words.

```

READY
SIGMA
SIGMA>SEARCH
      RECORD DELIMITERS
D01:=#
D02:=
      ITEM DELIMITERS
D02:=!
D03:=
      KEYWORDS
A01:=(T)...alfalfa weevil
A02:=(KEY)...biology
A03:=(KEY)...host
A04:=(FAM)...Ichneumonidae
A05:=
      LOGICAL FORMULAS
Z01:=A1
Z02:=A2
Z03:=A3
Z04:=A4
Z05:=Z1.Z2.Z3.Z4
Z06:=
REPORT(Y/N)?Y
FILE:=S.AKITU
      RETRIEVED TEXTS
QUESTION 01 (Z01) =          11          11
QUESTION 02 (Z02) =          357         357
QUESTION 03 (Z03) =          329         329
QUESTION 04 (Z04) =          137         137
QUESTION 05 (Z05) =           8           8
TOTAL              =          419         419
CPU (SEC/1000)    =          121         121
FILE:=
DO:REFILE
REPORT(Y/N)?N
QUESTION:=5
NEW RECORD DELIMITER:=#
NUMBERING(N/Y)?N
OUTPUT-FILE:=T
#
(TAX) Scambus (Ateleophadnus) inouei Kusigemati
(JTAX)イノウエタコゾウヒラタヒメバチ
(AU) KUSHIGEMATI, Kanetosi
(T) Parasites of the alfalfa weevil, Hypera postica, in Japan, with description
of a new ichneumonid species (Hymenoptera: Ichneumonidae, Chalcididae and
Pteromalidae; Diptera: Tachinidae)
(J) AKITU, New Series
(VNP) (125): 3-6,8-9, (1-13)
(Y) 1991
(OR) Hymenoptera, ハチ目
(FAM) Ichneumonidae, ヒメバチ科
(SYN)
(DST) Japan(Kyushu)
(KEY) taxonomy;new species;description(female);remarks;host;biology;in list
(NOTE)type(female);type locality(Komenotsu, Izumishi, Kagoshima Pref., Japan);
type depository(Ent. Inst., Hokkaido Univ., Japan);host(Hypera postica (Gyllen
hal))
#

```

Example 2. An example shows a research of the numbers of records on the AKITU file using key words of “Hymenoptera”, “Aphidiidae”, “Japan”, “Korea”, “new species” and displays the first record of Korean Aphidiidae.