

**THE BIOLOGIST'S HANDBOOK
OF PRONUNCIATIONS**

By the same author

A SOURCE-BOOK OF MEDICAL TERMS

Charles C Thomas, Publisher, Springfield, Illinois

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TERMS

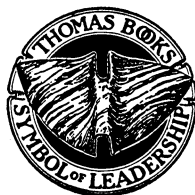
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THE BIOLOGIST'S HANDBOOK OF PRONUNCIATIONS

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CHARLES C THOMAS • PUBLISHER
Springfield • Illinois • U.S.A

CHARLES C THOMAS • PUBLISHER
BANNERSTONE HOUSE
301-327 East Lawrence Avenue, Springfield, Illinois, U.S.A.

*Published simultaneously in the
British Commonwealth of Nations by*
BLACKWELL SCIENTIFIC PUBLICATIONS, LTD.,
OXFORD, ENGLAND

Published simultaneously in Canada by
THE RYERSON PRESS, TORONTO

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Library of Congress Catalog Card Number: 59-14924

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Printed in the United States of America

PREFACE

IT IS A COMPLAINT all too common among those who are beginning the study of the biological sciences that they can make little satisfactory progress in the pronunciation of the numerous scientific names and terms they must use. Their path is made thorny by the fact that advanced students and even many teachers of scientific studies, to whom they look for guidance, mispronounce, often atrociously, many of the terms. Perhaps all, both students and teachers, would gladly improve their pronunciation if they could find ready at hand some small but adequate book of reference.

In response to the demand of these multitudes, I have prepared, with some misgivings and hesitation, this handy pronouncing guide. It includes not only a host of the most commonly used and often mispronounced technical terms, but also the better known generic names of plants and animals and numerous Latin adjectives and adjectival compounds used as specific or trivial names. As a special aid to learning, with each specific name is given its original Greek or Latin meaning or English equivalent.

Acceptable pronunciation of each word is indicated, by its division into parts (not necessarily syllables) by means of hyphens, by accent, and by diacritical marks. The preferred pronunciation is,

in each case, indicated first; the less used but acceptable alternatives are placed afterwards.

It should ever be remembered that while there are formal rules of pronunciation they have not always been observed. Long usage has in certain cases established other ways of sounding some letters, especially vowels, and of placing accents. It is also well to keep in mind that words, especially derived ones, may be pronounced differently by phonetic experts and by reputable biologists residing in different countries. The individual preferences are indeed many.

The scientific names of both plants and animals are generally cast in Latin form even though they may be compounded from Greek or other stems. It has been agreed that they should, for the most part, be pronounced in conformity to Latin rules and practice. Accordingly I have given in the introduction the more important rules governing the syllabification and accentuation of Latin words. A table showing the needed diacritical marks and the sounds of the letters which they govern has been located for ready reference inside both the front and back covers of the book. To add interest and to help the student in learning, a number of illustrations have been placed throughout the text. These call attention to often mispronounced words.

Those who use this Guide are urged to read carefully the Introduction and to make an earnest effort to master the brief but highly important material found there. They may then proceed to

pronounce intelligently and with ease and accuracy, the names and terms they use.

Gardeners and horticulturists, specialists in animal husbandry, foresters, naturalists, and students of the biological sciences will often need to consult the Guide. Teachers, especially, will welcome this aid as they prepare to give their lectures or conduct recitations. All will find it to be a most profitable and interesting spare-time pleasure (although at times embarrassing) to run through the lists of familiar generic and specific names as well as oft-used technical terms and underline the great number of mispronunciations they have been habitually making.

In preparing the long list of words (there are more than 9000), a guide to whose pronunciation is indicated, the author tried particularly to include only those most likely to cause difficulty. Thus many commonly used terms and generic names of obvious sound and accentuation have been omitted. This has made it possible to keep the book down to a size easy to handle, and to render it valuable as a constant desk or brief-case companion.

The author realizes that although he has spared no effort to here present a thoroughly reliable work, there still must be errors which have slipped in. Constructive criticisms and corrections are accordingly invited for the purpose of helping to attain to a more uniform and correct standard of pronunciation in future editions of the HANDBOOK.

I have been fortunate in securing the advice and generous assistance of many able students of the principles of phonetics, and to them I am deeply indebted. A list of the more important and helpful books consulted is appended.

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INTRODUCTION

UNFORTUNATE AS IT IS, the "English method" of pronouncing Latin is used, both in this country and in England, by most biologists, in the pronunciation of biological names cast in Latin form. According to this system the vowels are given their customary English sounds as are the consonants, except that *ch* is pronounced as *k*; *c*, *g*, and *gg* are usually soft before *e*, *i*, *y*, and the diphthongs *ae* and *oe*. The usual Latin rules of accentuation are observed.

The use of the "English method" of pronunciation goes back to the period when this method was used in the English Law Courts. Later it was widely taught in English and American schools. More recently it has been superseded by the "Continental method," which is now used exclusively in the secondary schools and colleges of the United States and many parts of Europe.

Since there are those who may prefer to pronounce words in accordance with the Continental or Roman method the following explanation of diacritical marks and sounds of consonants and diphthongs will be useful:

Long Vowels

ā like a in ah
ē " e " they
ī " i " machine
ō " o " mole
ū " u " mule

Short Vowels

a like a in idea
e “ e “ let
i “ i “ pin
o “ o “ obey
u “ u “ full

Consonants

c like c in come
ch “ ch “ chemistry
g “ g “ give
r “ r “ room
s “ s “ son
t “ t “ time
v “ w “ we
qu “ qu “ quite

Diphthongs

ae nearly like ai in aisle
oe “ “ oi “ coin
au “ “ ou “ spout
eu “ “ eu “ feud
ei “ “ ei “ veil
vi “ “ we “ cui (kwe)

**CONCERNING THE SYLLABIFICATION
AND ACCENTUATION OF LATIN
WORDS OR OF GREEK WORDS
CAST IN LATIN FORM**

1. A syllable consists of a vowel or diphthong* with or without one or more consonants. Accordingly, a word has as

- many syllables as it has separate vowels or diphthongs.
2. In dividing a word into syllables, a single consonant is joined to the vowel which follows it.
 3. If two or more consonants occur between two vowels, as many are joined to the following vowel as can be pronounced with it.
 4. In compounds, the parts are separated.
 5. The last syllable of a word is called the *ultima*. The next to the last syllable of a word is called the *penult*. The syllable preceding the penult is called the *antepenult*.

Words of two syllables have the accent on the penult. Thus: Latin *tū'-bā*, trumpet and *ān'-cēps*, two headed, double.

Words of more than two syllables have the accent on the penult *when that syllable is long*: otherwise the accent falls on the antepenult. Thus: *prae-dī'-cō*, to foretell but *prae'-dī-cō*, to declare.

In this pronouncing guide only the primary or principal accent is indicated, since, usually, knowing this, it is rather easy to find the secondary accent. It is well to remember that the secondary accent, as a general rule, can never fall less than two syllables before the primary one.

A syllable is long:

1. if its vowel is long. In this book the long vowels are marked; unmarked vowels must be regarded as short.

* A diphthong (Gr. *di*, double; *phthongos*, voice) is a union of two vowels pronounced as one. In "proper" diphthongs, which we have in such English words as "joy," "poise," and "round," the two vowels are blended; but in "improper" diphthongs which appear in such words as "people," "each," and "pain" only one of the vowels, generally the first, is sounded.

2. if its vowel is followed by "x" or "z."
3. if its vowel is short but followed by two or more consonants. Except a mute (p, b, t, d, c, k, g, q,) followed by l or r or by x or z.
4. if it contains a diphthong.*
5. final *as, es, os* are long.

A syllable not held to be long is short.

A final syllable ending in any consonant other than "s" is short (-is, -us, and -ys are short). There are few exceptions.

In pure Latin words a vowel is long:

1. if it is formed by the contraction of a diphthong.
2. if it occurs before "gm" (and often "gn"), "nf," and "ns."
3. if it occurs before "consonant i" = y (with the sound of y in *yet*).
4. usually if the "o" and "u" are final.

In pure Latin words a vowel is short:

1. if it occurs before another vowel or "h," thus: *via, nihil*.
An exception is found in some words transcribed from Greek.
2. if it occurs before "nd" or "nt." Thus: *amandus* and *amant*.

COMPOUND WORDS

Many generic and trivial (specific) names of animals and plants consist of fabricated compound

* The most common Latin diphthongs are "ae," "au," and "oe." "eu" occurs in a few Latin words derived in part from the Greek "eu," meaning "well, good." "-eus," a common Latin adjectival ending, is pronounced "-ě-us"; i.e., in two syllables. The common Greek diphthongs "ae" (represented by ae), "ev" (transliterated "eu"), and "oi" (transliterated "oe") are considered long in pronunciation.

words. If the words are compounded from Greek words or word-stems, the parts are often joined by the use of the vowel "o," often, but not necessarily, sounded as a shortened long "o" and marked "ō." Thus we have *ornithopteris* from the Greek stem *ornithos*, a bird, joined by the use of "o" to the word *pteris*, a wing. This connecting vowel "o" is also used in constructing some Latin compounds but the usual joining vowel in Latin compounds is "i." This we see in the trivial name *alnifolia* from the Latin stem *alnus*, the alder, and *folium*, a leaf.

TRANSLITERATED WORD-ENDINGS

Greek words ending in *-on* (*-ov*) and *-os* (*os*), when made over into Latin words, appear with the endings *-um* and *-us*, while those ending in long *e* (*-η*) usually have their Latin derivatives ending in *-a*. Thus Greek *petalon* (*πεταλον*) becomes the Latin *petalum*, a leaf, and Greek *cyamos* (*κνᾶμος*) becomes the Latin generic name *Cyamus*, a bean.

In the case of commemorative names ending in *-ia*, *-iana*, or occasionally in *-ella*, given to honor discoverers, eminent scholars, or patrons of science, every effort should be made to preserve in their pronunciation as near as possible the original sounds; only thus can the names be readily associated with the persons in whose memory they were originally given. Certainly *Dahlia*, given to commemorate the Swedish botanist Dahl, should be pronounced Dă'-lĭ-ā and not Dă'-lĭ-ā as is so commonly done, and *Camellia*, given in honor of the botanical contributions of George Joseph Kamel (Latinized

form = Camelli), the seventeenth century Moravian traveller, should have the *e* pronounced short (Căm-ěl'-lī-ą) and not long (Căm-ěl-'lī-ą) as so many careless persons are in the habit of doing. Pronounced otherwise, the connection between the man and the plant or animal is almost entirely obliterated and one of the chief purposes of giving the name is defeated.

Sometimes words have passed over into the English language and in so doing have not only had their accent shifted and the sounds of their vowels changed, but they have also had the spelling slightly altered. Examples of such words are the Greek *ănēm-ō'-nē* (ἀνεμώνη) which in English appears as the plant name *ănēm-ō-nē*, and the Latin *or-ā'-tor* becomes in English *ōr'-ā-tōr*. From the Latin *fō-li-us*, leaf, we have the English words *fō'-lī-āge* and *fō'-lī-ō*. Strange indeed, and rightly so, it now would sound, to hear someone speak of *fō'-lī-āge* or of a *fō'-lī-ō*. The long o in foliage comes to us through French.

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Generic names of plants are followed by an asterisk (*).

A

- Abama*** (ab-ā'-mā)
abbreviatus (ab-rev-i-ā'-tus) abridged.
abditus (ab'-di-tus) removed, withdrawn.
abdomen (ab-dō'-men)
abductor (ab-duk'-tōr)
Abelia* (āb-el'-i-ā; ā-bēl'-i-ā)
aberrant (ab-er'-ant)
abient (ab'-i-ent)
Abies* (ab'-i-ēz)
abieticola (ab-i-et-i'-kō-lā) fir-dweller.
Abietineae* (ab-i-et-in'-ē-ē)
abietinus (ab-i-et-ī'-nus) abies-like.
Ablepharus (ā-blef'-ā-rus)
ablutus (ab-lū'-tus) washed.
abnuitus (ab-nū'-it-us) given up, rejected.
abomasum (ab-ō-mā'-sum)
aboral (ab-ō'-ral)
aboriginus (ab-ōr-ij'-in-us) the primeval Romans,
also, a nation, the Aborigines.
abortivus (a-bōr-tī'-vus) born prematurely.
Abramis (ab'-rā-mis)
abrasus (ab-rā'-sus) rubbed off, shaved.
Abraxas (ā-brak'-sas)
Abrocoma (ā-brok'-ō-mā)
Abronia* (ā-brō'-ni-ā)
abrotanifolius (ab-rot-an-i-fol'-i-us, ab-rot-an-i-
fō'-li-us) with leaf like *Abrotanum*.