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where the research was conducted, acknowledgments, and submission date should be given in separate paragraphs below the by-line; an ABSTRACT stating briefly the objectives and results obtained must be included. An INTRODUCTION including the general problem involved, reasons for investigation and prior work; specific MATERIALS AND METHODS used; RESULTS obtained; DISCUSSION of data obtained; and CONCLUSIONS summarizing most important results and salient points.

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Submit two originals and two copies of each line drawing or glossy print. Frame graphs and affix index marks to ordinates and absicssae. Avoid too bold lettering, numbers, and lines for coordinate axes and curves.

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Paper accepted for publication

McKenry, M. V. Grape root phenology relative to control of parasitic nematode. Am. J. Enol. Vitic. (In press, 1985).

Book

Frost, A. A., and R. G. Pearson. Kinetics and Mechanism (2nd ed.). 405 pp. John Wiley and Sons, New York (1965).

Chapter

Beech, F. W., and R. R. Davenport. The role of yeasts in cider making. *In*: The Yeasts. A. H. Rose and J. S. Harrison (Eds.). pp 73-146. Academic Press, London (1970).

Thesis

Wolpert, J. A. Cold acclimation of Concord grapevines. Thesis, Michigan State University (1983).

Paper presented

Noble, A. C., R. Boulton, and M. T. Januik. A method for detection and quanitification of volatile sulfur compounds in musts and wine. Presented at the 36th Annual Meeting of the American Society for Enology and Viticulture, Reno, NV (June 1985).

Proceedings

Coombe, B. G., and R. E. Phillips. Development of the grape berry. III. Compositional changes during véraison measured by sequential hypodermic sampling. *In:* Proceedings of the University of California, Davis, Grape and Wine Centennial Symposium. A. D. Webb (Ed.). pp 132-6. University of California Press, Berkeley (1980).

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Submit tables that are self-explanatory and include enough information so that each table is intelligible without reference to the text or other tables. The title should summarize the information presented in the table without repeating the subheadings. Be sure that the layout of the table presents the data clearly. Subheadings should be brief. Non-standard abbreviations should be explained in footnotes. Footnotes are designated with superscript lower case letters or other appropriate symbols. Ditto marks should never be used.

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Cite tables in numeric order in the manuscript. Information presented in a table should agree with that in the text.

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The binomial or trinomial (in italics) and the authority must be shown for plant, insects, and pathogens when first used in the abstract and in the text. Following citation in Materials and Methods, the generic name may be abbreviated to the initial, except when confusion could arise by reference to other genera with the same initial. Algae and microorganisms referred to in the manuscript should be identified by a collection number or that of a comparable listing.

For varietal names, the AJEV conforms to the spellings listed in the BATF publication Working List of US Wine Grape Varieties available from this office.

Numerals

Spell out all numbers or fractions which begin a sentence. Do not use a hyphen to replace the preposition "to" between numerals (13 to 22 min, 3° to 10°C) within the text; however, hyphens may be used in tables, figures, graphs, and in parentheses. Write out numerals one through nine, except with units of measure.

Write out and hyphenate simple fractions (e.g., twothirds), with the same exceptions applying as for the use of hyphens. It is usually desirable to use decimals instead of fractions.

Time and Dates

When reporting time, use the 24 hour time system with four digits; the first two for hours and the last two for minutes (e.g., 0400 h for 4:00 a.m., 1630 h for 4:30 p.m.). Dates are reported as day of month, month, and

then year (19 April 1985).

Units

Wine volumes should be reported as liters (L) or milliliters (mL). Hectoliters are not recommended.

Grape weights should be reported as grams (g), kilograms (kg), and metric tons (t).

Temperature should be reported as degrees Celsius only.

Parts per million (ppm) and parts per billion (ppb) are not recommended. The equivalent milligrams per L (mg/L) and micrograms per liter (μ g/L) are preferred.

Wine or juice yield should be reported as liters per 1000 kg (L/1000 kg) or milliliters per kilogram (mL/kg) (equivalent).

Land surface area should be expressed as hectares.

Statistical Methods

Authors must report enough details of their experimental design so that the results can be judged for validity and so that previous experiments may serve as a basis for the design of future experiments.

Multiple comparison procedures such as Duncan's multiple range test are frequently misused. Such misuse may result in incorrect scientific conclusions. Multiple range tests should be used only when the treatment structure is not well understood (e.g., studies to compare cultivars). When treatments have a logical structure, significant differences among treatments should be shown using t- or f-tests.

Usually field experiments, such as studies on crop yield and yield components, that are sensitive to environmental interactions and in which the crop environment is not rigidly controlled or monitored, should be repeated (over time and/or space) to demonstrate that similar results can (or cannot) be obtained in another environmental regime. Replicate chemical or sensory evaluations should be done to show reproducibility and cosistencey, respectively.

Abbreviations and Symbols

Replacement of certain unwieldy chemical names by abbreviations may occur as a convenience, though only well known abbreviations should be used (e.g., ATP, DNA). Standard chemical symbols may be used without definition (Ca, NaOH). If the article uses several abbreviated forms, define them all in a single paragraph where the first abbreviation is used.

With the exception of those standard for international usage (e.g., HPLC, ATP), do not use abbreviations in the title or abstract. The metric system is standard, and SI units should be used (other units may be placed in parenthesis after the SI).

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Symbols and abbreviations on figures and tables must also conform.

Also see the AJEV list of standard abbreviations.

AJEV ABBREVIATIONS AND SYMBOLS

	SYMBOL		SYMBOL
TERM	or ABBREVIATION	TERM	or ABBREVIATION
acetoxy	AcO	frequency modulation	FM
acetyl	Ac	gallon	gal
adenosine 5'-diphosphate		gas-liquid chromatography	GLC
(adenosine diphosphate)	ADP	gas chromatography - mass spectrometry	GC-MS
adenosine 5' monophosphate (adenosine		gram	g
(monophospate, adenylic acid)	AMP	gravity (gravitation constant)	g (Ital.)
adenosine 5' triphosphate			
(adenosine triphosphate)	ATP	hectare	ha 🗸
alternating current	AC	hecto- (x 10 ²)	h
ampere	Α	hectoliter	hL
and other	<u>et al.</u> (Ital.)	hertz	Hz
ante meridiem	a.m.	high pressure liquid chromotagraphy	HPLC
atmosphere (see also standard atmosphere)	Atm	horsepower	hp
average (abbreviate in equations & tables only)	av	hour	h
Balling (°Brix preferred)	°В	hydrogen ion concentration, negative	
boiling point	bp	logarithm of	pH .
British thermal unit	Btu	hyperbolic cosecant	csch
Brix	°Brix	hyperbolic cosine	cosh
		hyperbolic cotangent	coth
calorie (gram calorie; see also Kilocalorie)	cal	hyperbolic sine	sinh
centrigrade (see degree Celsius)	°C		in
centimeter	cm	inch	in
centimeter-gram-second	cgs	infrared	IR
chemically pure	CP	inhibitor constant	K ₁
coefficient	coeff	inside diameter	i.d.
Coenzyme A	CoA	joule	J
concentration	concn	kelvin (use °K if risk of confusion with	
constant	const	other symbols)	K
cosecant	csc	kilocalorie (see also calorie)	kcal
cosine	cos	kilogram	kg
cotangent	cot	kilometer	km
counts per second	counts/sec		
cubic centimeter	cm ³	lethal dose, 50%	LD ₅₀
cultivar (only after a specific epithet)	cv.	levo- (configuration; preceding a	
decibel	dB	chemical namel)	<u>L</u> (small cap.)
deciber degree (angular)	u Б •	levoratory (preceding a chemical name)	I, ()
degree Celcius	°C	liter	L
degree Fahrenheit	°F	logarithm (to base 10; common logarithm)	log
deoxyribonucleic acid (deoxyribonucleate:	•	logarithm, natural	In
		lumen	lm
see also mitochondrial deoxyribonucleic acid)	DNA	lux	lx
dextro (configuration; preceding a	DIA		
chemical name)	D (small cap.)	mass	<u>m</u> (Ital.)
•	=	mass charge on electron	<u>m/e</u>
dextrorotatory (preceding chemical name)	<u>d</u> (+)	maximum	max
diameter	d	melting point	mp
direct current	DC	meta- (position; preceding a chemical name)	<u>m</u>
dissociation constant, negative logarithm of	pK	meter	m
effective dose, 50%	ED ₅₀	Michaelis constant	K _m
electromotive force	emf	micro (x10 ⁻⁶)	μ
electron volt	eV	microequivalent	μ eq
equivalent	equiv	microgram	μg
exponential	exp	microliter	μ L
·		micrometer (micron)	μ m
figure (abbrev. only in parthesis, tables,	= '	micromole	μ mol
and figure legends)	Fig.	miles per hour	mph
foot	ft	milli- (x10 ⁻³)	m [']
foot-candle	ft-c	milliampere	mA
foot-pound	ft lb	milliequivalent	meq
for example	<u>e.g.</u> (Ital.)	milligram	mg
freezing point	fp	milliliter	mĹ
- ·	•		

	SYMBOL		SYMBOL
TERM	or ABBREVIATION	TERM	or ABBREVIATION
millimeter	mm	retardation factor (distance unknown	
millimole (mass)	mmol	has traveled relative to solvent	
millivolt	mV	front in chromatography)	R_f
minimum	min.	revolutions per minute	rpm
minute (angular)	•	ribonucleic acid (see also complementary,	
minute (time)	min	ribosomal, messenger, and transfer	
mitochondrial deoxyribonucleic acid	mtDNA	ribonucleic acids)	RNA
molar (concentration)	M (Ital.)	roentgen equivalent man	rem
mole	mol	second (angular)	11
nano- (x10 ⁻⁹)	n	second (time)	sec
nanometer	nm	secondary (preceding a chemical name:	
Newton	N	a superscript see s (i.e. BAs)	sec- (Ital.)
nicotinamide adenine dinucleotide	NAD	significant at 5% level	* , ,
nicotinamide adenine dinucleotide, reduced	NADH	significant at 1% level	**
nicotinamide adenine dinucleotide		sine	sin
phosphate	NADP	species (only after generic name)	sp., spp.
nictinamide adenine dinucleotide		species nova (new species; only after	
phosphate, reduced	NADPH	specific epithet)	sp. nov.
normal (concentration)	<u>N</u>	specific gravity	sp gr
normal (preceding chemical name)	<u>n</u>	specific heat	sp ht
not significant	ns	specific volume	sp vol
nuclear magnetic resonance	NMR	square	sq
number	No.	standard atmosphere	atm
ohm	Ω .	standard deviation	SD
ortho- (position; preceding a chemical name)	<u>o</u>	standard error	SE
ounce (avoirdupois)	oz	standard temperature and pressure	STP
outside diameter	o.d.	substrate constant (see also inhibitor	
		constant and Michaelis constant)	<u>K</u> 2
page	р	surface tension	N/m
pages	рр	tangent	tan
para- (position; preceding a chemical name)	₽ .	tera (×10 ¹²)	T
parts per billion	ppb	tertiary (receding a chemical name)	tert-
parts per million	ppm	that is	<u>i.e.</u> (Ital.)
when applicable use	mg/L	thin-layer chromatography	TLC
or	uL/L−1	tonne (metric ton)	t +DNA
pascal	Pa '	transfer ribonucleic acid	tRNA uhf
per	/ o/	ultrahigh frequency ultraviolet	um
percent peta- (x10 ¹⁵)	% P	varietas (variety; only after a specific epithet)	var.
pico- (x10 ⁻¹²)	P D	versus	vs.
post merediem	•	volt	V .
pound (avoirdupois)	p.m. Ib	volume	vol
pounds per square inch	lb/in ²	volume ratio (volume per volume)	v/v
probabiltiy	<u>P</u>	watt	w
•	<u>-</u>	week	wk
racemic (optical configuration, a mixture of		weight	wt
dextro- and levo- (preceding a		weight per volume	w/v
chemical name)	<u>DL</u> (small caps.)	weight ratio (weight per weight)	w/w
rate change of a process with 10°C increase	Q ₁₀	year	yr

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