

EUROPEAN JOURNAL OF TAXONOMY MATERIAL CITATIONS FORMATTING GUIDE

In accordance with the European Journal of Taxonomy's <u>FAIR & Open Science policy</u>, the formatting guide for entomology, zoology and palaeozoology material citations is provided below (guidelines for botany available soon). Authors are encouraged to prepare their manuscripts according to this model prior to submission, but they will also be given the opportunity to comply upon acceptance of the article.

While EJT strongly recommends that authors adhere to the guidelines given below, the fine-grain formatting of the material citations is not compulsory: if an author decides not to comply or the material is not appropriate, EJT will perform reduced formatting during production. In this case, the majority of the material citations will not be tagged, extracted or disseminated to scientific databases.

GENERAL PRESENTATION

Order

Each material citation is composed of diverse data fields (number of specimens, locality, date collected, etc.) that EJT identifies using Darwin Core (DWC) terms. To efficiently perform this, it is important to ensure that the different fields of a material citation are consistently presented in the same order throughout the article or, at the very least, within a taxon treatment.

The preferred order of data fields is as follows:

COUNTRY • specimen(s) [e.g. "1 ♂"]; **geographic/locality data** [from largest to smallest]; **geographic coordinates**; **altitude/elevation/depth** [using alt. / elev. / m a.s.l. etc.]; **date** [format: 16 Jan. 1998]; **collector** [followed by "leg."]; **other collecting data** [e.g. micro habitat / host / method of collecting / "DNA voucher specimen"/"vial with detached elements", etc.]; **barcodes/identifiers** [e.g. "GenBank: MG779236"]; **institution code and specimen code** [e.g. "CBF 06023"].

Details on how to format each data field are provided on pages 2–5 (DATA FIELDS section).

Punctuation

A **bullet point** "•" (unicode: 2022) is used to signify the **beginning of a material citation**. In Microsoft Word, the following keyboard shortcuts can be used to obtain a bullet point:

- for Mac: Alt + 8 (US keyboard)
- for Windows: Alt (keep it pressed) + 0149 on the numeric keypad.

Within a citation, a **semicolon** ";" delimits each different field. **Semicolons should not be used elsewhere in a material citation.**

A single field can be composed of several details, which are separated by **commas** (e.g. the details region, area, town and street or precise locality name for the 'locality' field). In the example below, the 'locality field' is composed of 2 details: Province ("Eastern Cape Province") and town ("Cradock"):

Material examined

Holotype

SOUTH AFRICA • &; Eastern Cape Province, Cradock; 32°19′ S, 25°39′ E; Aug.–Oct. 1985; museum staff leg.; pitfall trap; NMBA 1170.

Repetitive data

Repetitive data can be indicated with terms such as "same data as for holotype", "same data as for preceding", "same locality", "ibid", etc., as long as the method used is consistent throughout the paper.

Paratypes

SOUTH AFRICA • 1 \circlearrowleft ; same data as for holotype • 1 \circlearrowleft ; Limpopo Province, Pietersburg [now Polokwane]; 23°54′ S, 27°23′ E; 4 Nov. 1916; C.A. Thompson leg.; TM 13375 (formerly 2217).

If a material citation is identical to another with only minor differences, the exceptions should be listed after the mention of repeated data e.g.:

Other material

SOUTH AFRICA • 1 ♂; Eastern Cape Province, Middelburg; 31°49′ S, 25°00′ E; 8 Sep. 1995; M. de Jager leg.; pit traps; NCA 95/394 • 1 ♂; same collection data as for preceding; 3 Sep. 1995; NCA 95/358 • 1 ♀; same collection data as for preceding; 15 Mar. 1995; NCA 95/243 • 2 ♂♂; same collection data as for preceding; 8 May 1999; associated with termites; NCA 91/1051.

'Missing' elements

It is not necessary to include information such as "no date" or "no locality data"; just list the elements that are available.

Label citations

Double quotation marks ("") must be used to represent label citations that cannot be reliably interpreted and formatted as recommended in these guidelines. This data will simply be parsed as a verbatim citation. EJT recommends including photos of labels as figures if they contain data that cannot be standardised.

Only quotation marks should be used to present verbatim label data and they should not appear elsewhere in a material citation.

Author interpretation

Use square brackets [] to distinguish data that has been interpreted from a label e.g., coordinates interpreted from a locality, or translations of foreign text:

Material examined

Lectotype (here designated)

MONTENEGRO • "Popovo Höhle bei Njegus" [Popovo cave near Njeguš]; 43.5291° N, 19.2074° E; 30 May 1903; Sturany leg.; NHMW 38260a.

DATA FIELDS

The different data fields of a material citation that EJT identifies for conversion and diffusion are explained below, along with the format required to achieve maximum output and accuracy.

Only specimen data presented in in the 'Materials examined' section will be tagged and converted for diffusion. Any specimen data presented in a separate table or section of the paper cannot be linked back to a specimen during conversion.

Country/ Water body

The citations must be listed by either country or water body (e.g. ocean/sea), using a separate paragraph for each new zone. The country or water body is in capital letters.

If the material is organised by region, please use the following format:

Material examined

CHINA – **Guangdong Prov.** • 1 ♀; Tianma, Xinhui; 24 Apr. 1956; Z.B. Zhou leg.; SCAU • 4 ♀♀; Xinhui; Nov. 1956; SCAU • 1♀; Nanhai; 14 Oct. 1955; L.B. Huo leg.; SCAU. – **Guangxi Prov.** • 1 ♂; Longsheng; 6 Apr. 1974; Y.L. Luo leg.; SCAU • 1 ♂; Nanning; 4 Aug. 1985; X.F. Pang leg.; SCAU. – **Fujian Prov.** • 1 ♂; Huaan; 26 Apr. 1982; Y.Q. Tang leg.; SCAU. – **Hainan Prov.** • 1 ♂, 3 ♀♀; Diaoluoshan; Jul. 1995; Z.Q. Peng leg.; SCAU • 1 ♂; Diaoluoshan; 8 May 2005; X.M. Wang leg.; SCAU • 1 ♂; Dongfang; 27 Nov. 1997; Z.Q. Peng leg.; SCAU.

Specimen(s)

This field can contain several indications about the specimen(s) cited: **number**, **nature** (e.g. specimen, juv., shell, exuviae), **sex** and **type status**. All subsequent data in the same citation will be applied to the specimen(s) presented.

For holotype specimen: do not introduce with a number, as there is only one individual:

Material examined

Holotype

SOUTH AFRICA • &; Eastern Cape Province, Cradock; 32°19′ S, 25°39′ E; Aug.—Oct. 1985; museum staff leg.; pitfall trap; NMBA 1170.

For paratypes/material other than type: introduce the number of specimens before the sex; if only one individual, use a single sex symbol ("1 \circlearrowleft ", "1 \circlearrowleft "); if more than 1 individual (2, 3, 4 specimens...), use the same symbol twice ("2 \circlearrowleft \circlearrowleft ", "8 \hookrightarrow \hookrightarrow ", etc.). Individuals are grouped by sex/nature, group are separated with commas, e.g.: "1 \circlearrowleft , 8 \hookrightarrow \hookrightarrow , 12 juv.".

Other material

SOUTH AFRICA • 1 &; Eastern Cape Province, Middelburg; 31°49′ S, 25°00′ E; 8 Sep. 1995; M. de Jager leg.; pittraps; NCA 95/394 • 1 &; same collection data as for preceding; 3 Sep. 1995; NCA 95/358 • 1 Q; same collection data as for preceding; 15 Mar. 1995; NCA 95/243 • 2 & 5; same collection data as for preceding; 8 May 1991; associated with termites; NCA 91/1051.

Other material

SOUTH AFRICA • 1 **Q, holotype of** *F. bust*; Kwazulu-Natal Province, Oribi Gorge Nature Reserve; 30°40.791′ S, 30°15.571′ E; 450 m a.s.l.; 13 Jan. 2011; C. Haddad leg.; sifting leaf litter; NCA 2014/3298 • 1 **Q;** Eastern Cape Province, Port St Johns District, Ingogo Forest Reserve; 31°37′ S, 29°32′ E; Dec. 1961; N. Leleup leg.; in humus; RMCA ARA_131806 • 1 **Q, 16 juv. (including subadult 33 and QQ);** same collection data as for preceding; RMCA ARA_131933.

Locality

The locality data is listed from least to most specific, using commas to divide each detail.

It is recommended to employ the English name in current usage where possible. If a different system is used, e.g. variant spellings or archaic names from label transcriptions, these should preferably be identified using quotes, with their current names given in square brackets, but this is not mandatory.

Material examined

Types

MYANMAR • 1 shell, holotype of *P. ponsonbyi* (D = 17.8 mm); "Burmah", Hlindet; NHMUK 1913.3.14.9.

Geographic coordinates

Various formats are accepted but it is important to include the degree symbol (°), which distinguishes the data as a geographic coordinate. The direction (N/E/S/W) should also be included:

- degrees minutes seconds: 40°26′46″ N, 79°58′56″ W
- degrees decimal minutes: 40°26.767′ N, 79°58.933′ W
- decimal degrees: 40.446° N, 79.982° W

Geographic coordinates should be presented to a maximum of 5 decimal places. Latitude and longitude are separated with a comma. Latitude is cited first, then longitude.

Altitude/elevation/depth

This type of measurement should be explicit in the material citations, e.g.:

- Altitude: alt. 489 m or 547 m a.s.l.
- Depth: depth 20 m

Collection date

Format: d(d) Mmm. YYYY

Month: ending with a period (.) except for May Date ranges should be shown with an n-dash, e.g.:

Jan.-Mar. 2018 / 5 Feb.-6 Apr. 2016 / 14 Dec. 2008-3 Feb. 2009 / 1950-1953

Collector

The name(s) of the collector(s) should always be followed by "leg."; for expeditions, "exped." can be used, e.g. MNHN exped.

Additional data

Ideally, the data fields identified above should be listed before any other collection data. If a different order is used, it is important to be as consistent as possible throughout the paper, or at least within a single treatment. You may use a semicolon to separate any additional data into appropriate fields, e.g.:

Material examined

SWEDEN • &; Halland, Halmstad, Gårdshult, Buskastycket; 56.41° N, 13.91° E; 3–25 May 2005; Swedish Malaise Trap Project leg.; **trap 35; collecting event: 1786; Malaise trap; hay meadow;** NHRS CEC1405 • &; Öland, Mörbylånga, Ullevi; 56.61° N, 16.60° E; 8 Apr.–9 May 2016; M. & C. Jaschhof leg.; **Malaise trap; herb-rich meadow near forest;** SDEI CEC1429.

Additional data can also be given in the appropriate field between brackets, e.g.:

Material examined

Holotype

MYANMAR • 1 shell, holotype of P. dextrorsa (D = 16 mm); Tenasserim Valley; NHMUK 1906.2.2.144.

Other material

THAILAND • 2 & &, 1 & (gonopods lost); Prachuap Khiri Khan Province, Kui Buri District, Hat Kham Subdistrict, Ban Yan Sue; 12°03′12″ N, 99°37′52″ E; ca 147 m a.s.l.; 31 Aug. 2007; ASRU members leg.; CUMZ.

Associated sequences

Accession numbers and barcodes should be identified as such, e.g.:

GenBank: U34853.1

Repository data

The repository data field should be composed of an institution acronym followed by a specimen code/catalogue number (where available).

Institution acronym

All acronyms for repositories must feature in a distinct list in the **Materials and methods** section, under a heading called heading "**Repositories**", "**Institutional acronyms**" or "**Institutional abbreviations**".

Ranges & multiple specimens

Use the word "to" instead of a hyphen or an n-dash in order to show a range of specimen numbers. E.g. "NHMUK 213584 to 213595".