

# **Biodiversity Style Guide**

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Version 3.2

## **Preface**

This Style Guide is issued by the Bioversity Information Marketing and Management group to assist staff to prepare documents. Clarity and simplicity are essential elements of written communication. The principles set out in the Guide should contribute to increasing the impact of documents generated by Bioversity staff.

In this version of the Style Guide, the sections are arranged so that aspects of writing appear first, then aspects of terminology and conventions in scientific writing. The Style Guide has been expanded to include more detailed information on preparation of material for publication and presentation. Revisions have been made on various parts of the text to reflect current Bioversity style and usage.

If you have any comments or suggestions for improvement, please send them to the Information Dissemination and Communications Manager, Information Marketing and Management (IMM) so that they can be considered for inclusion in subsequent revised versions of this Guide.

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## Introduction

The purpose of this Style Guide is to improve the comprehension and legibility of Bioversity documents. It sets out to establish uniformity of style and use in Bioversity publications and documents. It also advises on developing a simple writing style. The principles may sometimes have to be waived on grounds of common sense. The most important point is that language should be simple and clear at all times, usage should be consistent throughout a manuscript, and terminology should be standard throughout the organization.

## Writing style

See Appendix 1 for suggestions on clear, concise writing style, and Appendix 2 for comments on report writing.

## Spelling

### **General rule**

The ultimate arbiter of spelling within Bioversity is the latest edition of the Shorter Oxford English Dictionary. When in doubt, refer to and follow this, and where it indicates alternative spellings or forms, adopt the one given first. However, most dictionaries give broadly similar spellings. Refer also to the Bioversity preferred spellings in Appendix 3; the criterion should be consistency throughout the text, coupled to British English, not American English spelling principles. The best way to ensure that this spelling is followed is to use 'English U.K.' as the default language setting in your word processing application for all documents.

### **Differences between British and American spelling**

"The form *-ize* has been in use in English since the 16th century; it is widely used in American English, but is not an Americanism".

There are several spelling differences in American and British English. Bioversity style is to follow the British rules.

*Use the suffix -ize and its derivative -ization* (e.g. organize, organization). This alternative to *-ise* and *-isation* has long been accepted also as the British spelling. The form *-ize* and *-ization* is the etymologically correct form (from Greek verbs ending in *-ιζω*, *-ιζειν*). Nevertheless care must be taken not to replace all *-ise* endings with *-ize*; *comprise*, *demise*, *excise*, *supervise*, etc., and especially *concise*, etc., which have Latin origins.

*The ending -our* in *colour*, *honour*, *labour*, etc. is Bioversity use as opposed to *color*, *honor*, *labor*.

*The endings -ce and -se*. Bioversity uses *defence*, *offence*, and also *practice* for the noun with *practise* as the verb, as well as *advice* (noun) and *advise* (verb), *prophecy* (noun) and *prophesy* (verb).

*The ending -ment*. Retain the 'e': use *acknowledgement*, *judgement*, etc. rather than *acknowledgment*, *judgment*.

## Plurals

If words have alternative plural forms, the choice between the two is governed by the sense in which the word is used:

appendix (of a book) – appendixes  
appendix (anatomical or zoological term) – appendices  
formula (chemical, mathematical) – formulae  
formula (definition, recipe) – formulas  
index (mathematical) – indices  
index (of a book) – indexes

Note also:

Singular	Plural
apparatus	apparatus
biennium	biennia
corrigendum	corrigenda
erratum	errata
maximum	maxima
minimum	minima

In general, Bioversity encourages the use of the Latin plural, i.e. appendixes, etc.  
NB. *Data* is the plural of *datum*, and so takes a plural verb: "The data show that ..."

## Punctuation

Punctuation is intended as an aid to clarity of expression. Some arbitrary choices must be made, but the choices in this Style Guide agree with widely established literary and publishing practice. The **only** reason for punctuation is to assist the reader in understanding the exact meaning. The trend is toward a minimum of punctuation.

### Commas

Use commas in lists to separate the elements:

Rice, wheat and barley are all major crops.

There is no need to use a comma before 'and' in a list, as the comma is substituting for 'and'. The following example is wrong:

Rice, wheat, and barley are all major crops

But use a comma to make a meaning clear where elements are joined:

Papaya, durian, bananas and plantain, and mango are valuable tropical fruits

A comma is usually used to indicate a short pause:

It is a frustrating book, mainly because it is so short

Use commas in pairs to bracket words or phrases:

The variety, which tolerated salt, was very valuable

... or to separate an introductory phrase in a sentence:

Despite the extensive genetic erosion, great diversity was still available.

*However, furthermore, moreover* and *of course* are set off by commas when in this form:

Losses, however, are borne by ...

We believe, of course, that ...

When *however, furthermore, moreover, of course* and similar words are used as *transitional conjunctions*, they are always preceded by a semicolon, e.g.

Spring flooding was widespread; however, crops were protected by hastily build dams.

Use commas to separate related clauses, but the comma may be omitted if the clauses are short and closely related:

We have reviewed the report carefully, and we feel that no action is necessary.

We prepared the report and they approved it.

### **Semicolons**

Use a semicolon if two clauses are not connected by a coordinating conjunction. Each clause is usually a separate sentence:

We have reviewed the report carefully; we feel that no action is necessary.

### **Colons**

The colon is used to introduce a list or series, a long quotation, or an illustrative clause, material for which the preceding words have prepared the reader. The colon always implies that something follows; it is not used only as a mark of punctuation stronger than a semicolon.

Use a colon before a long quotation. A colon may be used to introduce a series of words, phrases, or clauses, as in:

There are three preliminary steps: we must plan the project, we must choose the location and we must assemble the materials.

### **Dash**

Use the dash as little as possible.

Use a dash to indicate an abrupt change in thought or construction, a digression or an unfinished sentence:

It happened so quickly that – but this is irrelevant.

**Hyphen**

Use hyphens sparingly. Use hyphens with units:

6-week mission  
35-year-old woman

... and to link compound adjectives:

up-to-date technique  
long-term investment  
rain-fed rice

... but note that compound adjectives following a noun are not hyphenated:

The woman was 35 years old  
The technique was up to date  
The investment was long term  
The rice is rain fed

... but hyphens may be required in adjectival phrases to clarify the meaning:

Indonesia has a 3-crop annual cycle

Be careful in compound adjectival phrases. If you write 'neglected crops coordinator' this can mean a coordinator of neglected crops, or a crops coordinator who is neglected. Using a hyphen, 'neglected-crops coordinator' makes the meaning clear.

**Prefixes and Suffixes**

Use a hyphen to avoid double vowels or triple consonants if the solid form would be awkward or difficult to read, or lead to mispronunciation, e.g., re-enact, co-worker

The adjectives 'over' and 'under' in compounds are written as one word, but combinations with 'ever' are usually hyphenated except in long-established forms such as everlasting (see Appendix 3).

Do not use a hyphen when you are using common prefixes such as un-, non-, multi-, post-, pre-, etc. unless capitalization is required (e.g. non-Asian) or if pronunciation or readability might be impaired (e.g. post-thermal treatment). Also, do not use a hyphen in the more familiar terms such as overtime, database, genepool.

Do not use a hyphen with an adverb - a word modifying a verb - that ends in 'ly':

Japan is a highly developed country  
readily available information  
carefully stored accessions

But note:

well-developed infrastucture

### **Quotation marks**

Single quotation marks ('...') are used to enclose a technical or humorous word; and a definition of a word. Use single quotes for everything except direct quotations from other writings or speech, when double quotes ("...") should be used. Double quotation marks are used before and after a direct quotation; the exact words of a speaker or writer.

Quotation marks are placed after a full stop if the quotation is a complete sentence in itself; otherwise the full stop is placed outside. Note the differences in the following sentences:

Quote:

In the words of one authority: "The country's public service is hopelessly inadequate."

Paraphrase:

In the words of one authority, the country's public service is 'hopelessly inadequate'.

### **Punctuation**

This is a source of great debate. Generally, if the complete sentence is included in quotes, then a full stop or other punctuation mark falls inside the final quote:

"We must make greater efforts to develop agriculture."

"Why are we so short of food?" asked the farmer.

### **Apostrophes**

The apostrophe (') represents a missing letter (e.g. don't, can't). It also can indicate possession. Use apostrophes in possessives (e.g. farmers' fields) but not in personal pronoun possessives such as *yours*, *ours* and *its*. Remember that *it's* is a contraction for *it is*; *its* is the possessive pronoun. Do not use apostrophes in dates:

1960s, *not* 1960's.

Thus:

the yield of the crop becomes  
the crop's yield

In the plural the apostrophe moves to the end of the word:

the yield of the crops becomes  
the crops' yield and  
the yields of the crops becomes  
the crops' yields

Where the word ends in an 's' only the apostrophe is used:

the work of Jones becomes  
Jones' work

Do not use the apostrophe in simple plurals. This error is often seen with abbreviations, e.g.:

USAID works in the LDC's'

THIS IS INCORRECT as it implies possession, i.e. 'LDC's region'. The correct use is:

'USAID works in the LDCs.'

### **Parentheses**

Use brackets in this order: first (...), then [...] outside these and then {...}. But remember that square brackets are used to show concentration of ions [Na<sup>+</sup>], radioactive labelling [<sup>3</sup>H], and in a quotation to show that the text between them is not part of the original.

They [the villagers] thought that the main point (and the most difficult one) was the status of *saisonniers* [seasonal workers].

### **Ellipsis**

Words (or sentences) deleted from a quotation are marked by the insertion of three dots, known as an ellipsis:

As one delegate pointed out: "This was obvious ... as far back as 1951."

### **Exclamation marks**

Exclamation marks will not occur in Bioversity writing very often. Use them very carefully as they are seldom necessary. They are generally overused and give a very informal feel to a sentence.

## **Avoiding sexist and racist language**

All Bioversity writers and editors must make sure that the texts they are preparing do not show sexist or racist bias in content or expression. Avoid making generalizations about the characteristics of certain nationalities or racial groups. See Appendix 4 for detailed notes on non-sexist language.

## **Capitalization**

Initial capitals should be used sparingly, and consistently within the same document. Hard-and-fast rules are impossible to lay down.

Proper nouns and adjectives should have initial capitals, e.g. Switzerland, the American way of life.

Accepted geographical, political, administrative and similar designations take initial capitals for specific titles but not for general descriptions. Capitalize specific areas, but use lower case when talking about general areas or directions. Examples: South-east Asia, but south-eastern Asia; heading west, but in the West. It is impossible to define fully the word

'accepted' in this case, but, e.g. province of Quebec, the states of New South Wales, the river Thames, the Suez Canal, South Africa, East Africa, West Africa, Latin America, but use northern Europe, southern Africa etc.

Use initial capitals for the short titles of legislative texts and international instruments, e.g. the Convention on Biodiversity.

## Chemical names

Avoid trade names. If their use is necessary, place the generic name first, the trade name in parentheses following. Give the full chemical name of a substance in first use, unless the generic name is well known (such as 2,4-D). In material prepared for publication outside of Biodiversity, it is sometimes necessary to insert a disclaimer, e.g. "the use of the trade name XX does not imply endorsement of its efficacy by the authors or their institutions".

## Scientific names

Every scientific name in a Biodiversity document should be correct according to *Index Kewensis*. The *International Code of Nomenclature of Cultivated Plants* should be consulted for rules governing nomenclature of cultivated plants.

The scientific name of a species in a two-word (binary) combination, called a binomial, consists of a generic name followed by a specific epithet, for example: *Heliothis armigera*, *Campoplexis chloridaeae*. Binomials are printed in italics.

Always give the scientific binomial at first mention in the text, together with the author and the common name. In the case of subspecies, botanical varieties, etc, give the author for only the subspecies/variety, not the species. Do not use scientific names needlessly; it is generally sufficient to use the common name of a plant, insect or disease, after the first mention.

In a table listing the scientific names of species, provide the scientific binomial and author for all species, even if some or all have previously been given in the text.

Fuller scientific descriptions, such as *Heliothis* (Noctuidae: Lepidoptera) and *Fusarium oxysporum* Schlect. emend Snyder & ... should be given to avoid confusion or ambiguity.

The name of a family or taxon of higher rank is capitalized but not italicized (Noctuidae). The names of taxa above the rank of genus are always plural in form and therefore require a plural verb (The Orchidaceae are ...).

In infraspecific categories the rank of any botanical trinomial must be indicated (*Saxifraga aizoon* subforma *surculosa*).

Names of cultivated varieties (cultivars) are given in Roman type after the name of the species and are either set off with single quotes (*Sorghum bicolor* 'Lulu') or with the abbreviation cv. (*Cicer arietinum* cv. *Annigeri*).

Avoid the use of such expressions as 'the hirsutums.' By substituting 'the *G. hirsutum* stocks' or 'the *G. hirsutum* selections' it becomes possible to follow the rules and print the Latin adjective in italics.

Common names for insect pests, such as aphid, mirid and jassid, formed by anglicizing a generic, or higher order, Latin name, are written with a lower case initial letter and are not italicized. The same rule applies to names of diseases: alternaria leaf spot, fusarium wilt, verticillium wilt, etc.

## Units of measurement

Use SI units without fail in Bioversity documents (see Appendix 5). If results are reports in non-SI units, e.g. quintals, insert the SI equivalent in parentheses after the other unit.

In SI units, the same abbreviation is used for both singular and plural forms (km = kilometre, kilometres) and no full stops are used. Use the form 't/ha' for two units, and the negative exponential ( $t\ ha^{-1}\ yr^{-1}$ ) for three or more units. But note that many journals insist on the negative exponential form in all cases.

For convenient conversion of units, see <http://www.ippc.orst.edu/calculators/>.

## Abbreviations

A recurring abbreviation should be explained on the first occasion it is used in the text, no matter how familiar it is.

Never use 'pgr' (lower case) as an abbreviation in any Bioversity document, particularly as it is the name of a Bioversity publication.

Abbreviations consisting of initial letters (known as 'acronyms') should be typed in capitals without full stops (periods):

WHO, REDARFIT

Do not use full stops at the end of abbreviations or contractions:

Mr, MSc, Dr, PhD

For scientific names of species, the following abbreviations are acceptable:

species:	sp. (singular), spp. (plural)
subspecies:	subsp. (singular), subspp. (plural). But note that genebank databases often use the form 'ssp' for subspecies.
cultivars and varieties:	cv. (singular) and cvs. (plural); var. (singular) and vars. (plural)
forma species:	f.sp. (singular), ff.sp. (plural)

## Statistical abbreviations

<i>Abbreviation</i>	<i>Definition</i>
ANOVA	analysis of variance
CV	coefficient of variation
df	degrees of freedom
DMRT	Duncan's multiple range test
ln()	logarithm of number in (), base e
log()	logarithm of number in (), base 10
LSD	least significant difference
MS	mean square
MSE	mean square error
ns	nonsignificant
Prob()	probability of statement in ()
R	multiple correlation coefficient
r	correlation coefficient
RCBD	randomized complete block design
s <sup>2</sup>	error mean square
s <sub>x</sub>	standard error of treatment mean
SE	standard error
SS	sums of squares
*	statistically significant at probability 0.05
**	statistically significant at probability 0.01
***	statistically significant at probability 0.001

## Currencies

International readers will not necessarily be familiar with national currencies. With less well-known units, spell the currency out, e.g. an outlay of 5000 Indian rupees.

Where abbreviations are used, adopt the sequence of country abbreviation, then the unit: US\$ (not \$US). After the initial use of the full abbreviation, use the symbol alone.

A useful source for currency units and abbreviations is Appendix III, 'Currency units of various countries and areas', to the IMF Glossary (Washington, DC, doc. GLO.2-82, 1982 - available from the Bioversity Library).

Up-to-date currency conversions are available on-line at several sources, e.g. <http://www.xe.net/ucc/>. The Bioversity Intranet has a conversion calculator under the Travel section.

## Italics

Bioversity follows the Oxford English Dictionary with regards to italicized words. Below is a brief list of common abbreviations that are italicized.

Note the placement of the full stops:

*ex situ*

*in situ*  
*in vitro*  
*in vivo*  
*idem*  
*inter alia*  
*passim*  
*sensu stricto/lato*

NOTE: The following are **NOT** italicized:

ad hoc  
bona fide  
cf.  
curriculum vitae  
et al.  
et seq.  
ex officio  
ff.  
ibid.  
loc. cit.  
op. cit.  
quid pro quo  
q.v.

NOTE: Latin phrases used adjectivally should not be hyphenated, e.g. *in situ* conservation, NOT *in-situ* conservation

Names of indigenous people should **NOT** be italicized.

Note that Latin words, in particular scientific names of species, should never be printed in all uppercase letters. This applies even when the heading or sentence is in all upper case, e.g.,

This form is **incorrect**: SULPHUR APPLICATION FOR ZEA MAYS L. ON SANDY SOIL

The **correct** form is: SULPHUR APPLICATION FOR *Zea mays* L. ON SANDY SOIL

When a genus name is used as a common name, e.g. "Studies have shown that the leaves of moringa (*Moringa oleifera*) are an excellent source of vitamins, minerals and proteins", the genus is written in non-italicized, lowercase.

## **Algebraic symbols and equations**

Italicize letters in algebraic equations and all expressions where a value is replaced with a letter:

$$b^2 - 4ac = 0$$

## Numbers

Spell out numbers without units from one to ten inclusive in the body of the text, e.g.

There were two cases of malaria and eight of enteritis.

But when one value in a series is greater than ten, it is acceptable to present all values in numeric form, e.g.

There were 2 cases of malaria, 8 of enteritis and 13 of dysentery.

Use numbers with a unit, e.g.

We collected 10 kg of barley seed and 3 kg of wheat seed.

Always use figures before dates, percentages, units of money or measurement, ages, times of the day, page references, serial numbers and the like, e.g.

3 million, 5 May 1980, US\$4, 5 m, 6 years old, page 7, Chapter 8.

A number that forms the first word of a sentence should be spelled out regardless of the above rules. Ugly examples can usually be avoided by redrafting, e.g.

'The year 1980 was one of solid achievement'

not

'Nineteen eighty was a year ...'

### **Multidigit numbers**

The use of points and commas in multidigit numbers varies around the world (2,500,000 does not mean 2.5 million everywhere). The SI notation, which Biodiversity adopts, is that numbers of only four digits do not take a comma or a space, i.e. 1500; numbers of five or more figures take a space, i.e. 23 527, 2 500 000. In Word use a 'nonbreaking space' [control-shift space] to avoid the numbers being broken at the end of a line.

In tables with a list of numbers of 4 and 5 or more digits, use a space for all the values, and align them on the right:

25 789  
5 789  
124 890

NB! The word 'billion' is accepted in American usage as meaning a thousand million (1 000 000 000), but in traditional English usage one billion is a million million (1 000 000 000 000). The difference is tremendous. The recommended Biodiversity usage of a billion is a million million, but because of the risk of confusion, its use is discouraged. In any case, define the unit on first mention, or use the exponential. Never use the word 'trillion'.

## Dates

Dates should follow the pattern day, month, year:

21 Jan 1983

Note that American usage with dates is to put the month first:

May 4 1994

... or even more confusing:

5/4/94

Recommended Biodiversity usage avoids all ambiguity.

When presenting dates such as 3000 BC, do not insert a period after the letters B and C.

Abbreviate the months as follows (without full stops):

January	Jan
February	Feb
March	Mar
April	Apr
June	Not abbreviated
July	Not abbreviated
August	Aug
September	Sept
October	Oct
November	Nov
December	Dec

References to years take the pattern '1914-18' or 'from 1914 to 1918' (not 'from 1914-18') or between 1914 and 1918 (not 'between 1914-18').

## Decimals and fractions

Decimal fractions below unity should be preceded by a zero, both in tables, figures, etc., and in the text, e.g.

0.5%

Note the use of the nonbreaking space in multidigit values:

0.189 456

... and in the extreme case:

123 456.345 678

Fractions should be spelled out: one-tenth, one twenty-fifth. It is often convenient to convert vulgar fractions into decimals, but this can imply a degree of accuracy that is not justified, or into percentages.

## Geographic directions

Follow the Oxford English dictionary, e.g.

south-west, south-south-west  
north-east, north-north-east

Do not capitalize the words unless referring to a specific, recognized geographical region, e.g.

South-East Asia  
North Africa

## Alphabetical order

See Appendix 6 for putting names into alphabetical order.

## Lists

In text, there are two ways to make a list of items. One is a *run-in list*, the other is a *vertical list*. A list is not effective if it is not recognized as a list by the reader, or if it is too long or complex for the reader to distinguish the individual items or points. A few conventions will assist the writer in choosing the best way to display lists.

### **Run-in lists**

These should be short, ideally three items but not exceeding five. When the items in the list are too far from the lead-in context, the list becomes meaningless. Run-in lists should: (1) contain items or ideas that are appropriate for the lead-in, (2) have parallel construction in form and grammar, and (3) be brief enough to be easily assimilated by the reader.

### **Vertical lists**

A list in vertical format (e.g. numbered items, bulleted items) presents sequential information or items of parallel importance. Numbers imply priority, so should be used when a sequence of events or hierarchy is important, e.g. "these four steps should be followed: 1. ... 2. ..." etc. If sequence is not important, or the numbers are not referred to elsewhere in the text, then use a bulleted list. As with run-in lists, items in a bulleted list should have parallel construction in form and grammar. Within a report, items at the same level of hierarchy in the text should be presented in the same way, i.e. bullets for the first level, dashes for the second level, and so on.

Bulleted lists were first used in ads, as a graphic device to draw the eye. They are still treated as graphics in that bulleted items do not end with punctuation, except the last item which is terminated with a full stop. If bulleted items consist of several sentences per item, then put a full stop at the end of each bullet text.

## Tables

The presentation of tabular matter is a subject basically outside the scope of this Style Guide. Nevertheless, this section gives some elementary guidance in setting out tables.

A table gathers together a large amount of information in a form that is easy to understand. It follows that tables should not be used to present a few numbers or scraps of information that are more easily read in the text. When designing a table, try to make it fit easily into the format of the final document; a narrow table down or across the page looks ugly, wastes space and is difficult to read.

### **Headings**

The heading of a table should enable readers to see at once what the table is about and, hence, whether it is of any interest to them.

### **Column headings and items**

Each column, including the first, should have a heading (though the first is often difficult to label adequately).

### **Blanks**

Blanks in tables are to be avoided, as they may puzzle the reader. Fill in spaces with the following symbols: n.a. = figures not available; 0 or - = nil or negligible; or give an explanation in a footnote.

## References

All publications referred to in the text should be listed in the References section, and conversely, all reports listed in the References should be cited in the text. Ideally, only published reports (i.e. available through a library) should be listed, but material in press (accepted, not merely submitted) can be listed, as can Working Papers, Contract Reports, and similar documents housed in an institution. References to maps, plans, herbarium sheets and the like are acceptable if full details are given:

### **Standard journal article**

Hammer K, Knüpffer H, Perrino P. 1990. A checklist of the south Italian cultivated plants. *Kulturpflanze* 38:191-310.

NB: Journal title in full. More than six authors add 'et al.' after first six names.

### **Journal article (no author)**

Plant genetic resources in sub-Saharan Africa [editorial]. 1994. *Plant Genetic Resources Newsletter* 84:15.

### **Journal article (organization as author)**

IPGRI. 1994. Genebank management. Safety and performance guidelines. *Experimental Agriculture* 164:282–284.

### **Article or chapter in a book**

Roberts EH, King MW, Ellis RH. 1984. Recalcitrant seeds: their recognition and storage. In: Holden JHW, Williams JT, editors. *Crop Genetic Resources: Conservation and Evaluation*. George Allen and Unwin, London, UK. pp. 38–52.

### **Article or chapter in a book (no author)**

Solving the Y2K problem. 1997. In: Bowd D, editor. *Technology Today and Tomorrow*. Van Nostrand Reinhold, New York, USA. p. 27.

### **Book with a personal author**

Neergard P. 1979. *Seed Pathology* (2nd ed.). Macmillan, London, UK.

### **or for non-English books**

Rádulescu E, Negru A. 1971. *Handbook for Identification of Pests and Diseases of Seeds* [in Hungarian]. Mezőgazdasági Kiadó, Budapest, Hungary.

### **Book with editor as author**

Engels JMM, Hawkes JG, Worede M, editors. 1991. *Plant Genetic Resources of Ethiopia*. Cambridge University Press, Cambridge, UK.

### **Book with organization as author and publisher**

FAO. 1990. *Trade Yearbook*, vol. 44. FAO, Rome, Italy.

### **Conference and workshop proceedings**

Padulosi S, Hadj-Hassan A, editors. 2001. *Pistacia: towards a comprehensive documentation and use of its genetic diversity in North Africa*. Report of the IPGRI Workshop; 14–17 December 1998, Irbid, Jordan. IPGRI, Rome, Italy.

### **Internet information source**

Australian National University GIS database [Homepage of Mapping Agricultural Systems in Papua, New Guinea Project (MASP)] [online]. 2002 August 12 last update. Available from: <http://rspas.anu.edu.au/lmg/masp/>. Date accessed: 31 March 2005.

A note on Internet sources – all instances in the body text must be ‘end-noted’ with the site address and the date accessed, i.e.

<sup>1</sup> <http://rspas.anu.edu.au/lmg/masp/> – Accessed 31 March 2005.

**Scientific or technical report**

Upadhyay MP. 1996. Current status of plant genetic resources in Nepal. Final report. Report No. 123456X. National Coordinators on Plant Genetic Resources, IPGRI, Rome, Italy.

**Dissertation**

Kaplan SJ. 1995. Characterization of leafy vegetables in West Africa [dissertation]. Wageningen University, Wageningen, Netherlands.

**World Wide Web page**

Beckleheimer J. 1994. How do you cite URL's in a bibliography? [online]. Available from: URL: <http://www.nrlssc.navy.mil/meta/bibliography.html>. Date accessed: 21 April 2004.

**World Wide Web page (no author)**

Educating America for the 21st century: developing a strategic plan for educational leadership [online]. 1994. Available from: URL: <http://www.ilt.columbia.edu/CONF/EdPlan.html>. Date accessed: 11 June 2005.

**World Wide Web Home page**

European Forest Genetic Resources Programme. [Homepage of EURFOGEN] [online]. 2000 May 22 last update. Available from: URL: <http://www.biodiversityinternational.org/networks/euforgen>. Date accessed: 20 December 2006.

***Style for text citation***

Name and date citation:

One author: 'indirect' (Jones 1996); 'direct' Jones (1996)

Two authors: (Jones and Taylor 1996); or Jones and Taylor (1996)

More than two : (Jones et al. 1996); or Jones et al. (1996)

Multiple 'indirect' citations, order chronologically and then alphabetically (colon separator):

(Jones and Taylor 1996; Jones and Watson 1996; Jones and Smith 1998)

## Indexes

Certain major publications may require an index. Few Bioversity publications have indexes; the nature of the material means that a comprehensive contents list will be enough. Nevertheless, indexes can be useful. They are difficult to prepare well and take an enormous amount of work.

## Manuscript preparation

Manuscripts that are to be submitted for editing or layout by Bioversity should be prepared using the guidelines listed below.

Depending on the series type of a publication, the final copy may be prepared on PC (Word or PageMaker) or on Macintosh. Editing and layout may be done in-house or by a freelancer. This decision is reached after considering available staff time, deadlines, resources available and the type of editing required. The options include substantive editing, language correction, editing for English and Bioversity style, and formatting. For proceedings, a Word template is available on the Bioversity Intranet for use by staff in preparing final layouts. Its use is encouraged by Publications staff, who will provide assistance if required.

Authors should simplify the structure of the manuscript to ensure that there are not more than two or three levels of subheading within each chapter. Beyond this number, clarity and readability suffer.

### **Guidelines for text preparation**

1. Provide an electronic file(s) of a Word document if possible, but ASCII, WordPerfect, RTF or anything compatible with/readable by Word for Windows is acceptable.
2. Ensure that the material provided is the final, approved text from the technical point of view. Extensive revisions to papers should have been checked with the authors before passing material to EPU.
3. 'Strip' the files, i.e.
  - remove all headers and footers (except page numbers)
  - remove all graphics and put them in a separate file; at the appropriate place in the text, indicate the file name of the graphic to be inserted
  - remove large tables and treat them like graphics.
4. Provide a Table of Contents. If the document is composed of several files, put the appropriate file name next to the ToC entry.
5. Provide a hard copy of the text. The author's original is preferred, as it shows the hierarchy of headings and the composition of tables.
6. Provide a hard copy of all large tables and graphics, and the originals of photos, slides and drawings. Graphics may be redone to a standard style. Thus, for line, bar and pie graphs, provision of the actual data values will ensure an accurate final graph. If data are not provided, the 'best guess' method will be used to prepare graphics. Unless maps or graphs will be printed in colour, provide black and white versions that are understandable. In constructing graphs and figures, endeavour to limit the use of screens and hatching to a maximum of four shades, and provide 2-dimensional rather than 3-dimensional graphs and bar charts.
7. Provide reproduction-quality logos of cosponsoring organizations/ institutions, with details of specific colour use, etc. The more commonly used logos are probably on file with Publications staff. Check to see if they are available.

**Preliminary pages**

Bioversity publications usually have the following order in the layout of preliminary pages:

- Title page (= p. i)
- Mandate, copyright page, etc. (= p. ii)
- Foreword and/or preface (= p. iii)
- Contents next right-hand page
- Introduction = p. 1

**Titles and headings**

Type all titles and headings with an initial capital and all the rest of the words in lower case, unless you are following an established style.

**Reference lists**

A definitive listing on the use of parentheses, full stops and the order in which the elements of a bibliographic citation are listed within a single reference has been laid down by an international editing body. However, since many journals do not follow this style, and Bioversity style has been changing over the years, refer to the section on References in this Style Guide for normal Bioversity bibliographic usage.

**idem**

The expression 'idem' (literally 'the same person (or thing)') should not be used as it is confusing.

**ibid**

The expression 'ibid' (abbreviation of '*ibidem*', literally 'in the same place') should not be used as it is confusing.

**op. cit.**

The expression 'op. cit.' (abbreviation of '*opere citato*', literally 'in the work quoted') should not be used as it is confusing.

**Footnotes**

In general, footnotes are not used in Bioversity publications, except in tables. In particular, they should not be used in text to present references to published material, but only to add comments or explanatory notes on that material. Published works should be listed in a References section at the end of the report.

**Proofreading/publishing**

Proofs sent to authors by non-Bioversity publishers may be accompanied by a list of that publisher's preferred proofreading symbols. If not, then commonly used symbols can be found in style manuals such as the CBE's *Scientific Style and Format, Sixth Edition*. Appendix 7 defines some publishing items.

**Copyright**

In general, copyright covers the format and presentation of information or data, not the information itself. You cannot copyright the depth of the sea, for instance, but could copyright a table showing comparative depths at several locations.

If it is necessary to reproduce non-Bioversity material that is copyright, the authorization of the copyright holder (publisher and/or author) must be obtained and acknowledged. Authorization must be obtained for the reproduction of any drawing, diagram, graph, table or photograph, even if the original material has been slightly altered or certain parts have been omitted. In any case, the source of the information should always be cited at the bottom of a table or diagram.

A 'reasonable' amount of words may be quoted direct for review or discussion. 'Reasonable' is open to interpretation. The legal concept of 'fair dealing' differs from country to country. In the UK, for example, permission is not required to reproduce a single prose extract of up to 400 words, or a series of extracts up to a total of 800 words, provided that each is less than 300 words.

All authorizations must be obtained in writing. It is the author's responsibility to obtain permission. The form of acknowledgement requested by the publisher should be followed.

NB. It is not necessary for Bioversity staff to obtain permission to reproduce IBPGR material, even if it carries an FAO copyright symbol.

## Appendix 1. Scientific style and Bioversity English

Today English style and scientific English style are different. English is a difficult language to write well; native English speakers have problems. This appendix presents some simple hints on writing well in English.

Good technical writing is clear, concise and precise; it reflects the qualities of science.

*Select vocabulary carefully.* Use a vocabulary level appropriate for your reader. Research shows that agricultural scientists overestimate reader vocabulary when they write for nonscientists. If you are not certain your reader will understand a technical term, use the term accompanied by a more common synonym or a definition.

*Write clear sentences.* Sentences should average no more than 20 words, but sentence variety is what counts, both in length and in form. Examine each sentence you write to see if

- all ideas are conceptually related
- the sequence of ideas is logical
- the main idea is easy to find
- subject and object are close to each other.

*Vary sentence form.* Keep the main clause short and place it at the beginning or end of the sentence.

There are a number of aspects of writing in English that are commonly abused:

- Simple language and direct expression
- Active and passive voices
- Personal pronouns
- Nouns from verbs
- Compound nouns
- Long sentences
- Errors of meaning and form
- Jargon
- Incorrect use of common expressions

### ***Simple language and direct expression***

Always choose the simplest way of saying something. Choose a simple word rather than a difficult one; a concrete word over an abstract one; a familiar word over a rare one. Do not be influenced by the modern scientific literature. Much of it is extremely badly written. Never be impressed by a complex, hard-to-understand sentence. It is not a good sentence. Good scientific writing communicates in simple terms, even though the subject may be complicated. Repeated use of unnecessarily difficult, remote language not only prevents the subject being understood, it also makes the text hard to read.

**Unnecessary and difficult words**

Remember the word 'verbosity'. It is very common, trying to say a thing in a complicated way, usually to make it sound more important. This is very bad style. For example, you can say:

The efficacy of the therapeutic agent utilized was undeniable.

You are then being verbose. Much better if you write:

The drug we used was very effective.

Use simple verbs like 'use' instead of utilize. Cut out phrases like "It is interesting to note that..." Many writing guides and grammar texts give lists of verbose words and the shorter alternatives. Always try to use the easiest expression, and avoid 'buzz words', words that are suddenly popular but are not well defined, such as 'empower', 'bottleneck' and 'sustainable'.

**Double negatives**

In English you can use two negatives or negative words to make a positive statement. For example: "It is not unlikely." 'Not' is a negative, and so is 'unlikely', so they cancel each other out and mean: "It is likely."

This sort of construction is seen quite often. Most of the time it just gets in the way of plain speech. It is much better to avoid it. There is sometimes a very fine difference in meaning between a positive statement and a double negative statement, but if your mother tongue is not English, it is better to avoid using the construction. Other examples are:

The total was not unimpressive (It was impressive)

No decrease in numbers of species... (although 'Increase in numbers of species' has a difference in meaning...)

**Active and passive voices**

Many books on English style will tell you that you should avoid the passive voice because it makes text boring and dull. This can be true, but in scientific style the passive voice is often essential. In the phrase: "We measured the variation" (active), it is clear that the subject (we) did something (measured) to an object (the variation). In the passive voice the object comes first and has something done to it by the subject: "The variation was measured by us." However, in the passive voice you can also say: "The variation was measured." That is, you can leave out the subject. And that is why the passive can be used in scientific style, because most of the time the subject is you, the writer. The subject is not important. Readers do not need to be told that "you measured the variation". They already know that, because your name is on the title page of the paper.

You should try to use the active voice where it fits, because it will add variety and interest to your writing. But you should only do it where the subject is important:

"Stapleton (1985) found that..." not:

"It was found by Stapleton (1985)..."

### **Personal pronouns**

If you use the active voice you will have to say "I" and "We did something". There is nothing wrong with this. If you did the work, or if you think something is right, then you should say it. Do not say "It is felt by us that..." Classical science writing encourages the use of 'impersonal' language, at the expense of readability. Using the personal pronouns sometimes makes a more lively style and easier reading.

### **Nouns from verbs**

These are also called abstract nouns. The overuse of abstract nouns is the single most common fault in science writing today. Research on writing style shows that beyond vocabulary, the greatest barrier to reading and speed comprehension is using nouns instead of verbs: more specifically, hiding verbs in nouns. We call this **nominalization**, and its use the **nominal** form:

<b>nominal</b>	-	Their recommendation was to plant earlier.
<b>verbal</b>	-	They recommended earlier planting.
<b>nominal</b>	-	Varieties must have tolerance for environmental stresses.
<b>verbal</b>	-	Varieties must tolerate environmental stresses.

You can make a noun from a verb quite easily. 'To measure' gives you 'measurement', a normal English word that has its uses, but because it is a noun you have to put a verb with it, e.g. "The measurement was done" [or carried out]. Often it is much easier to use a verb and say that something was measured. So you do not write: "Measurements were carried out on the variation." You write: "The variation was measured." Or, as we have just seen, if the subject is important: "Stapleton (1985) measured the variation."

Other common examples of this are 'production' from 'produce', 'interpretation' from 'interpret'. Using such abstract nouns too often produces long sentences and dull prose. The extra length comes in part from the length of the '-tion' nouns and in part from the need to use extra verbs. The dullness results from the abstractness of these nouns and the usually passive, weak verbs that must go with them. Replacing an abstract noun with a verb gives you more chance to bring the subject into the sentence and make it more alive and specific.

Abstract nouns are extremely common and easy to spot. When you are reviewing your manuscript, highlight all the nouns ending in -tion, -ance, -sion, -ment, -ness, -cy. You will be amazed. Usually you can replace them by rewriting the sentence using the original verb. These changes may also shorten a sentence and put its elements into a clearer sequence. For example, take:

"It is possible that the pattern of herbs now found at the site is a reflection of past disturbances."

Better, and fewer, words say:

"The pattern of herbs found at the site now may reflect past disturbances."

### **Compound nouns**

These are simple to define. They are strings of nouns put together to form a phrase. To some they sound impressive. But in fact they hide the meaning of what you are trying to say, and also make the message unclear or ambiguous. There may be more than one way to interpret what you are saying. Poor writers and poor communicators frequently use these words. Avoid these compound nouns wherever you can. They are very hard to understand and terrible style. Use simple English. Note that compound nouns are usually made up of nouns from verbs, or abstract nouns. Sometimes you can go back to the verbs and make a proper sentence, with a clear meaning. For example, look at the way you can build up a compound noun. We can start with:

Research,  
    which leads on to:  
Research dissemination,  
    then:  
Research result dissemination,  
    then:  
Research result dissemination improvement,  
    and:  
Research result dissemination improvement methods.

This final phrase is very hard to understand and 'unstring'. It is much easier to use verbs and break it up to say:

Methods of improving the dissemination of the results of research.

Unfortunately, compound nouns are too common in science writing today, and they are a sign of writers with a bad style. Two nouns together are easy enough to understand; more, and the meaning can be lost. As you are looking through your text, mark the places where two or more nouns occur together and go back and try to rephrase the sentences to use verbs instead of the nouns.

### **Long sentences**

Avoid long sentences where you can. Use short sentences instead. However, in scientific papers it is sometimes hard not to use a long sentence. In that case you should go ahead and use one and not worry.

How long is a long sentence? Any sentence that you find is more than two typewritten lines may be too long. However, remember that a mixture of short and long sentences gives variety and interest to your writing.

The problem with long sentences is that you have to remember so much before you get the message. There are several different types of too-long sentence. Below are three common examples.

### **1. Too much information in the sentence**

There is so much information all strung together that it is impossible to understand the message. Go back and look for a place to split the sentence up into separate parts. Try to read a long sentence straight through, then ask yourself if you understood it all. The main problem is the lack of punctuation. Breaking the whole thing up often makes the sentence more understandable. It may take up more space, but it is worth the effort because it is clearer.

### **2. Hiding the subject under conditions**

Often you may have a list of conditions that describe the main topic of the sentence, but by including them all you bury the main statement. Sometimes you can make a series of sentences, but at other times it may be better to take the conditions out of the way. You can either start a new sentence after you have said the most important thing, or make a list.

### **3. Qualifications**

This can also be called 'hedging', when you are not certain of the truth of what you are writing, so you use conditional verbs and qualify what you want to say. It is good to say 'perhaps' when you are not sure of something, but it can be taken to extremes. You can still stop short of being too definite by using a single conditional.

Some vague and overused phrases in scientific writing are: "it has long been known", "it is believed", "many aspects of this problem have been debated". Avoid these phrases unless you follow them with specific examples of what is known or believed or debated.

### ***Errors of meaning and form***

Make sure you understand the meaning of all the words you are using. Do not use a long word that you think sounds impressive unless you are certain of the meaning. If you have used it wrongly you will look very foolish, and also hide what you are really trying to say. Much better to use several simple words that give the proper meaning and are easily understood. There are also many words in English that look almost the same, but have different meanings.

### ***Jargon***

Jargon is defined as 'a system of signs or characters having an arbitrary meaning', which means that if you do not know what the jargon stands for, you cannot understand the sense of the sentence. All scientific disciplines have their own special language of technical words, but you must be very careful not to use them in your manuscript without defining them. English has become the 'universal language' of science because so many people understand it nowadays. But it is all useless if the reader cannot understand the specialized terms you are using. You might think that everyone knows what the terms mean, but you will be wrong. The researchers outside your field will not understand the terms. So be careful. Review your manuscript to make sure you have defined all the 'jargon' that you may have included.

### ***Incorrect use of common expressions***

The following words and phrases are frequently used incorrectly in scientific writing. Biodiversity authors should strive to use them correctly, to avoid confusion or misunderstanding for the reader.

---

among, between	When comparing more than two things, use 'among'; for two things, use 'between'
based on	Do not start a sentence with 'based on' because it is almost always incorrect to do so, e.g. " <i>based on</i> the results of the survey, we developed a model for effective conservation measures" is incorrect because 'we' (the subject) were not <i>based on</i> the survey results. Instead, say " <i>given</i> the results of the survey, we developed a model for effective conservation measures".
compare to, compare with	If you compare A <i>to</i> B, you are likening them and suggesting that they are equals. If you compare A <i>with</i> B, then you are pointing out dissimilarities as well as similarities. In almost all cases, 'compare with' is the form required for scientific reports.
due to	This means 'caused by' or 'attributed to'; thus floods can be due to heavy snowmelt, but a meeting cannot be cancelled due to apathy. It can be cancelled 'because of' or 'owing to' apathy. Or, the sentence can be phrased: "cancellation of the meeting was due to apathy"

## Appendix 2. A checklist for effective report writing

1. Have you developed a tentative table of contents for the final report at the beginning of your research project?
2. Have you set aside enough time to write, revise and print your research report? Have you included report writing and printing costs in the research budget?
3. Have you prepared a detailed outline for the final draft? Does it include sections on methodology, results, conclusions and recommendations with specific topics to be discussed under each? How does it compare with the table of contents in similar studies?
4. Does the Introduction of your report identify a key research question(s) to be answered? And indicate its importance?
5. In your report, do you explain the methodology you used? Are detailed methodological facts placed in an Appendix?
6. Does the report include a list of references?
7. Do tables, figures, etc. all follow the same format? Do they include necessary information such as source, units of measure, economic values, etc.? Have you checked other publications to see how the format you use compares?
8. Have you eliminated all basic mistakes such as spelling errors and typos, and have you included sources in your draft before you circulate it for comments? Have you corrected errors in syntax and grammar?
9. Have you checked for inconsistencies in the data presented in different sections of the study?
10. Does the report devote most of the text to research results and discussion?
11. Have you sought out comments on a first draft from key decision-makers?
12. If relevant, does the report present both sides of key issues?
13. Have irrelevant data and repetition been eliminated in the rewriting of the first draft? Can large sets of numbers be placed in an Appendix?
14. Are the policy recommendations fully developed and easy to understand?
15. Does the report include an Abstract?
16. Have you considered preparing brief summaries for publication in the Institute's quarterly journal (*Plant Genetic Resources Newsletter*), Regional newsletters or in popular magazines?

### Appendix 3. List of Bioersivity preferred spellings

Follow the Oxford English Dictionary (<http://dictionary.oed.com/>)

abridgement  
abbreviation  
acknowledgement  
ad hoc  
advise (v), advice (n)  
adviser  
adze, not adz  
aestival, not estival  
afforestation; establishment of forest, etc., where none previously existed (cf. reforestation; establishing forest on site which was once forested)  
Afghanistan  
after-care  
after-effects  
afterwards  
ageing  
agro-economic  
agroforestry  
air-dried; air-dry  
air-tight  
along with; prefer together with  
aluminium  
amidst; prefer amid  
amino acids  
among – use for many things, see *between*  
amongst; use among  
anaemia  
analogue  
analyse, analysed (v)  
analysis (n, sing.) analyses (n, pl.)  
Anglophone; prefer English-speaking  
apartment  
appendices (anat. or zool.)  
appendix, meaning part of a book, takes the plural appendixes; the plural appendices should only be used in anatomical or zoological contexts  
appendixes (books)  
applicable  
Arabian Gulf; prefer Persian Gulf  
autumn, not Fall (or fall)  
axe, not ax  
Azerbaijan

BA (Bachelor of Arts)  
backstop - American baseball term therefore difficult to understand - forbidden - use back up, support, etc.  
back-up (n), back up (v)

backward (adj), backwards (adv)  
base-line  
beginning  
behaviour  
bench-mark (n), benchmark (v)  
benefited, benefiting  
between – use for two things, see *among*  
biannual  
biased  
billion; use 000 million (US billion = UK thousand million)  
biodiversity  
birth-rate  
book-keeping  
bottleneck – a 'bottleneck' is a graphic English expression for a constriction in the flow of traffic. Unfortunately, its use has been extended far beyond its original meaning. A bottleneck problem is nowadays seen as one that when solved will open up information flow, avenues of research, etc. out of all proportion to the size of the original problem. However, 'bottleneck problem' has become a common cliché for what are, in fact, ordinary problems. Think very hard before using this word: can it be substituted by critical, major, significant, etc.?  
BSc (Bachelor of Science)  
bread-basket  
break-down (n), break down (v)  
Breeders' Rights  
broad-leaved  
budgeted  
build-up (n), build up (v)  
bureau, bureaux  
by-product  
  
ca. for circa (in time)  
cacao – the plant, see *cocoa*  
cancel, cancelled, cancelling, cancellation  
carburettor  
carcass, carcasses  
carry-over (n), carry over (v)  
case-study  
castor seed, not bean  
catalogue  
cataloguing  
centre, not center (but note that several CGIAR centres call themselves 'Center'. Respect this spelling.)  
central Africa  
Central African Republic  
Central America  
centuries: 20th century (n), 20th-century (adj)  
CG Centres; use CGIAR centres  
CG System; use CGIAR system  
channelled

chapter; in text use l.c. for general references, 'in the chapters concerning' but capitals and numbers for specific reference; 'in Chapter 10'

check-list

cheque, not check

chilli, chillies

cite (v,= refer to /n=), site (v,=refer to /n=location)

clear-cut

clearing house

cocoa – the product of the *cacao* plant

coexist

colour, not color

combating

commit, committed, commitment

Common Market; use European Union

connection

consensus, not concensus

cooperate, cooperative

coordinate

corn; prefer maize

corner-stone

cost-effective

councillor (council member)

counsellor (adviser)

countersign

counter-revolution

counterpart

co-worker

crop-specific

cross-bred, cross-breed, cross-breeding

cross-examine

cross-fertilize

cross-pollinate

crossroads

cross-section

cultivable; use cultivable

cutback (n), cut back (v)

CV (curriculum vitae, plural curricula vitae)

data sheet

database, not databank

date-palm

day-length

day-time

dBase

death-rate

decades, use figures; the 1960s, not the sixties, the '60s or the 1960's

decision-maker, decision-making

defence, not defense

developed

dialogue, not dialog  
dioecious, not diecious  
disk (computers), disc (otherwise)  
dispatch, not despatch  
downward (adj), downwards (adv)  
Dr (no full stop)

eastern Europe  
eastward, not eastwards  
ecoregional  
enamelled, not enameled  
encyclopaedia, not encyclopedia  
end-user  
envisage, not envision  
equalled, not equaled  
equator, the equator (l.c.)

faba bean  
fact-finding  
farm worker  
Farmers' Rights  
favour, not favor; hence favourable, favourite (not favorable, favorite)  
fertilizer  
fibre, not fiber  
field-work, field-worker  
filter paper  
first hand  
first, second, etc., not firstly, secondly  
flow chart  
focused, not focussed  
fold, as in threefold, tenfold  
follow-up (n), follow up (v)  
forward (adj), forwards (adv)  
fractions; always hyphenated 'two-thirds', 'three-quarters'  
freshwater (adj), fresh water (n)  
fruit-tree  
fuel-wood  
fulfil, fulfilling, fulfilment, not fulfill, fulfillment  
full time (n, adv), full-time (adj)  
fund-raising (n & adj)

genebank  
gene flow  
gene pool  
germplasm  
glass-house; prefer greenhouse, as it might not be made of glass, or specify.  
gravelled, not graveled  
green belt  
greenhouse

Green Revolution - now outdated, even pejorative, do not use

grey, not gray

ground cover

ground-nut, not peanut

ground-water

guide-book

guide-lines

hand-out (n), hand out (v)

hands-on experience - slang, try to avoid, use 'practical experience', much more elegant

hand weeding

heat-resistant

high-yielding varieties (HYVs)

honey-bee

hybridization

index, meaning a list in a book, takes the plural indexes; the form indices is used only when referring to index numbers

indexes (books), indices (of performance, etc.)

infra-red

infrastructure

in-house

input

install, instalment, installation

inter-agency

inter-Centre (adj), e.g., inter-Centre review of rice

intercrop, intercropping (n,v)

interdisciplinary

inter-regional

inward (adj), inwards (adv)

judgement, not judgment

Kazakhstan

kilogramme, not kilogram

kilometre, not kilometer

know-how - slang, do not use, use expertise, knowledge, etc.

Kyrgyzstan

label, labelled, not labeled

labour, not labor; note labourer, but laborious and laboratory

lakh; usually means 100 000; do not use, or define on first use

landowner, landownership

landrace

layout (n), lay out (v)

least-developed countries (LDCs)

levelled, not leveled

licence (n), license (v); but licensor for the person who grants a licence

life cycle

life-span  
litre, not liter  
long-term (adj), long term (n)

macroeconomic  
man-hour – sexist, forbidden, use staff-hour  
manpower – sexist language, use workforce, human resources, labour, personnel, etc.  
marketplace  
maximize  
medium-term (adj), medium term (n)  
metre (unit of measurement), but meter (the person or thing that measures, as gasometer)  
microcomputer  
microorganism  
mid-term (adj)  
minimize  
model, modelled, modelling, not modeled  
monospecific  
mould, moult, not mold, molt  
movable  
MSc (Master of Science)  
multi-access  
multilateral site  
multi-purpose  
Muslim, not Moslem

nationwide  
neighbour, not neighbor  
non-committal  
none (i.e. no one), takes singular verb; 'none is older than she (is)', not 'none are older than her'  
non-event  
non-negotiable  
non-productive  
north-east  
northern hemisphere  
northward, not northwards  
north-west; do not capitalize except for recognized regions, e.g North-West Frontier Province, Pakistan  
notebook  
noticeable  
notwithstanding  
nowhere

occupying  
occurring  
odour, not odor, note odourless but odoriferous, odorous  
oestrous (adj), oestrus (n)  
offence, not offense  
oil palm

omitted; no variant exists  
ongoing, this is already an international cliché – *continuing* is a useful alternative  
online  
onward, not onwards  
organize, organization, not organise, organisation  
orient (noun, adjective, verb); do not use orientate as verb  
outcrop  
outdated  
outmoded  
outward, not outwards  
outweigh  
overall  
oversight (should not be used in the sense of watchful care, because this meaning is rare or unknown outside of the USA. *Supervision* should be used instead, reserving *oversight* for the meaning of omission or error due to inadvertence)  
overuse

panel, panellist  
panelled, not paneled  
peanut, use ground-nut  
per annum – avoid; in text use annually, per year, a year  
per cent; use % after figures '90%'  
petalled, not petaled  
Petri dish  
PhD  
plough, not plow  
policy-maker  
post-emergence  
post-graduate  
post-harvest  
practice (n), practise (v); no variants exist  
pre-empt  
preferred, preferring, no variant exists  
prerequisites  
prerogative  
principal; i.e. most important  
principle; i.e. rule (of conduct, physics, morals)  
print-out (n), print out (v)  
problematic, not problematical  
programme, not program; but program is used in connection with computers and to describe software  
programmer, even with computers  
prologue, not prolog

rainfall  
rain-fed  
rain forest  
rain-water  
rangeland

reafforestation; use reforestation (see below)  
realize, realization, not realise, realisation  
re-assessment  
re-evaluation  
reflection, not reflexion  
reforestation; establishment of forest on site which was once forested (cf. afforestation;  
establishment of forest, etc., where none previously existed)  
regrettable  
reiterate  
reopen  
research and development (R & D)  
river-bed  
roadside  
Romania  
rootstock  
rumour, not rumor  
run-off (n), run off (v)

salt-tolerant  
salt water (n & adj)  
savannah  
sea-level  
seed-bed  
seed-borne  
self-pollinating, self-fertilizing  
share-cropper, share-cropping  
short-term (adj), short term (n)  
shut-down (n), shut down (v)  
side effect  
sizeable  
skilful, not skillful  
slaughter-house  
slow-down (n), slow down (v)  
small-holder, small-holding  
small farmer, use small-scale farmer  
socio-economic  
soil-borne  
south-east  
southern hemisphere  
south-west  
soya bean  
spillover (n), spill over (v)  
standardize, standardization, not standardise, standardisation  
Student's t-test  
sub-Saharan Africa  
subtropical  
succeed, successful  
sugar beet  
sugar-cane

sunflower  
supersede, no variant exists  
sulphur, not sulfur  
sweet corn; use maize  
synchronize, synchronization

Tajikistan  
tap-root  
target, targeted; avoid using target as a verb  
task force  
team-work  
test-tube  
text-book  
Third World; perjorative, hence forbidden – use developing countries or less-developed country (LDC)  
time-limit  
timetable  
top-soil  
totalled, totalling, not totaled, totaling  
transnational  
transferring  
travelled, not traveled, traveler, not traveller,  
tsetse fly  
Turkmenistan

Ukraine  
ultraviolet  
under-developed countries – do not use, use developing countries  
underlie  
under-nourishment  
under-utilized  
upward (adj), upwards (adv)  
USA, or United States, not US  
US\$100, etc.  
usable  
Uzbekistan

versus/ vs. when abbreviating  
vice versa  
videotape  
vigour, not vigor; but vigorous  
vis-à-vis, literal meaning is 'face to face', avoid

wage-earner  
water-level  
water-table  
water-buffalo  
water-melon  
watershed

well-being  
West Africa  
western Europe  
whilst; use while or whereas or whereas  
wind-break  
workday, use working day  
work-force  
work-load  
workman; sexist, use worker  
work-place, workroom, workshop  
World War II, not Second World War  
worldwide

yam-bean  
year-round  
yogurt

zeros

## Appendix 4. Bioersivity guidelines on non-sexist language

The English language has many words with discriminatory overtones, such as spokesman, mankind, etc. Bioersivity policy is to use nonsexist language in all of its publications and other written materials. These guidelines give advice on how to write in English without bias.

### ***Man as a verb***

Do not use 'man' as a verb, as in:

The emergency room must be manned at all times.

Work, staff, serve, operate and other alternatives can be used instead:

The emergency room must be staffed at all times.

### ***Man as a prefix***

Speakers and writers often use man-prefixed compounds in contexts where man represents males alone or both males and females:

'Will mankind murder Mother Earth or will he rescue her?'

With a little thought this can be replaced by:

'Will human beings murder the Earth or will they rescue it?'

Alternatives for 'man' are humanity and human beings.

Various sex-neutral alternatives to manmade are available, including handmade, hand-built, synthetic, manufactured (in this case man- comes from the Latin *manus*, hand), fabricated, machine-made and constructed.

Manpower is usually replaceable with personnel, staff, work force, available workers, or human resources.

### ***Man as a suffix***

'A spokesman of the corporation will meet with the press at 4 p.m.'

can be replaced by:

'A representative of the corporation will meet with the press at 4 p.m.'

Also:

Englishmen are said to prefer tea

can be replaced by:

The English are said to prefer tea.

See the list at the end of this section for additional recommended alternatives.

### ***The pronoun problem***

It has been common in English to use the pronouns he, his and him to refer to any unspecified or hypothetical person, e.g.:

'Each farmer received his share'

Using 'he or she' or 'his or her' is very clumsy. The trouble is that it becomes awkward when repeated. A writer can often recast the material in the plural, e.g.

Incorrect:

The learner should not be cut off from his roots; his own culture and traditions should be respected.

Correct - rewritten in the plural:

Learners should not be cut off from their roots; their own cultures and traditions should be respected.

One may also replace the 'he' with 'they' without changing the verb. This may seem grammatically wrong, but, in fact, 'they' was used as a singular pronoun a long time ago, as in Lord Chesterfield's remark (1759),

'If a person is born of a gloomy temper ... they cannot help it.'

Bioversity encourages the use of 'they' instead of 'he'.

Pronouns may also be eliminated by repeating the noun they refer to, but again this can sound clumsy. A synonym for the word may be also be used.

Instructions or practical advice can avoid the problem by addressing the reader directly, e.g. 'The warehouse store is another way for you to curb your food bills.'

'One' or the passive voice sometimes serves as a third-person pronoun.

Contracts and other forms can be printed with he/she, his/her, etc., where one or the other must be selected. However, avoid using s/he or he/she in Bioversity reports.

### ***Assigning gender to gender-neutral terms***

The assignment of gender to common-gender nouns may distort the information being presented, such as when terms like immigrants, settlers and farmers are used in contexts that refer to males only. Many farmers in the developing world are women. According to United Nations estimates, women produce 60 to 80% of the food supply in Africa and Asia. Nevertheless, many people will be surprised and even confused by a statement such as 'The farmer showed she knew more than the scientist'.

### ***Gratuitous modifiers***

Gratuitous modifiers often slip into writing as a result of prejudice or out of habit, such as 'women scientists', 'women students', a 'woman photographer'. In most cases such sex-specific modifiers can be deleted.

**Personification**

Many nouns in English are traditionally (not grammatically) given a sex. Cars and ships are frequently called 'she'. Bioversity writers should use 'it'. Do not write 'sister Centre/Institute', instead use 'related Centre' or 'sibling Centre', or change the sentence.

**Girls, ladies, females, women**

These words have strong overtones: of immaturity and dependence in the case of 'girl'; of decorum and conformity in the case of 'lady'. They can be very offensive, such as:

'I'll have my girl make some copies right away'.

'Lady' is not a synonym for 'woman'. 'Lady' is used most effectively to evoke a certain standard of propriety, correct behaviour, or elegance. Bioversity writers should examine their use of these words very carefully. However, 'Ladies' may safely be used in 'Ladies and gentlemen'.

Used either as a noun or an adjective, 'female' is appropriate when the corresponding choice for the other sex would be male:

'The cow had her calves last night: three females and two males.'

'Woman' is the most useful all-around word for referring to an adult female person.

'The project team of seven women and five men was chosen quickly.'

Traditionally, women tend to be seen as wives, whereas men are called 'men' more often than 'husbands', which is the appropriate parallel term. 'Spouse' is a gender-neutral word. If the husband is working then his spouse is his wife. If the wife is working then her spouse is her husband.

To 'father' (the biological act of insemination) is disappearing. A new word, parenting, is gaining acceptance.

Note also the following error:

Incorrect:

Research scientists often neglect their wives and children.  
(Thus the scientists must be men)

Correct:

Research scientists often neglect their families.  
(So that the scientists may be men or women)

Used as a noun, 'woman' connotes independence, competence and seriousness of purpose as well as sexual maturity.

**Describing women by appearance**

Emphasis on the physical characteristics of women is offensive in contexts where men are described in terms of achievements or character.

It is still common to come across gratuitous references to a woman's appearance in contexts where similar references to a man would be ludicrous.

### **Trivializing**

Language used to describe women's actions often implies that women behave more irrationally and emotionally than men, for example:

It seems women 'bicker' but men 'disagree'

### **Names and titles**

Women are frequently referred to by their first names in circumstances where men are called by their last names, in particular in the titles of papers and books. There is no reason for this. Bioversity discourages this practice. However, some women prefer to use their first names to avoid possible confusion. This is a matter of personal preference. Unless specifically requested, use initials only. The impression created, intentionally or not, is that women merit less serious consideration, less respect. Thus do not write:

Dr J.D. Morgan and Dr Judith James.

### **Mrs, Miss and Ms**

Because many people feel strongly about social titles, the obvious and courteous solution for anyone writing about or to a particular woman is to follow her preference. If this is not known, use 'Ms'.

### **Correspondence**

The salutation 'Dear Sir or Madam' is permissible but clumsy. 'To the addressee' or 'To whom it may concern' can be better.

### **Sexist term**

Businessman

Cameraman

Chairman

Domestics, maids, servants

Forefathers

Foreman

Frenchmen, etc.

Freshmen

Gentleman's agreement

Girl Friday, man Friday

Lady

Man, mankind

### **Recommended alternative**

Business manager, executive, head of firm, agent, representative, business traveller: (pl) business community, business people

Photographer, camera operator, (pl) camera crew

President or Chair

Use Chairman/Chairwoman when an established body is referred to and when a specific known person is meant (spokesman, etc.)

For all new bodies set up, use president or chair

Domestic workers

Ancestors, forebears

Supervisor

The French

First-year students

Unwritten agreement, agreement based on trust

Aide, key aide, assistant, helper

(see text) Use *lady* only as a parallel to *gentleman*. *Lady* has become debased and its use is often jocular

People, humanity, human beings, humankind, the human

<b>Sexist term</b>	<b>Recommended alternative</b>
	species, the human race, we, ourselves, men and women, <i>Homo sapiens</i> , one, the public, society
Man a project	To staff a project, hire personnel, employ staff
Man power	Staff, labour, work force, personnel, workers, human resources, human power, human energy
Man-made	Artificial, synthetic, manufactured, of human construction, of human origin, built-up, industrial, human-induced
Man (as a verb)	Operate, work, staff serve at (or on or in)
Man-hours	Work-hours, labour time
Man-made	Handmade, hand-built, human-made, synthetic, manufactured, fabricated, machine-made
Man-to-Man	One-to-one, one-on-one, person-to-person
Man and the Biosphere	While existing titles of programmes, documents and so forth cannot be changed, avoid man, he, etc. in all cases in new titles
Mother tongue	First language
Mr and Mrs John Smith	Jane and John Smith, Mr and Mrs Smith, Mr and Ms Smith
Spokesman	Spokesperson, representative Use <i>spokesman</i> or <i>spokeswoman</i> when a specific person is intended. Use the nongender-specific term when the reference is indeterminate. This applies to 'man' terms generally
Workman	Worker
Workmanlike	Efficient, skilful

## Appendix 5. The International System of Units

The *Système International d'Unités* (SI) was adopted by the eleventh General Conference on Weights and Measures and endorsed by the International Organization for Standardization in 1960. The system is an extension and refinement of the traditional metric system and is superior to any other in being completely coherent, rational and comprehensive. In the system there is only one unit for each physical quantity and the product or quotient of any two SI units yields the unit of the resulting quantity; no numerical factors are involved. The system is based on seven basic and two supplementary units.

### *Prefixes for SI units*

Fraction	Prefix	Symbol	Multiple
10 <sup>18</sup>	exa	E	1 000 000 000 000 000 000
10 <sup>15</sup>	peta	P	1 000 000 000 000 000
10 <sup>12</sup>	tera	T	1 000 000 000 000
10 <sup>9</sup>	giga	G	1 000 000 000
10 <sup>6</sup>	mega	M	1 000 000
10 <sup>3</sup>	kilo	k	1 000
10 <sup>2</sup>	hecto	h	100
10 deca*	da	da	10
10 <sup>-1</sup>	deci	d	0.1
10 <sup>-2</sup>	centi	c	0.01
10 <sup>-3</sup>	milli	m	0.001
10 <sup>-6</sup>	micro	μ	0.000 001
10 <sup>-9</sup>	nano	n	0.000 000 001
10 <sup>-12</sup>	pico	p	0.000 000 000 001
10 <sup>-15</sup>	femto	f	0.000 000 000 000 001
10 <sup>-18</sup>	atto	a	0.000 000 000 000 000 001

\*may be spelled 'deka'

## Appendix 6. Putting names into alphabetical order

The most common use of alphabeticization is when you are assembling the reference list. Usually this is simple, but some names can lead to confusion.

The first rule is that the family or surname (the name at the end in Western names) is put first, with the initials following. This is easy with a name like 'Swan, D.G.', but more difficult with Van Epstein and de la Mere, also names from many other countries. If you are in doubt you can usually find examples if you read carefully through a list of references in a journal. However, here are some specific cases.

### **Arabic names**

The family name of most Arab names comes last, so take the final name as a basis for ordering. Include, but do not take into account (for alphabetizing) any suffixes such as ibn- or abu-.

### **Burmese names**

The Burmese do not use family names. Take the main part of the name for alphabetizing, the initial will most probably be a title.

### **Chinese names**

Spell the name as given in the original work. The names are traditionally written with the family name first, so do not turn them around, or use commas, unless the name has been Westernized, with initials, e.g. T.J. Chin.

### **Ethiopian names**

Ethiopian names should not be abbreviated, nor should the order of the names be changed, but spell the name as given in the original work. Ethiopian names should be alphabetized according to the first name.

### **French names**

French names can start with the articles 'le, la, l', du, de la, etc.' Since there is such variety, ignore the articles (see German and Dutch names, below).

### **German and Dutch names**

These can be very confusing. Some Dutch names begin with 'van' and some German names with 'Von'. One approach is to take the main names as the subject and put the rest behind the name, as in:

Klaus, Von, D.J.L.  
Meer, van, P.H.  
Veer, van de, T.R.

Another is to leave the 'Von' or 'van' where it is but still read the first letter of the name:

Von **K**laus, D.J.L.  
van **M**eer, P.H.  
van de **V**eer, T.R.

Many journals will have their own specific way of treating these names. Be careful that the 'van' and 'Von' begin with a capital or small letter, as cited in the original reference.

**Indian names**

The surname appears last in Indian names. Some Indians have only one name.

**Indonesian names**

Many Indonesians have or use only one name. If they use two or more, use the last name as a basis for ordering.

**Japanese names**

The family name comes first in Japan and so should be treated like Chinese names. However, in most journals the name will have been Westernized, with the family name last.

**Names with 'Saint'**

Even though this might be abbreviated to St., it is usual to list it as if it were spelled 'Saint', so with 'St. Laurent', and Saint-Saens, the first comes before the second. Ignore the hyphen.

**Names with 'Mac' and 'Mc'**

Order such names as if they all are spelled 'Mac-'.

**Spanish names**

Surnames are usually double-barrelled, e.g. José Ortega Garcia. Use 'Ortega' for ordering. Ignore words like 'y' and 'de', go to the start of the surname.

**Thai names**

The family name comes last in Thai names, so the name should be inverted.

**Vietnamese names**

The family name comes first and so the order should not be changed.

## Appendix 7. Some common publishing terms

Abbreviation	A shortened form of a word produced by deleting the final part of the word, sometimes ending in a full stop. This is not Biodiversity practice, except in Reference lists, e.g. Biochem., Agroecol., Res.
Acronym	A word formed from the initial letters of other words, e.g. WHO, World Health Organization (see Abbreviation and Contraction)
Bold	Type that is much <b>denser, blacker or thicker</b> than normal (see Italics and Roman)
Camera-ready copy	Copy prepared so that the printer can use it as an original for making printing plates
Caption	Term usually applied to the text under an illustration which it explains. May also be the title or heading above an illustration (see Legend)
Case bound	A publication bound with stiff boards covered by cloth or other material (also known as hard back, opposite: paperback, or soft bound)
Contraction	A shortened form of a word which ends in the same letter as the word itself, usually without a period, e.g. weight: wt (see also Abbreviation and Acronym)
Cropping	Trimming or masking off unwanted parts of an illustration
Ellipsis	The three dots in text indicating that words have been omitted, ..., or that the sentence is not finished
Indent	To leave a blank space at the beginning of a line or start of a paragraph
Italics	Type sloping <i>like this</i> to the right (see Roman and Bold)
Landscape	A figure or table turned sideways on a page because it is longer than the width of the page
Legend	Explanation included within the edges of a map or illustration (see Caption)
Lower case	Small letters, a, b, c (see Upper case)
Manuscript	(abbreviated ms.; plural mss.) Handwritten copy (see Typescript)
Page proof	A copy of the typeset text which has been made up into the form of pages
Proof	Any copy of type made for the purpose of correction
Roman	Normal upright type (see Italics and Bold)
Solidus	Another name for the slash mark: / or \
Stet	Latin word for 'let it stand'. Written in the margin of a proof to cancel an alteration. The word or words involved are underlined with dots
Typescript	Typewritten copy (see Manuscript)
Upper case	Capital letters: A, B, C (see Lower case)