

INDEX

VOLUME 32, 1981

AUTHORS

A

- Adlerz, W. C. Abstract 32:82-3
- Agenbach, W. A. See L. M. van der Westhuizen 32:168-70
- Al-Kaisy, A. M., A. G. Sachde, H. A. Ghalib, and S. M. Hamel. Physical and chemical changes during ripening of some grape varieties grown in Basrah. 32:268-71.
- Alley, C. J. Grapevine propagation. XVII. Spring chip-budding of mature grapevines at high level from February through April. 32:26-8.
- , and A. T. Koyama. Grapevine propagation. XIX. Comparison of inverted with standard T-budding. 32:29-34.
Abstract 32:251.
- Amerine, M. A. Reviews 32:84, 85, 177, 178, 254, 255, 301.
Abstracts 32:253.
- Anders, T. G. See R. S. Scott 32:138-43.
- Andrid, H. See F. Jensen 32:206-7.
- Arnold, R. A. Abstract 32:175.

B

- Barbetti, M. J. Abstract 32:174.
- Barlass, M. Abstract 32:80.
- Baronowski, J. D., and C. W. Nagel. Isolation of hydroxycinnamic acid derivatives in White Riesling wine. 32:5-13.
- Beede, R. See F. Jensen.
- Boidron, J. N. See F. Ureta 32:90-2.
- Bolin, H. R. Abstract 32:82.
- Boswell, F. C. Abstract 32:81.
- Bottacin, A. See P. Spettoli. 32:87-9.
- Bouard, J. See F. Ureta. 32:90-2.
- Boulton, R. See G. A. Cremer, 32:14-7, 18-20.
See Pamela Dunsford. 32:100-5, 106-10.
Abstract. 32:175.
- Bouquet, A. Abstract. 32:82.
- Brown, M. R. and C. S. Ough. A comparison of activity and effects of two commercial pectic enzyme preparations on white grape musts and wines. 32:272-6.

- Bustos, O. E. Alcoholic beverage from Chilean *Opuntia ficus indica*. 32:228-9.

C

- Cahoon, G. A. See D. K. Lee. 32:247-50.
- Caputi, A. Conversion of alcohol content to percentage by volume at various temperatures. 32:256.
- Cawthon, D. L. See J. R. Morris. 32:280-2.
- Celik, H. See A. Eris. 32:122-4.
- Ceccarelli, S. See F. Fatichenti. 32:236-40.
- Chen, L. J. Abstract. 32:252.
- Chen, S. L. See J. K. Kraus. 32:132-4.
- Clifford, D. P. Abstract. 32:174.
- Cooley, H. J. See C. Y. Lee. 32:244-6.
- Cremer, G. A., and R. Boulton. The hydrolysis of gelatin by an immobilized acid protease. I. Immobilization and hydrolysis kinetics. 32:14-7.
- , and —. The hydrolysis of gelatin by an immobilized acid protease. II. Enzyme reactor design. 32:18-20.
- Criddle, W. J., R. W. Goswell, and M. A. Williams. The chemistry of sherry maturation. I. The establishment and operation of a laboratory-scale sherry solera. 32:262-7.
- Cristoferi, G. See H. Kracke. 32:135-7.
- Cullis, B. R. See B. M. Freeman. 32:21-5.

D

- Daudt, C. E. See C. S. Ough. 32:185-8.
- Day, W. R. See P. J. Tyson. 32:241-3.
- DeHaven, R. W. and R. L. Hothem. Estimating bird damage from damage incidence in wine grape vineyards. 32:1-4.
See R. L. Hothem. 32:150-4.
- Deiana, P. See F. Fatichenti. 32:236-40.
- Desmarais, M. See J. A. Zee. 32:93-9.
- Downton, W. J. S. See M. G. McCarthy. 32:197-9.
- Dunsford, P. and R. Boulton. The kinetics of potassium bitartrate crystallization from table wines. I. Effect of particle size, particle surface area, and agitation. 32:100-5.

— and —. The kinetics of potassium bitartrate crystallization from table wines. II. Effect of temperatures and cultivar. 32:106-10.

Dutcher, J. D. Abstract. 32:176.

Dutt, G. R., E. A. Mielke, and W. H. Wolfe. The use of soils for the delineation of viticultural zones in the Four Corners Region. 32:290-6.

E

Eris, A. and H. Celik. Effects of some plant growth regulators on bud burst and rooting of *Vitis vinifera* L. cv. Chaus cuttings. 32:122-4.

F

Fagan, G. L., R. E. Kepner, and A. D. Webb. Biosynthesis of certain gamma-substituted-gamma butyrolactones present in film sherries. 32:163-7. Abstract. 32:300

Farris, G. A. See F. Fatichenti. 32:236-40.

Fatichenti, F., G. A. Farris, P. Deiana, S. Ceccarelli, and M. Serra. Commercial trial of winemaking using two selected starters of *Sacchromyces cerevisiae* which do not reduce malic acid content. 32:236-40.

Freeman, B. M. and B. R. Cullis. Effect of hedge shape for mechanical pruning of vinifera vines. 32:21-5.

Abstract. 32:83-4.

Review. 32:255.

Furuta, F. See D. W. Lowenberg. 32:128-31.

G

Ghalib, H. A. See A. M. Al-Kaisy. 32:268-71.

Goheen, A. C. See B. Lear. 32:208-11.

See. B. C. Raju. 32:155-8.

Goswell, R. W. See W. J. Criddle. 32:262-7.

Guarino, J. L. See R. L. Hothem. 32:150-4.

H

Hamel, S. M. See A. M. Al-Kaisy. 32:268-71.

Hardie, W. J., J. O. Johnson, and R. J. Weaver. The influence of vine water regime on ethephon-enhanced ripening of Zinfandel. 32:115-21.

See J. R. Whiting. 32:212-18.

Harju, K. Abstract. 32:174-5.

Hothem, R. L., D. F. Mott, R. W. DeHaven, and J. L. Guarino. Mesural as a bird repellent on wine grapes in Oregon and California. 32:150-4. See R. W. DeHaven. 32:150-4.

Houtman, A. C. Abstract. 32:74.

Howell, G. S. See S. E. Johson. 32:144-9.

See T. K. Mansfield. 32:200-5.

Hums, N. See R. S. Scott. 32:138-43.

J

Jensen, F., H. Andrid, and R. Beede. A comparison of normal girdles and knife-line girdles on Thompson Seedless and Cardinal grapes. 32:206-7.

Johnson, D. E. and G. S. Howell. Factors influencing critical temperatures for spring freeze damage to developing primary shoots on Concord grapevines. 32:144-49.

Johnson, J. O. See W. J. Hardie. 32:115-21.

See F. Mannini. 32:277-9.

K

Kasimatis, A. N. Abstract. 32:176.

Kepner, R. E. See G. L. Fagan. 32:163-7.

Kido, H. Abstract. 32:176.

Koyama, A. T. See C. J. Alley. 32:29-34.

Kliwer, W. M. Abstracts 32:299.

Kracke, H., G. Cristoferi, and B. Marangoni. Hormonal changes during the rooting of hardwood cuttings of grapevine rootstocks. 32:135-37.

Kraus, J. K., R. Scopp, and S. L. Chen. Effect of rehydration on dry wine yeast activity. 32:132-4.

Kunkee, R. E. Reviews. 32:84,177.

Abstracts. 32:253, 300.

L

Langcake, P. Abstract. 32:174.

Lear, B., A. C. Goheen, and D. J. Ranski. Effectiveness of soil fumigation for control of fanleaf-nematode complex in grapevines. 32:208-11.

Lee, C. Y. and H. J. Cooley. Higher alcohol contents in New York wines. 32:244-6.

Lee, D. K. and G. A. Cahoon. Glyphosate (Roundup) toxicity to Niagra grapevines. 32:247-50.

Lee, Terence H. See P. J. Tyson. 32:241-3.

Lee, Tien How. See C. S. Ough. 32:125-7.

Lehoczy, J. Abstract. 32:174.

Leighton, T. See J. Silver. 32:64-72.

Lepkovsky, S. See D. W. Lowenberg. 32:128-31.

Loos, M. A. See L. M. van der Westhuiszen. 32:168-70.

Lowenberg, D. W., C. S. Ough, S. Lepkovsky, and F. Furuta. The effect of ethanol and wine on the plasma histamine level of chickens and man. 32:128-31.

Luis, E. S. See P. J. Tyson. 32:241-3.

M

Mahaney, P. See L. P. McCloskey. 32:159-62.

Mannini, Franco, R. J. Weaver, and J. O. Johnson. Effects of early bloom sprays of ethephon on irrigated and nonirrigated vines of Zinfandel grapes. 32:277-9.

Mansfield, T. K. and G. S. Howell. Response of soluble solids accumulation, fruitfulness, cold resistance, and onset of bud growth to differential defoliation stress at véraison in Concord grapevines. 32:200-5.

Marangoni, B. See H. Kracke. 32:135-7.

Mattick, L. R. and A. C. Rice. Research Note: The use of PVPP for decolorizing wine in the determination of tartrate by the metavanadate method. 32:296-7.

See DF. F. Splittstoesser. 32:171-3.

McCarthy, M. G. Irrigation of grapevines with sewage effluent. I. Effects on yield and petiole composition. 32:189-96.

— and W. J. S. Downton. Irrigation of grapevines with sewage effluent. II. Effects on wine composition and quality. 32:197-9.

McCloskey, L. P. and P. Mahaney. An enzymatic assay for acetaldehyde in grape juice and wine. 32:159-62.

—. Analysis of anthocyanins in *Vitis vinifera* wines and red color versus aging by HPLC and spectrophotometry. 32:257-61.

McDonald, J. The lead contamination problem with emphasis on the lead content of wine. 32:219-22.

Meredith, C. Abstract. 32:83.
Review 33:300-1.

Mielke, E. ¹A. See G. R. Dutt. 32:290-6.

Minarik, E. Abstract. 32:253.

Morris, J. R. and D. L. Cawthon. Yield and quality response of Concord grapes (*Vitis labrusca* L.) to mechanized vine pruning. 32:280-82.

Motormura, Y. Abstract. 32:175-6.

Mott, D. F. See R. L. Hothem. 32:150-4.

Mullins, M. G. and K. Rajasekaran. Fruit cuttings: Revised method for producing test plants of grapevine cultivars. 32:47-63.

See C. Srinivasan. 32:47.
Abstract. 32:81.

N

Nagel, C. W. See J. D. Baronowski. 32:5-13.

Niimi, Y. Abstract. 32:83.

Noble, A. C. Abstract 32:175.
Review. 32:177

O

Ough, C. S. and T. H. Lee. Effect of vineyard nitrogen fertilization level on the formation of some fermentation esters. 32:125-7.

— and C. E. Daudt. Quantitative determination of volatile amines in grapes and wines. I. Effect of fermentation and storage temperature on amine concentrations. 32:185-8.

See D. W. Lowenberg. 32:128-31.

See M. R. Brown. 32:272-6.

Abstracts. 32:81, 84, 85, 176, 254, 300.

Reviews. 32:256, 301.

P

Pool, R. M. See C. Pratt. 32:223-7.

Potter, R. Abstract. 32:83.

Pratt, C. and R. M. Pool. Anatomy of recovery of canes of *Vitis vinifera* L. from simulated freezing injury 32:223-7.

Puech, J. L. Extraction and evolution of lignin products in Armagnac matured in oak. 32:111-4.

Purcell, A. H. Abstract. 32:82, 251, 299.

Q

Quinsland, D. Fill volume measurements of bottled wine. 32:86.

R

Rajasekaran, K. See M. G. Mullins. 32:35-40.

Raju, B. C. and A. C. Goheen. Relative sensitivity of selected grapevine cultivars to Pierce's disease bacterial inoculations. 32:155-8.

Ramsdell, D. R. Abstract. 32:251, 252.

Rapp, A. Abstracts. 32:80, 253.

Raski, D. J. See B. Lear. 32:208-11.

Reazin, G. H. Chemical mechanisms of whiskey maturation. 32:283-9.

Rice, A. C. See L. R. Mattick. 32:297-8.

Rice, S. L. Abstract. 32:81-2.

S

Sachde, A. G. See A. M. Al-Kaisy. 32:268-71

- Sall, M. A. Abstract. 32:80.
- San Ramao, M. V. Abstract. 32:174.
- Schoombée, N. F. See L. M. van der Westhuisen. 32:168-70.
- Schreier, P. Abstract. 32:253.
- Scopp, R. See J. K. Kraus. 32:132-4.
- Scott, R. S., T. G. Anders, and N. Hums. Rapid cold stabilization of wine by filtration. 32:138-43.
- Serra, M. See F. Fatichenti. 32:236-40.
- Shimazu, Y. See M. Watanabe. 32:73-5, 76-9.
- Silver, J. and T. Leighton. Control of malolactic fermentation in wine. II. Isolation and characterization of a new malolactic organism. 32:64-72.
- Simard, R. E. See J. A. Zee. 32:93-9.
- Simpson, R. F. Abstract. 32:80.
- Singleton, V. L. Abstract. 32:84.
- Spettoli, P., and A. Bottacin. Nicotinimide nucleotide transhydrogenase from *Vitis vinifera* cv. Roboso grape berries. 32:87-9. Abstract. 32:252.
- Splittstoesser, D. F. and L. R. Mattick. The storage life of refrigerated grape juice. 32:171-3.
- Spotts, R. A. Abstract. 32:175.
- Srinivasan, C. and M. G. Mullins. Physiology of flowering in the grapevine: A review. 32:47-63. Abstract. 32:251.
- Stafford, A. E. Abstract. 32:82.
- Stellmach, G. Abstract. 32:251.
- Stevenson, A. B. Abstract. 32:83.
- Szöghy, R. E. See J. A. Zee. 32:93-9.
- T**
- Tyson, P. J., E. S. Luis, W. R. Day, and Terence H. Lee. Estimation of soluble protein in must and wine by high-performance liquid chromatography. 32:241-3.
- U**
- Uehara, M. See M. Watanabe. 32:73-5.
- V**
- Van der Merwe, C. A. and C. J. Van Wyk. The contribution of some fermentation of products to the odor of dry white wines. 32:41-6.
- Van der Westhuisen, L. M., W. A. Agenbach, M. A. Loos, and N. F. Schoombée. Comparison of procedures for isolation of malolactic bacteria from wine. 32:168-70.
- Van Wyk, C. J. See C. A. van der Merwe. 32:41-6.
- Vilas, M. R. Abstract. 32:254.
- W**
- Wagener, G. W. W. The effect of different thermovinification systems on red wine quality. 32:179-84.
- Wakai, Y. Abstract. 32:254.
- Walker, B. See P. J. Tyson, 32:241-3.
- Watanabe, M., Y. Shimazu, and M. Uehara. Effect of adenosine-3', 5'-cyclic monophosphate on botrylized must making. 32:73-5.
- ____ and _____. Quality of wine made from cMAP-added botrylized must. 32:76-9.
- Weaver, R. J. See W. J. Hardie. 32:115-21. See F. Mannini. 32:276-8. Abstract 32:251.
- Webb, A. D. See G. L. Fagan. 32:163-7. Abstract. 32:252, 300.
- Whiting, J. R. and W. J. Hardie. Yield and compositional differences between selections of grapevines cv. Cabernet Sauvignon. 32:121-8.
- Williams, M. A. See W. J. Criddle. 32:262-7.
- Williams, P. J. Abstract. 32:253.
- Winterlin, W. Abstract. 32:300.
- Wolfe, W. H. See G. R. Dutt. 32:290-6.
- Woo, A. H. Abstract. 32:82.
- Wulf, L. W. Abstract. 32:82.
- Y**
- Yengoyan, L. S. See L. P. McCloskey 32:257-61.
- Z**
- Zee, J. A., I. M. Szöghy, R. E. Simard, and M. Desmarais. Elemental analysis of wines using photon induced x-ray fluorescence. 32:93-9.

SUBJECT INDEX

A

- Acetaldehyde. enzymatic assay. 31:159-62.
 Acid, grape. increase with CAMP. abst. 32:175.
 Acidity. pH relationships. abst. 32:175.
 Alcohol, higher, in New York wines. 32:244-6.
 production; effect of osmotic pressure. abst. 32:253.
 Amine concentrations. effect of fermentation and storage temperature. 32:185-8.
 Amines. in food. rev. 32:301.
 in red and white wines. abst. 32:300.
 Amines, volatile. quantitative determination. 32:185-8.
 Anthocyanin. recovery from cranberry waste. abst. 32:82.
 Anthocyanin-flavonoid. role in plant color. abst. 32:252.
 Anthocyanins. analysis in vinifera wines. 32:257-61.
 Aroma. effect of fermentation products on white wines. 32:41-6.
 origin in alcoholic beverages. rev. 32:178.
 substances in grapes. abst. 32:252.
 volatile components of Australian parts. abst. 32:80.
 Aroma, red wine. identification of volatiles. abst. 32:252.

B

- Biochemistry. of alcoholic beverage production. rev. 32:255.
 Bird damage. estimating in vineyards. 32:1-4.
 Bird repellent. mesurol on wine grapes. 32:150-4.
 Boron. yield effects on muscadine. abst. 32:81.
Botrytis cinerea. effect of cAMP on must. 32:76-9.
 effect on lactic acid bacteria. abst. 32:174.
 wine quality from cAMP added. 32:73-5.
 Bunch rot. in Australian Reising grapes. abst. 32:174.
 γ -Butyrolactones. biosynthesis in film sheries. 32:163-7.

C

- Cabernet Sauvignon. identification of flavonoids. abst. 32:82.
 Cabernet Sauvignon grapevine. yield and compositional differences between selections. 32:212-8.
 Canes. recovery from freezing. 32:223-7.
 Chromatography. affinity. malic enzyme from grapes. abst. 32:252.
 liquid. anthocyanin-aging analysis. 32:257-61.
 Chromatography, high performance liquid. protein estimate. 32:241-3.
 Color. versus aging by HPLC. 32:257-61.
 vinification pigment loss. abst. 32:84.
 Color, plant. anthocyanin-flavonoid complex role. abst. 32:252.
 Concord grapevines. response to differential defoliation stress. 32:200-5.

Contamination, lead. 32:219-22.

- Cranberry. waste anthocyanin recovery. abst. 32:82.
 Cuttings. for grapevine test plants. 32:35-40.

D

- Desséchement de la rafle. influence on grape quality. 32:90-2.
 Diaflor. environmental fate. abst. 32:300.
 Differential defoliation stress. soluble solids, fruitfulness, cold resistance, bud growth onset in Concord vines. 32:200-5.

E

- Encyclopaedia, winemaker's. rev. 32:177.
 Enzymatic assay. acetaldehyde in juice and wine. 32:159-62.
 Enzymes, pectic. effect on white musts and wines. 32:272-6.
 Ester. wine formation rates. 32:85.
 Esters. nitrogen fertilizer effect on formation. 32:125-7.
 Ethanol. See Alcohol.
 Ethephon. effects on Zinfandel vines. 32:277-9.
 enhanced ripening of Zinfandel. 32:115-21.

F

- Fanleaf-nematode. soil fumigation control. 32:208-11.
 Fermentation. contribution to white wine aroma. 32:41-6.
 factors influencing rate and esters. abst. 32:174.
 temperature effects on white wine. abst. 32:176.
 Fertilizer, nitrogen. effect on ester formation. 32:125-7.
 Flavonoids. identification in Merlot and Cabernet Sauvignon. abst. 32:82.
 Flowering. grapevine physiology review. 32:47-63.
 Freeze damage. factors influencing. 32:144-9.
 Freezing injury, simulated. recovery of *Vitis vinifera*. 32:223-7.
 Fumigation, soil. control of fanleaf-nematode complex. 32:208-11.

G

- Gas chromatography. *Vitis vinifera* pattern recognition. rev. 32:178.
 Gelatin, hydrolysis. enzyme reactor design. 32:18-20.
 protease immobilization and kinetics. 32:14-17.
 Girdles. comparison on Thompson seedless and Cardinal grapes. 32:206-7.
 Glycerol. effect of osmotic pressure on production. abst. 32:253.

- Glyphosphate. toxicity to Niagara vines. 32:247-50.
- Graft. rotundifolia-vinifera compatability. abst. 32:82.
- Grape. acid increase with cAMP. abst. 32:175.
 aroma substances. abst. 32:252.
 changes in some Basrah varieties. 32:268-71.
 drying. effect of fatty acid esters and carbonates.
 32:81
 fatty acid ester loss. abst. 32:82.
 genotypic and phenotypic correlations. abst. 32:83.
 infection by *Gugnardia bidwellii*. abst. 32:175.
 juice. desulfiting process. abst. 32:83.
 phylloxera. *Daktulosphaira vitifoliae*. abst. 32:83.
 pressing research. abst. 32:298.
 quality influenced by desséchement de la rafle.
 32:90-2.
 root borer damage. abst. 32:176.
 salt tolerance. abst. 32:83.
 shoots. growth inhibition and induction. abst.
 32:251.
 sugar uptake by skin. abst. 32:299.
 sugar-acid criteria. abst. 32:84.
 trellising water use. rev. 32:254.
 vinification pigment loss. abst. 32:84.
- Grape juice. SO₂ effect on storage life. 32:171-3.
- Grapevine, CCC, physiological effect. abst. 32:83.
 clonal selection. rev. 32:84.
 clone modification in *Vitis vinifera*. abst. 32:81
 embryos and plantlets from hybrid antlers. abst.
 32:81.
 ethephon bloom spray effects. 32:277-9.
 ethephon-enhanced ripening. 32:115-21.
 fate of diaflor. abst. 32:300.
 flowering. histochemical changes. abst. 32:251.
 physiology. rev. 32:47-63.
 freeze damage factors. 32:144-9.
 fruiting cuttings for test plants. 32:35-40.
 grafting. rotundifolia-vinifera compatability. abst.
 32:82.
 growth regulator effects. 32:122-4.
 hormonal changes during rooting. 32:135-7.
 induction precocious flowering. abst. 32:299.
 mechanized pruning of Concord. 32:280-2.
 Pierce's disease. control abst. 32:82.
 sensitivity. 32:155-8.
 therapy. abst. 32:299.
 propagation. from green shoot tips. abst. 32:251.
 inverted and T-budding. 32:29-34.
 spring chip-budding. 32:26-8.
 regenerative capacity of leaf primordial fragments.
 abst. 32:80.
 root-system *Agrobacterium tumefaciens* cells. abst.
 32:174.
 studies on fragmented shoot apex. 32:80.
 temperature and growth regulator effects. abst.
 32:299.
- Growth, grape shoots. inhibition and induction. abst.
 32:251.
- Growth regulator. effects on *Vitis vinifera*. abst. 32:299.
 effects on *Vitis vinifera*. 32:122-4.
 induction precocious flowering. abast. 32:299.
- H**
- H₂S. in Indian wines. abst. 32:300.
- Handbook. Connoisseurs' of California Wines. abst.
 32:254.
- Headspace analysis. wine. abst. 32:175.
- Health, stay healthy with wine. rev. 32:301.
- Higher alcohol. See Alcohol.
- Histamine. effect of ethanol and wine on plasma levels.
 32:128-31.
- Hormonal changes. during rooting. 32:135-7.
- Horticultural Reviews. rev. 32:300-1.
- Hydroxycinnamic acid. isolation and identification.
 32:5-13.
- I**
- Irrigation. grapvines with sewage effluent. 32:189-99.
- L**
- Lactic acid bacteria. Botrytis cinerea effect. abst. 32:174.
- Lactones. sherry biosynthesis of γ -butyrolactones.
 32:163-7.
- Lead. content in wine. 32:219-22.
- Lignin products. in oak-aged Armagnae. 32:111-14.
- Linalool. formation by saccharomyces fermentation.
 abst. 32:299.
- Linalool derivatives. in muscat. abst. 32:253.
- M**
- Malic acid. saccharomyces cerevisiae which do not con-
 sume. 32:236-40.
- Malic enzyme. chromatography of. abst. 32:252.
- Malolactic. isolation of bacteria. 32:168-70.
 transformation using nicotinamide nucleotide tran-
 s-hydrogenase enzyme. 32:87-9.
- Malolactic fermentation. isolation of a new organism.
 32:64-72.
 volatile constituent behavior. rev. 32:177.
- Maturation, whiskey. 32:283-9.
- Merlot. identification of flavonoids. abst. 32:82.
- Mesuro. as a bird repellent. 32:150-4.
- Microbiology. of alcoholic beverage production. rev.
 32:255.
- Mildew, epidemiology. a model. abst. 32:80.
- Mite, european red. dispersal of. abst. 32:252.
 life history in Concord. abst. 32:251.
- Monoterpenoid composition. muscat grapes. 32:230-5.
- Mulch, plastic. effect on vines. abst. 32:251.
- Muscat. identification of 3,7-dimethyl-octa-1,7-dien-3,6
 diol. abst. 32:253.
 linalool derivatives. abst. 32:253.
- Muscat grapes. monoterpenoid composition. 32:230-5.
- Musts, botrytized. effect of cAMP. 32:76-9.

N

- Nematode, fanleaf. soil fumigation control. 32:208-11.
 Nicotinamide nucleotide transhydrogenase. purification and properties. 32:87-9.

O

- Oak. lignin products. 32:111-4.
 Odor. See Aroma.
 Opuntia ficus indica. alcoholic beverage from. 32:228-229.
 Osmotic pressure. effect on ethanol and glycerol production. abst. 32:253.

P

- Patulin. measurement in grapes and wine. abst. 32:81.
 production by *Byssoschlamys* spp. in juice. abst. 32:81.
 Pectic enzymes. effect on white musts and wines. 32:272-6.
 Pierce's disease. cultivar sensitivity. 32:155-8.
 environmental therapy. abst. 32:299.
 transmission by leaf hoppers. abst. 32:252.
 transmission mechanism. abst. 32:252.
 Pigment. loss during vinification. abst. 32:84.
 Pinot noir. G.C. pattern recognition. rev. 32:178.
 Plasmopara viticola. control using zinels complex. abst. 32:174.
 Polarography. determination of free and total SO₂. rev. 32:255.
 Ports. volatile components of Australian. abst. 32:80.
 Potassium bitartrate. crystallization kinetics. 32:100-10.
 Protease. immobilization and hydrolysis kinetics. 32:14-7.
 immobilized enzyme reactor design. 32:18-20.
 yeast production. rev. 32:177.
 Protein. estimation by HPLC. 32:241-3.
 Pruning, mechanical. hedge shape effect. 32:21-25.
 Pruning, mechanized. response of Concord grapes. 32:279-81.
 PVPP. in tartrate determination. 32:297-8.

R

- Rehydration. effect on yeast activity. 32:132-4.
 Root. borer damage. abst. 32:176.
 Roundup. toxicity to Niagara vines. 32:247-50.

S

- Saccharomyces bailii. cause of turbidity. abst. 32:254.
 Saccharomyces cerevisiae. non-malic consuming strains. 32:236-40.
 Sáke. succinate formation. abst. 32:254.
 Sewage effluent. irrigation of grapevines. 32:189-99.
 Sherries. γ -butyrolactone biosynthesis. 32:163-7.

- Sherry. maturation chemistry. 32:262-7.
 type-composition relationship. abst. 32:300.
 SO₂. determination by polarography. rev. 32:255.
 effect on grape juice storage. 32:171-3.
 grape juice desulfiting. abst. 32:83.
 Soil. for delineation of viticultural zones. 32:290-6.
 tillage effects. abst. 32:176.
 Soil fumigation. control of fanleaf-nematode complex. 32:208-11.
 Stability, cold. by filtration. 32:138-43.
 Stability, KHT. crystallization kinetics. 32:100-10.
 Steroids. on yeast during fermentation. abst. 32:253.
 Succinate. formation in sáke and grape fermentation. abst. 32:254.
 Sugar. accumulation by grape. abst. 32:299.
 Sulfur compounds, volatile. in alcoholic beverages. abst. 32:253.

T

- Tartrate. PVPP in determination of. 32:297-8.
 Temperature. effect on *Vitis vinifera*. abst. 32:299.
 fermentation effects on white wine. abst. 32:176.
 Temperature, fermentation and storage. effect on amine concentrations. 32:185-8.
 Terpenes. monoterpenoids in muscat grapes. 32:230-5.
 Terpenoid. new component identified. abst. 32:80.
 Thermovinification. effect on red wine quality. 32:179-84.
 Thiolacetals. in alcoholic beverages. abst. 32:253.
 Tillage practices. soil effects. abst. 32:176.
 Toxicity. glyphosphate (Roundup) to Niagara vines. 32:247-50.
 Trellising. water use on different systems. rev. 32:254.
 Turbidity. from saccharomyces bailii. abst. 32:254.

V

- Véraison in concord grapevines. differential defoliation at. 32:200-205.
 Vineyards. bird damage. 32:1-4.
 Mechanical pruning hedge shape. 32:21-5.
 Viticulture zones. soil for delineation. 32:290-6.
 Volatile amines. quantitative determination. 32:185-8.

W

- Whiskey. chemistry of maturation. 32:283-9.
 Wine. acidity-pH relationships. abst. 32:175.
 analysis for metals by AAS. abst. 32:174.
 blending. rev. 32:255.
 cold stability by filtration. 32:138-43.
 Connoisseurs' handbook of California. abst. 32:254.
 elemental analysis by x-ray fluorescence. 32:93-99.
 esterification rates. rev. 32:85.
 Great Vintage Wine Book. rev. 32:85.

headspace analysis. abst. 32:175.
 phenolic bitterness, astringency. abst. 32:175.
 Pocket Encyclopaedia. rev. 32:84.
 quality from cAMP-added botrytized must. 32:73-5.
 stability. KHT crystallization kinetics. 32:100-10.
 volatile identification. rev. 32:178.
 volatiles in red. abst. 32:253.

X

X-ray fluorescence. wine elemental analysis. 32:93-9.

Y

Yeast. carboxylesterase forms. abst. 32:176.
 effect of rehydration on activity. 32:132-4.
 osmotic pressure effect on ethanol and glycerol.
 abst. 32:253.
 production of exocellular proteases. rev. 32:177.
 production of linalool. abst. 32:300.
 steroids on. abst. 32:253.

Z

Zinfandel. ethephon enhanced ripening. 32:115-21.