

Literaturverzeichnis zum Beitrag: Prof. Dr. Manfred Stoll, Dr. Matthias Friedel, Dr. David Brunner und Prof. Dr. Hans-Peter Schwarz, Hochschule Geisenheim University, 2018: Vom Weinberg Richtung Kelterhaus - Digitalisierung in der Prozesskette (Sensortechnik im Weinberg), Das Deutsche Weinmagazin, 21, 36-39

Adão, T., Hruška, J., Pádua, L., Bessa, J., Peres, E., Morais, R., and Sousa, J.J. (2017). Hyperspectral imaging: a review on UAV-Based sensors, data processing and applications for agriculture and forestry. *Remote Sensing* 9, 1110-1140.

Baluja, J., Diago, M.P., Goovaerts, P., and Tardaguila, J. (2012). Assessment of the spatial variability of the content of anthocyanins in grapes using a fluorescence sensor: Relationships with vine vigour and yield. *Precision Agriculture*, 13, 457-472.

Barnaba, F.E., Bellincontro, A., and Mencarelli, F. (2014). Portable NIR-AOTF spectroscopy combined with winery FTIR spectroscopy for an easy, rapid, in-field monitoring of Sangiovese grape quality. *Journal of the Science of Food and Agriculture*, 94, 1071-1077.

Ben Ghzlen, N., Cerovic, Z. G., Germain, C., Toutain, S., and Latouche, G. (2010). Non-destructive optical monitoring of grape maturation by proximal sensing. *Sensors*, 10, 10040-10068.

Birchmore, W., Scott, E., Zanker, T., Emmett, B., and Perry, W. (2015). Smart-phone app field assessment of powdery mildew. *Australian and New Zealand Grapegrower and Winemaker*, (622), 46.

Bramley, R.G.V. (2009). Lessons from nearly 20 years of Precision Agriculture research, development, and adoption as a guide to its appropriate application. *Crop and Pasture Science*, 60(3), 197-217.

Bramley, R.G.V. (2010). Precision Viticulture: Managing vineyard variability for improved quality. In: Reynolds, A.G. (Ed). *Managing wine quality*. Vol. 1. Woodhead Publishing, UK. pp. 445-480.

Bramley, R.G.V., Le Moigne, M., Evain, S., Ouzman, J., Florin, L., Fadaili, E.M., Hinze, C.J. and Cerovic, Z.G. (2011). On-the-go sensing of grape berry anthocyanins during commercial harvest: Development and prospect. *Australian Journal of Grape and Wine Research*, 17, 316-326.

De Bei, R., Fuentes, S., Gilliam, M., Tyerman, S., Edwards, E., Bianchini, N., Smith J. and Collins, C. (2016). VitiCanopy: A free computer App to estimate canopy vigor and porosity for grapevine. *Sensors*, 16(4), 585.

Diago, M.P. and Tardaguila, J. (2015). A new robot for vineyard monitoring. *Wine and Viticulture Journal*, 30: 38-42.

Diago, M.P., Fernández-Novales, J., Fernandes, A.M., Melo-Pinto, P., and Tardaguila, J. (2016). Use of visible and short-wave near-infrared hyperspectral imaging to fingerprint anthocyanins in intact grape berries. *Journal of Agricultural and Food Chemistry*, 64, 7658-7666.

Diago, M.P., Bellincontro, A., Scheidweiler, M., Tardaguila, J., Tittmann, S. and Stoll, M. (2017). Future opportunities of proximal near infrared spectroscopy approaches to determine the variability of vineyard water status. *Australian Journal of Grape and Wine Research*, 23, 409-414.

Doerflinger F.C. and Pagay V. (2018). Objective assessment of dried sultana grape quality using digital image analysis *Australian Journal of Grape and Wine Research*, 24, 234–240.

DLR - Deutsches Zentrum für Luft- und Raumfahrt (2018). Fliegendes Lasersystem soll Pilzbefall im Weinbau aufspüren https://www.dlr.de/dlr/desktopdefault.aspx/tabid-10081/151_read-29464/#/gallery/31810

Drangenmeister, H. (2007). Einsatz von PDAs in der Außenwirtschaft, KTBL-Heft 69.

EEA (2018): National climate change vulnerability and risk assessments in Europe; European Environment Agency; ISBN 978-92-9213-940-7 ISSN 1977-8449 doi:10.2800/348489.

González-Caballero, V., Sánchez, M.T., Fernández-Novales, J., López, M.I. and Pérez-Marín, D. (2012). On-vine monitoring of grape ripening using near-infrared spectroscopy. *Food Analytical Methods*, 5, 1377-1385.

Jones H.G., Stoll M., Santos T., De Sousa C., Chaves M.M., and Grant O.M. (2002). Use of infrared thermography for monitoring stomatal closure in the field: application to grapevine. *Journal of Experimental Botany*, 53, 2249-2260.

Lafontaine, M. and Freund, M. (2013). Improving optical fruit sorting by non-destructive determination of quality parameters affecting wine quality. In: J. Beyerer, F. Léon and T. Längle (Editors), *Optical Characterization of Materials*. Karlsruher Institut für Technologie (KIT) KIT Scientific Publishing Karlsruhe, Germany, pp. 115-126.

Latouche, G., Debord, C., Raynal, M., Milhade C. and Cerovic, Z. (2015). First detection of the presence of naturally occurring grapevine downy mildew in the field by a fluorescence-based method. *Photochemical and Photobiological Sciences*, 14, 1807-1813.

Nicolaï, B.M., Beullens, K., Bobelyn, E., Peirs, A., Saeys, W., Theron, K.I., and Lammertyn, J. (2007). Non-destructive measurement of fruit and vegetable quality by means of NIR spectroscopy: A review. *Postharvest Biology and Technology*. 46, 99-118.

Oerke, E.C., Herzog, K., and Toepfer, R. (2016). Hyperspectral phenotyping of the reaction of grapevine genotypes to *Plasmopara viticola*. *Journal of Experimental Botany*, 67, 5529-5543.

Proffitt, T., Bramley, R., Lamb, D. and Winter, E. (2006). Precision Viticulture. A new era in vineyard management and wine production. Winetitles, Adelaide.

Rossi, R., Pollice, A., Diago, M.P., Oliveira, M., Millán, B., Bitella, G., Amato, M., and Tardaguila, J. (2013). Using an automatic resistivity profiles soil sensor on-the-go in precision viticulture. *Sensors* 13, 1121-1136.

Sankaran, S., Mishra, A., Ehsani, R., and Davis, C. (2010). A review of advanced techniques for detecting plant diseases. *Computers and Electronics in Agriculture*, 72(1), 1-13.

Samouëlian, A., Cousin, I., Tabbagh, A., Bruand, A., and Richard, G. (2005). Electrical resistivity survey in soil science: a review. *Soil and Tillage Research*, 83(2), 173-193.

Stoll, M., Gaubatz, B., Schultz, H.R., Müller, R. and Schwarz, H.-P.(2007a). Die weinbauliche Rückverfolgbarkeit. Teil 1: gesetzliche Rahmenbedingungen. *der Deutsche Weinbau*, 23: 16-18.

Stoll, M., Gaubatz, B., Schultz, H.R., Müller, R. und H.-P. Schwarz (2007b). Die weinbauliche Rückverfolgbarkeit. Teil 2: Anforderungen, Möglichkeiten, Herausforderungen und Chancen der Dokumentation. *der Deutsche Weinbau*, 24: 18-20.

Tardaguila, J., Diago, M.P., Priori, S., and Oliveira, M. (2018). Mapping and managing vineyard homogeneous zones through proximal geoelectrical sensing. *Archives of Agronomy and Soil Science*, 64(3), 409-418.

Trought, M.C.T. and Bramley, R.G.V. (2011). Vineyard variability in Marlborough, New Zealand: Characterising spatial and temporal changes in fruit composition and juice quality in the vineyard. *Australian Journal of Grape and Wine Research* 17, 79-89.

Underwood, J., Wendel, A., Schofield, B., McMurray, L. and Kimber, R. (2017). Efficient in-field plant phenomics for row-crops with an autonomous ground vehicle. *Journal of Field Robotics*, 34, 1061-1083.