



## A guide to the pronunciation of the scientific names for harmful algae

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### Abstract

A historical review of scientific nomenclature and of the pronunciation of classical languages suggests that there is no objectively correct way to enunciate the technical terms applied to harmful algae. Any guide to pronunciation is always relative to some group of speakers; scientific nomenclature is an artificial construct without a population of normative speakers, living or dead, to whom the bewildered enunciator can have reference. Thus a key to the pronunciation of the Latin and Greek scientific terms in all disciplines, and a fortiori to the pronunciation of those terms applied to harmful algae, must be based on rules of common sense, mutual forbearance, and general intelligibility. This article includes a guide to pronouncing the names of harmful algae based on these principles.

### Introduction

Dictionary systems of phonetic transcription must choose some arbitrary reference group from the actual population of language speakers as a point of departure. This simple truth is the key to understanding the pronunciation of the scientific terms applied to harmful algae, as well as the pronunciation of all scientific nomenclature.

This article has chosen what, from a linguist's point of view, is a deplorable system of phonetic notation, but one that is familiar to newspaper readers across America. The key in Table 1 is based on the United Press International broadcasting style as given in the third edition of the UPI Stylebook (1992), with some modifications to eliminate the handbook's most egregious phonetic omissions and errors. Each symbol is accompanied by a key word representative of the sound symbolized. However, not every speaker will pronounce every key word alike. The words *missile disaster* will be represented by one transcription for educated speakers of American English (MIHS-uhl dih-ZAS-tuhr) and by a somewhat dissimilar one (MIHS-eyel dih-ZAH-stuh) for British speakers of

what is formally called the Received Standard and informally known as BBC English.

The UPI is an American news syndicate and, in making up its pronunciation key, it assumes that its broadcasters and the readers of its style book will be speaking the dialect of American English shared by the educated middle-class from Boston to Los Angeles. In other words, the point of reference for the UPI phonetic symbols used here is what might be called PBS English, the sort heard on Public Broadcasting's National Public Radio shows. A Glaswegian dockworker unfamiliar with this American dialect and confronted with the task of broadcasting using the same system employed by the UPI would continue to sound like a Glaswegian dockworker, because his pronunciation of the key words would differ from that employed by speakers of PBS English. Any good dictionary is well aware of this. The greatest of them, the Oxford English Dictionary (1989), clearly states at the head of its key to pronunciation that its phonetics are relative to 'the educated speech of southern England (the so-called "Received Standard")'. The pronunciation of any language varies in relation to the social and linguistic conditions of its speakers.

Table 1. Modified version of the UPI Stylebook (1992) pronunciation guide used for phonetics in this article. In the text, a syllable given all in CAPITAL LETTERS takes the primary stress; a syllable given in **bold face type** takes a secondary stress: *belizeanum* (beh-**leez**-ee-AHN-uhm)

Phonetic symbol	Pronounced as in American standard
A	cat
AH	father
AI	air
AW	talk, awe, fought
AY	mate
B	boy
CH	chin
D	dodo
EE	meat, machine
EH	get
EW	few, mule
EYE	time
F	food
G	giggle
H	hot
HW	when
IH	pity
J	juice, general
K	key, cat
L	let
M	mother
N	nice
NG	song
O	not, hot
OH	note, though
OI	boy, oil
OO	fool
OW	how
P	paper
R	roar
S	say, cease
SH	sheep, machine
T	tell
TH	thin
TH	this
U	put
UH	the, shut, but [schwa]
UR	purr
UU	wood
V	very
W	wet
X	loch, chutzpah
Y	yes
Z	zombie, these
ZH	rouge, pleasure

## Background

The language of scientific terminology, and a fortiori the language used in the nomenclature of harmful algae, is now and has been from well before the eighteenth century a form of Latin with an admixture of classical Greek and contemporary proper nouns. The polite recommendations in Article 20A of the 1994 International Code of Botanical Nomenclature ('use Latin terminations insofar as possible'; 'avoid names not readily adaptable to the Latin language') are only the politically correct transcripts of Linnaeus' fulminations on the subject in his *Critica Botanica* of 1737: 'Generic names which have not a root derived from Greek or Latin are to be rejected. . . Let all the other languages of Europe be banished from this science, as well as the languages spoken outside Europe, which to us are "barbarous"' (Linnaeus, 1938: pp. 37–38).

If Latin and Greek provide the foundation of scientific terminology, how are the elements of this classical nomenclature to be pronounced? What group of speakers can we select as the exemplars for phonetic transcription?

Alas, the Latin and Greek of scientific nomenclature are highly artificial. *Pseudo-nitzschia pseudodelicatissima* is a form that no educated Latin speaker of Cicero's Republican age would recognize. Our Republican would find the compounding of Greek (*pseudo*) and Latin (*delicatissima*) elements arch or arresting, and the combination of consonants found in *nitzschia* could not exist in classical Latin, where it would have appeared to our educated Roman as impossible as many Slavic names seem to English speakers. The contrast between Ciceronian Latin and the classical terminology employed by modern science merely confirms George Gaylord Simpson's observation that zoological nomenclature 'is an arbitrary device that has become an enormously complex, strictly formal, rigidly legalistic system' (Simpson, 1961: p. 34).

Thus the attempt to formulate rules for the pronunciation of scientific terminology immediately faces two difficulties: 1) the vocabulary of scientific terminology is in the first place artificial and does not easily lend itself to any natural pronunciation, and 2) any system of phonetics employed for its enunciation must be relative to some normative group of speakers, but there is no normative group of speakers for the artificial language of formal scientific names. Codes of nomenclature such as the International Code of Botanical Nomenclature (1994), the International Code of

Nomenclature for Cultivated Plants (1995), and the International Code of Nomenclature of Bacteria (1992) offer no help in pronunciation. They are all too familiar with the difficulties, and each has chosen silence as the better part of erudition in dealing with what may be a problem without a proper solution.

To illustrate the problem, let us take a basic term from the vocabulary of the phycologist: *algae*. Should the word be pronounced as Lucretius, Rome's scientific poet of the first century B.C., would have done? The result would be something like al-GAY-ee, a trisyllabic pronunciation already archaic in Lucretius' time but one which suited his artistic proclivities. Or should the word be pronounced as Pliny the Elder, so greatly admired by Linnaeus, might have done, which could well have yielded AL-gee (Allen, 1978: p. 61)? Or should the Latin of the English scientific pioneers Francis Bacon and Isaac Newton be the benchmark, in which case the word might be sounded AL-geye? The great continental classicist Joseph Scaliger, Bacon's contemporary, would certainly not have approved of the last; he was once harangued in Latin for four hours by 'a most learned Englishman' whom he no more understood 'than if he had spoken Turkish' (Allen, 1978: p. 108).

What about the Latin of Galileo? Galileo shared this much with the ecclesiastical authorities who impeded the dissemination of modern scientific thought: they all pronounced their Latin like their Italian, a procedure that forsook classical articulation in favor of the *lingua volgare* associated with Church Latin (Savino, 1986: p. 8). Galileo, who in any event championed the use of the vernacular in scientific writing, would probably have said AHL-gee, somewhat as in modern Italian, a form of pronunciation for Latin that continues to provoke withering scorn from many contemporary anglophone students of classical languages as corrupt, inauthentic, and Catholic.

Why not then choose the Latin of Linnaeus? This option is not entirely palatable when we recall that Linnaeus was by his own admission bad at languages, knew only Swedish and Latin, and rigorously avoided all linguistic studies (Pulteney, 1805: pp. 562–63). Nor would Linnaeus' pronunciation of Latin have been widely shared even in his own age. As Frederick Brittain has noted, eighteenth-century scholars generally pronounced their Latin with the flavor of their native languages, so that Linnaeus' prized classicisms would have sounded more Scandinavian than Ciceronian (Brittain, 1955: p. 54).

The prospect of finding a definitive standard for the pronunciation of scientific Latin is no brighter in choosing as models educated classicists of the present day, as a review of W. Sidney Allen's appendix on 'The Pronunciation of Latin in England' (1978) will reveal. The experts cannot agree among themselves, and several competing pronunciations are currently in use. Meanwhile, the problem of finding an acceptable norm for the pronunciation of scientific terms is compounded by the century-long decline in the study of classical languages. Once, all scholars might have been expected to possess an extensive background in Latin and Greek, extending to such minutiae of the ancient languages as the proper use of thesis (downbeat) and arsis (upbeat) in classical prosody, an area of study very helpful in determining pronunciation. However, today it is doubtful if any students in humanities, much less the sciences, can distinguish their theses from their arses, and in such a condition of learning, consistency of pronunciation based on scholarly consensus is impossible.

## Solutions

The easiest solution to this conundrum would be to adapt an ancient domestic maxim and insist that scientific terms should be seen and not heard. Unfortunately, in a world of global symposia and scholarly peregrination, this rule seems as incapable of enforcement in the scientific realm as it has proved in the household.

It seems then that any attempt to find a correct pronunciation for an artificial language can only be resolved by resort to an artificial set of rules. This the authors of this note will attempt, hewing to the guiding principles that the rules should rely on common sense, mutual forbearance, and general intelligibility, always keeping in mind the broad application of Mayr's lament about zoological terminology: 'It is most unfortunate that some taxonomists take a far greater interest in the names of animals than in the animals themselves' (Mayr, 1969: p. 297). Specifically:

1. *The English Rule* English, and particularly the English of standard American usage, is the contemporary language most widely used in scientific discourse and should provide the point of reference for the phonetics of scientific terminology. Practicality rather than chauvinism suggests this rule: in due course a Chinese Rule may have to be adop-

Table 2. A phonetic guide to commonly used scientific terms for harmful algae, including a sample of variant pronunciations. Close approximations to original Latin or Greek enunciation are marked with an asterisk: \* **gum**-noh-dih-NEE-uhm

<i>Alexandrium</i>	al-eh-k-ZAND-ree-uhm * uhl-eh-k-ZUHN-drih-um
<i>affine</i>	AF-fihn-eh a-FIHN-eh a-FEE-nay *uhf-FEE-neh
<i>catenella</i>	<b>kat</b> -uh-NEHL-luh * <b>kuh</b> -tay-NELH-luh
<i>cohorticula</i>	koh-hawr-TIHK-ew-luh
<i>excavatum</i>	ehks-kah-VAHT-um *ehks-kuh-WAH-tum
<i>fundyense</i>	<b>fuhn</b> -dee-EHNS-eh
<i>margalefi</i>	mahr-gah-LEHF-eye
<i>minutum</i>	mihn-EW-tuhm meye-NOOT-uhm
<i>ostendfeldii</i>	os-tehn-FEHL-ee-eye
<i>tamarense</i>	tahm-mahr-EHNS-eh
<i>Amphidinium</i>	am-fih-DIHN-ee-uhm
<i>carterae</i>	kahr-TEHR-eye
<i>klebsii</i>	KLEHB-see-eye
<i>operculatum</i>	o-pehrk-ew-LAHT-uhm
<i>Anabaena</i>	an-uh-BEEN-uh an-uh-BAYN-nuh
<i>affinis</i>	AHF-ihn-ihs af-FEE-nihs
<i>circinalis</i>	sihr-sihn-AHL-ihs *kihr-KIH-nuh-lihs
<i>elenkini</i>	eh-lehn-KIHN-ee-eye
<i>lemmermannii</i>	lehm-mehr-MAHN-ee-eye
<i>planctonica</i>	plahnk-TON-ihk-uh plank-TON-ihk-uh *plahnk-TAW-nih-kuh
<i>spiroides</i>	speye-ROI-deez
<i>Chaetoceros</i>	keye-TO-sehr-aws *Xeye-TAW-keh-raws
<i>concaicornis</i>	kon-kah-vih-KAWRN-ihs
<i>curvisetus</i>	kuhr-vih-SEHT-uhs * kur-WEE-seh-tus
<i>gracile</i>	GRA-sihl-eh * GRUH-kih-leh
<i>similis</i>	SIHM-ihl-ihs
<i>socialis</i>	soh-sih-AHL-ihs * saw-kih-AH-lihs
<i>Chattonella</i>	kat-ton-EHL-uh * Xuht-taw-NEHL-luh
<i>antiqua</i>	an-TEEK-wuh
<i>marina</i>	ma-REEN-uh * muh-REE-nuh

Table 2. Continued

<i>subsalsa</i>	suhb-SAHL-suh
<i>Chrysochromulina</i>	<b>krih</b> -soh-kroh-MEW-lihn-uh * <b>Xru</b> -saw-Xroh-MU-lih-nuh
<i>acantha</i>	ah-KAN-thuh * uh-KUHN-thuh
<i>brevifilum</i>	brehv-ih-FIHL-uhm brehv-ih-FEEL-uhm brehv-ih-FEYEL-uhm
<i>ericina</i>	ehr-ih-SIHN-uh
<i>hirta</i>	HURT-uh
<i>leadbeateri</i>	lehd-BEET-uhr-eye * leh-ahd-beh-AH-teh-rih
<i>polylepis</i>	pol-ee-LEHP-ihs
<i>Coscinodiscus</i>	kos-sihn-oh-DIHSK-uhs
<i>asteromphalus</i>	ah-stuhr-OM-fahl-uhs
<i>granii</i>	GRAHN-ee-eye
<i>Dictyocha</i>	dihk-tih-OHK-uh
<i>speculum</i>	SPEHK-ew-luhm
<i>Dinophysis</i>	deye-NOH-fih-s-ihs deye-NOF-ihs-ihs * dee-NAW-fu-sihs
<i>acuminata</i>	ah- <b>kew</b> -mihn-AHT-uh
<i>acuta</i>	ah-KEWT-uh
<i>caudata</i>	kow-DAHT-uh KOW-daht-uh
<i>fortii</i>	FAWRT-ee-eye
<i>mirta</i>	MURT-uh
<i>norvegica</i>	nawr-VEHJ-ihk-uh
<i>sacculus</i>	SAHK-kew-luhs
<i>tripos</i>	TREYE-paws TRIH-pos
<i>Gambierdiscus</i>	<b>gam</b> -bee-uhr-DIHSK-uhs
<i>belizeanus</i>	beh- <b>leez</b> -ee-AHN-uhs
<i>toxicus</i>	TOKS-ihk-uhs
<i>Gonyaulax</i>	gon-ih-OW-laks * gaw-nu-OW-luhks
<i>alaskensis</i>	uh-las-KEHNS-ihs
<i>excavata</i>	ehks-kah-VAHT-uh
<i>grindleyi</i>	grihnd-LEE-eye
<i>polyedra</i>	pol-ee-EHD-ruh
<i>polygramma</i>	pol-ee-GRAM-uh * paw-lee-GRUH-muh
<i>spinifera</i>	speye-NIHF-uhr-uh * spee-NIH-feh-ruh
<i>Gymnodinium</i>	<b>jihm</b> -noh-DIHN-ee-uhm * <b>gum</b> -noh-dih-NEE-uhm
<i>breve</i>	BREHV-eh
<i>catenatum</i>	kat-ihn-AHT-uhm kat-uh-NAHT-uhm * kuh-tay-NAH-tum
<i>galatheaum</i>	gal-ah-thee-AHN-uhm

Table 2. Continued

<i>mikimotoi</i>	mih-kih-MOHT-oi mih-kee-MOHT-oi
<i>nagasakiense</i>	nah-gah- <b>sahk</b> -ee-EHNS-eh
<i>sanguineum</i>	sang-GWIHN-ee-uhm * sahn-KWIH-neh-um
<i>simplex</i>	SIHM-plehks
<b>Heterocapsa</b>	heht-uh-roh-KAPS-uh * heh-teh-raw-KUHP-suh
<i>circularisquama</i>	sihr-kew-lahr-IHS-kwahm-uh * kihr-ku-lah-RIHS-kwuh-muh
<i>triquerta</i>	treye-KWEHRT-uh
<b>Heterosigma</b>	heht-uh-roh-SIHG-muh
<i>akashiwo</i>	ah-kah-SHEE-woh
<i>carterae</i>	kahr-TEHR-eye
<b>Microcystis</b>	<b>meyek</b> -roh-SIHS-tihs * meek-raw-KIHS-tihs
<i>aeruginosa</i>	eh-roo-jihn-OHS-uh ee-roo-jihn-OHS-uh * eye-roo-gih-NOH-suh
<i>flos-aquae</i>	<b>flos</b> -AHK-weye
<i>pulvera</i>	pul-VEHR-uh
<i>viridis</i>	VIHR-ihd-ihs
<b>Nitzschia</b>	NEE-chee-uh
<i>closterium</i>	klos-TEHR-ee-uhm
<i>tenuirostris</i>	<b>tehn</b> -ew-ee-ROS-trihs
<b>Ostreopsis</b>	os-tree-OP-sihs
<i>heptasgona</i>	hehp-TAS-gon-uh
<i>labens</i>	LAY-behns LAH-behns
<i>lenticularis</i>	lehn- <b>tihk</b> -ew-LAHR-ihs * lehn- <b>tih</b> -ku-LAH-rihs
<i>mascarenensis</i>	mas- <b>kahr</b> -uhn-EHNS-ihs
<i>ovata</i>	oh-VAHT-uh * aw-WAH-tuh
<i>siamensis</i>	seye-ah-MEHN-sihs
<b>Peridinium</b>	peh-rih-DIHN-ee-uhm
<i>cinctum</i>	<b>SIHNGK-tuhm</b> * KIHNK-tum
<i>foliaceum</i>	foh-lih-AHS-ee-uhm
<b>Perna</b>	PEHR-nuh
<i>canaliculus</i>	<b>kan</b> -uh-LIHK-ew-luhs <b>kan</b> -ah-LIHK-ew-luhs
<i>viridis</i>	VIHR-ihd-his
<b>Pfiesteria</b>	fihs-TEHR-ee-uh
<i>piscicida</i>	<b>peye</b> -see-SIHD-uh * pihs-KEE-kih-duh
<i>shumwayae</i>	shuhm-WAY-eye
<b>Prorocentrum</b>	proh-roh-SEHNT-ruh
<i>arenarium</i>	ah-ruh-NAHR-ee-uhm
<i>belizeanum</i>	beh- <b>leez</b> -ee-AHN-uhm

Table 2. Continued

<i>conconvum</i>	kon-CAHV-uhm
<i>cordatum</i>	kawr-DAHT-uhm
<i>emarginatum</i>	eh-mahr-jihn-AHT-uhm
<i>gracile</i>	GRA-sihl-eh
<i>hoffmannianum</i>	hof-mahn-ee-AHN-uhm
<i>lima</i>	LEE-muh
<i>maculosum</i>	mak-ew-LOHS-uhm
<i>mariae-leboruiae</i>	MEHR-ih-ee leh-bawr-EW-ih-ee
<i>micans</i>	MEYEK-anz
<i>minimum</i>	MIHN-uh-muhm
<i>rostratum</i>	ros-TRAHT-uhm
<i>triestinum</i>	tree-ehs-TEEN-uhm
<b>Protoceratium</b>	proh-toh-sehr-AHT-ih-uhm
<i>reticulatum</i>	reh- <b>tihk</b> -ew-LAHT-uhm
<b>Protoperidinium</b>	proh-toh-peh-rih-DIHN-ee-uhm
<i>brevipes</i>	BREHV-ihp-eez * BREH-wih-pays
<i>divergens</i>	deye-VIHR-jehnz * DEE-wehr-gaynz
<i>globulus</i>	GLOB-ew-luhs
<i>quinquecorne</i>	kwihn-kweh-KAWRN-eh
<b>Prototheca</b>	proh-toh-THAYK-uh
<i>staminea</i>	stah-MIHN-eh-uh
<b>Prymnesium</b>	prihm-NEES-ee-uhm
<i>parvum</i>	prihm-NAYS-ee-uhm PAHR-vuhm * PUHR-wuhm
<i>patelliferum</i>	pat-ehl-ih-FEHR-uhm
<b>Pseudo-nitzschia</b>	soo-doh-NEE-chee-uh sew-doh-NEE-chee-uh
<i>australis</i>	os-TRAHL-ihs
<i>americana</i>	uh-mehr-ih-KAHN-uh
<i>pseudodelicatissima</i>	soo-doh- <b>deh</b> -lihk-ah-TIHS-sihm-uh
<i>cuspidata</i>	kuhs-pih-DAHT-uh
<i>delicatissima</i>	deh-lihk-ah-TIHS-sihm-uh
<i>delicatula</i>	deh- <b>lihk</b> -ah-TEW-luh * day-lih-KAH-tu-luh
<i>fraudulenta</i>	fraw-dew-LEHNT-uh
<i>heimii</i>	heye-MEE-eye
<i>multiseries</i>	muhlt-ih-SEHR-ih-eez
<i>pungens</i>	PUHN-gehns
<i>seriata</i>	seh-rih-AHT-uh
<i>subfraudulenta</i>	suhb-fraw-dew-LEHNT-uh
<i>subpacificica</i>	suhb-puh-SIHF-ihk-uh
<i>turgidula</i>	tuhr-jihd-EW-luh * tur-GIH-du-luh
<b>Rhizolenia</b>	reye-zoh-soh-LEHN-ee-uh * rhee-zaw-soh-LAY-nih-uh
<i>calcar-avis</i>	<b>kal</b> -kahr AH-vihs
<i>fragilissima</i>	fraj-eyel-IHS-sihm-uh

Table 2. Continued

<i>setigera</i>	sih-TIHJ-uh-uh * say-TIH-geh-ruh
<b><i>Trichodesmium</i></b>	treye-koh-DEHS-mee-uhm * trih-kaw-DAYS-mih-um
<i>erythraeum</i>	ih-rith-REE-uhm ih-rith-RAY-uhm
<i>hildebrandtii</i>	hihl-duh-BRAND-tee-eye
<i>thiebautii</i>	tyuh-eh-BOH-tee-eye tee-eh-BOH-tee-eye thee-ah-BOHT-ee-eye

ted if Mandarin becomes the accepted language of scientific conversation.

2. *The Rule of Analogy* Where a scientific term or part thereof has a counterpart in contemporary English, the pronunciation of the counterpart term or part should guide the pronunciation of the scientific name. The term *algae* offers the ideal example: it is both a term of scientific nomenclature and a common English word. As a common English word it is sounded as AL-jee, the only pronunciation given in the Oxford English Dictionary and the Random House Dictionary of the English Language (1987). An appeal to classical Latin is, as demonstrated, unproductive, and reliance on the contemporary phonetics increases intelligibility while eliminating pseudo-scholarly posturing. Where English has already established values for classical phonemes, there is no good reason to discard these in favor of an unobtainable ancient ideal. Hence the final *a* of *acantha* might as well have the uh sound we are accustomed to in *alumna* or *anima*; the ending of *brevipes* can be fashioned after the terminal sound in *herpes*; the final two syllables of *arenarium* might as well keep the ee-uhm pronunciation familiar from *premium*; the last two vowels of *Pfiesteria* may retain the sound familiar to us from *malaria*; the *v* of *divergens* should retain the vee sound established by *in vitro* (does anyone say ihh WEE-troh?); the hard *c* of the ancient languages may be permitted, by analogy with current English, to have its modern *s* value before certain vowels, as in *et cetera*, but not in front of other vowels, as in *cornucopia*; the ancient hard *g* can likewise retain its current jay sound in situations like *gymnasium* and *marginalia*; the first *u* of *calculus* will dictate the pronunciation of the similar

vowel in terms such as *reticulatum*; the established pronunciations of *cholera* will show how to deal with initial *ch*; double vowel endings such as *fortii* can be handled by analogy with the plural of *genius* (JEE-nee-eye); endings such as *eum* or *ides* may be enunciated on the model of *museum* or *the Pleides* (PLEE-uh-deez); the final *ae* of *algae* can keep its common value as in AL-jee; and so forth.

3. *Stohler's Rule* The biologist Rudolf Stohler once ended an argument over the correct pronunciation of a shell name with the unanswerable retort, 'Well, you mispronounce it *your* way, and I'll mispronounce it *my* way' (Cate & Raskin, 1986: p. 11). Forbearance of this sort has been the necessary precondition for communication in classical languages for over 500 years and will continue to be so in any foreseeable future. For years, British and American speakers have silently noted the barbarism of each other's pronunciations of *Oedipus* and *Aeschylus* and rapidly passed along to more important matters; there is surely room enough in the study of algae for both eh-roo-jihn-OHS-uh and ee-roo-jihn-OHS-uh. And Stohler's Rule becomes indispensable when dealing with vowel combinations where confusion abounds: does a meeting adjourn SEYE-nee DEYE-ee, SIHN-ay DEE-ay, SIHN-eh DEE-eh, or by some permutation of these sounds? Who cares so long as everyone gets out of the room? In such cases, varying pronunciations are unlikely to confuse anyone, and whatever emotions they may trigger in a handful of purists are more properly the subject of psychiatry than biology.
4. *Stearn's Rule* When all else fails, make it sound nice, or as William Stearn puts it, 'Botanical Latin is essentially a written language, but the scientific names of plants often occur in speech. How they are pronounced really matters little, provided they sound pleasant and are understood by all concerned' (Stearn, 1995: p. 51). Stearn's Rule is especially helpful in dealing with the vexed subjects of stress and accent. It is impossible to reproduce the classical system of stress and accent in modern English. Rather than waste time on this quixotic endeavor, those who employ scientific nomenclature can profitably concentrate on the aesthetics of their terminology. Most people will feel better disposed to *Ostreopsis ovata* musically pronounced as os-tree-OP-sihs oh-VAHT-uh rather than flat-footedly rendered as oh-STREE-ohp-sihs OH-vuh-tuh, and in fact the more pleasing sound

is also closer to classical accentuation. This rule should also help overcome the difficulty presented by completely unclassical formulations such as *siamensis*. The pronunciation seye-AM-ehh-sihs has little to recommend it from either an aesthetic or a linguistic point of view, and a good ear combined with a little common sense will happily produce seye-ah-MEHN-sihs.

## Discussion

Pseudo-purists may well want to remember Mark Twain's adage, 'Be good and you will be lonesome' – and not only lonesome but often wrong. Those who insist, for instance, that *dinoflagellate* is correctly pronounced **dihh**-oh-FLAJ-uh-layt rather than **deyen**-oh-FLAJ-uh-layt are parading a false erudition: the word is a classical hybrid, combining Greek *dinos*, a noun denoting rotation, with the Latin *flagellum*, meaning vine-shoot or whip. In good Attic Greek of the Periclean period, the iota in *dinos* ought to have been pronounced like the vowel in French *vive* (Allen, 1987: p. 65), while in educated Latin of the Republican era *flagellum* would have had a hard *g* sound. By mixing pronunciations never heard before in the same language or the same era, the purist is liable to become ridiculous by uttering this word as **deen**-oh-FLAG-uh-layt. A simpler course would be to follow the rules outlined in this article and pronounce the term **deyen**-oh-FLAJ-uh-layt. This is the pronunciation given in the Oxford English Dictionary; it appeals to most English-speakers by analogy with *dinosaur*; it sounds reasonable and pleasing; and it is unlikely to be misunderstood. Of course anyone wishing to persist in an alternate but intelligible pronunciation would be welcome to invoke Stohler's Rule. The forbearance implicit in Stohler's Rule and in Stearn's Rule also provides a welcome accommodation, unencumbered by bogus phonetic legalisms, for those who pronounce the noun form AL-jee but the adjectival form AL-guhl, or those who prefer both with a hard *g*. Pragmatic intelligibility rather than impossible consistency is the aim of the guidelines recommended here.

## Phonetic guide to commonly used scientific terms for harmful algae

Table 2 offers a guide to pronunciation based on the principles advanced in this article. Where two or more

pronunciations meet the criteria for acceptable pronunciation, the different forms are occasionally listed in the interests of providing a sample of the variety that should be allowed in enunciating these terms. The inclusion of one variant does not mean that another excluded form may not also meet the criteria for acceptable pronunciation as listed above. The authors have also included a selection of pronunciations that are very near to their classical sounds, and these are marked with an asterisk. The parts of these variants, if Latin in origin, are close approximations to the educated Roman speech of Vergil's time; if Greek in origin, to the educated Athenian speech of Plato's era. Many modern enunciators will be struck by the fact that the closer the pronunciation approaches to its classical value, the stranger it sounds to contemporary ears. Warning: starred pronunciations should be employed only by those willing to flirt with pomposity.

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