# ARDI Portal/Other Resources Module 6

## Module 6: ARDI Portal/Other Resources

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### Wind Turbine Pitch Optimization

by Benjamin Biegel, Morten Juelsgaard, Matt Kraning, Stephen Boyd, Jakob Stoustrup, A. Description "... -Conference on Systems and Control Denver, CO, USA. September 28-30, 2011 Wind Turbine Pitch Optimization Benjamin Biegel ..."

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#### VARIABLE SPEED WIND TURBINE

by Chatinderpal Singh

"... & ADVANCED TECHNOLOGY Volume-2, Issue-3, 652 – 656 VARIABLE SPEED WIND TURBINE Chatinderpal Singh Student

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to systems and control researchers. In this paper we study the pitch control mechanism of <em>wind</em> <em>turbine</em>



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Any time Since 2015 Since 2014 Since 2011 Custom range	Susceptibility of Helicobacter pylori to the <b>antibacterial</b> activity of <b>manuka</b> honey NAI Somal, KE Coley, PC Molan Journal of the Royal, 1994 - jrs.sagepub.com Abstract Honey is a traditional remedy for dyspepsia, and is still used for this by some medical practitioners although there is no rational basis for its use. The finding that Helicobacter pylori is probably the causative agent in many cases of dyspepsia has raised Cited by 184 Related articles All 11 versions Cite Save
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Mol. Nutr. Food Res. 2008, 52, 000-000

DOI 10.1002/mnfr.200700282

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### **Research Article**

### Identification and quantification of methylglyoxal as the dominant antibacterial constituent of Manuka (*Leptospermum scoparium*) honeys from New Zealand

#### Elvira Mavric<sup>1</sup>, Silvia Wittmann<sup>1</sup>, Gerold Barth<sup>2</sup> and Thomas Henle<sup>1</sup>

<sup>1</sup>Institute of Food Chemistry, Technische Universität Dresden, Dresden, Germany <sup>2</sup>Institute of Microbiology, Technische Universität Dresden, Dresden, Germany

The 1,2-dicarbonyl compounds 3-deoxyglucosulose (3-DG), glyoxal (GO), and methylglyoxal (MGO) were measured as the corresponding quinoxalines after derivatization with orthophenylendiamine using RP-HPLC and UV-detection in commercially available honey samples. Whereas for most of the samples values for 3-DG, MGO, and GO were comparable to previously published data, for six samples of New Zealand Manuka (Leptospermum scoparium) honey very high amounts of MGO were found, ranging from 38 to 761 mg/kg, which is up to 100-fold higher compared to conventional honeys. MGO was unambigously identified as the corresponding quinoxaline via photodiodearry detection as well as by means of mass spectroscopy. Antibacterial activity of honey and solutions of 1,2-dicarbonyl towards Escherichia coli (E. coli) and Staphylococcus aureus (S. aureus) were analyzed using an agar well diffusion assay. Minimum concentrations needed for inhibition of bacterial growth (minimum inhibitory concentration, MIC) of MGO were 1.1 mM for both types of bacteria. MIC for GO was 6.9 mM (E. coli) or 4.3 mM (S. aureus), respectively. 3-DG showed no inhibition in concentrations up to 60 mM. Whereas most of the honey samples investigated showed no inhibition in dilutions of 80% (v/v with water) or below, the samples of Manuka honey exhibited antibacterial activity when diluted to 15-30%, which corresponded to MGO concentrations of 1.1-1.8 mM. This clearly demonstrates that the pronounced antibacterial activity of New Zealand Manuka honey

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Any time Since 2018 Since 2017 Since 2014 Custom range Sort by relevance Sort by date	Information literacy and international capacity development initiatives in lit sciences: AGORA, OARE, HINARI, <b>ARDI</b> (Research4Life-R4L) <u>T Bartol</u> - European Conference on Information Literacy, 2013 - Springer AGORA/FAO (2003), OARE/UNEP (2006), HINARI/WHO (2003) and <b>ARDI/WIPO</b> (2009), con referred to as Research4Life (R4L), are associated global initiatives in the life sciences (agricultu food, nutrition, medicine, health, environment) founded with the purpose of ☆ ワワ Cited by 3 Related articles All 9 versions <b>WIPO</b> services for access to patent information-Building patent information infrastructure and capacity in LDCs and developing countries	nmonly re,
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	A novel maximum power point tracking technique for solar panels using a SEPIC or Cuk	
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	Henry Shu-Hung Chung, K. K. Tse, S. Y. Ron Hui, C. M. Mok, M. T. Ho	
81	maximum output power from a solar panel under varying meteorological conditions isexperimentally with a 10-w solar panel at	
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	Journal: IEEE Transactions on Power Electronics - IEEE TRANS POWER ELECT, vol. 18, no. 3, pp. 717-724, 2003	
	Calculation of the optimum installation angle for fixed solar-cell panels baset on the genetic algorithm	
	and the Simulated-annealing method (Citations: 28)	
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## Performance study on a grid connected 20 kW<sub>p</sub> solar photovoltaic installation in an industry in Tiruchirappalli (India)



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#### ABSTRACT

This paper discusses the details and results obtained from a study carried out on a roof top 20 kWp solar photovoltaic (PV) power plant in a reputed manufacturing industry in India. Although there is plenty of sunshine, various financial supports and government policies, the growth of photovoltaic (PV) power plants in developing countries is still facing significant barriers due to unclear techno-economic aspects of the PV power plant. Therefore this paper highlights a few salient features of the installation, operational performance and economic calculations of a grid connected solar photovoltaic (PV) power plant. A few important aspects of solar power plant

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