



Digital Technology Update

Greenhouse Growers Toolbox

Updated App v. 1.0.2 available now

The App is an online business process management tool.

It has been designed to meet the needs of the hydroponic greenhouse sector.

What is it?

The App provides you with access to a suite of calculations to help you measure greenhouse nutrient formulas, dripper timings and volumes, acid / product dosing, radiation and light units.



In addition it will also enable you to ensure that your greenhouse design is adequate to meet your specific growing needs.

Both the free 'lite' version and the full version can be downloaded from the Apple App Store via iTunes and is suitable for iPhone, iPad & iPod.

Please note: All App information is given in good faith however no liability is accepted for content or its application.

Since 1998 Graeme Smith Consulting has been providing specialised support and consultation services for the Australian and international protected cropping industry.

By using the Greenhouse Growers Toolbox App you will gain access to tools and valuable insights from a leading industry professional; Graeme Smith.

Graeme's repertoire includes an Greenhouse Growers Toolbox App compatible with iPhone, iPad and iPods, which has recently been updated to version 1.0.2.

graemesmithconsulting.com

New Features v. 1.0.2

Greenhouse Nutrient Deficiency Chart

Use the flowchart to determine in a systematic way which element/s may be causing deficiency symptoms in the leaves. (Includes typical examples of leaf deficiency)

Greenhouse Nutrient Feed Recipe Guidelines

Standard feed recipe guidelines for both Open and Closed (recirculation) media based hydroponic systems (in PPM and mmol/ μ mol) and includes most common greenhouse vegetable crops

Greenhouse Nutrient Drain Reference Guidelines

Enter laboratory analysis of your hydroponic drain water and compare to reference guidelines for your vegetable crop (in PPM and mmol/ μ mol) and includes automatic EC correction

Common Elemental Conversions

Converts common elements to / from pure form in PPM and lists common atomic weights.



Apex-Brinkman PCA Conference

Guest Speaker **Graeme Smith, Graeme Smith Consulting**

1) Vertical farming and Plant Factories and Artificial Lighting (PFAL) reports from recent conferences

Developments and emerging technologies driving innovation in global urban farming that will revolutionise local fresh food supplies.

2) Fundamental principles of effective greenhouse management

For newer greenhouse growers, some key management insights into successful greenhouse and hydroponic farming from a former grower and current industry advisor.

Conference Guest Speaker

Updated Features v. 1.0.2

Greenhouse Acid or Product Dosing

Calculate treatment PPM or volume (litres) of various products/acids when added to water

Greenhouse Boiler Fuel Cost

Calculate and compare costs of various common greenhouse boiler fuels (\$ per Giga Joule of energy)

Greenhouse Dripper Timing and Volume

Calculate greenhouse irrigation flows, rates & volumes (media based dripper systems only!)

Greenhouse Area & Volume

Calculate area (m^2) or volume (m^3) of various common greenhouse structures

Greenhouse Hydronic Boiler Calculations

Estimate minimum required greenhouse boiler size (in kW & MCal/hr)

Greenhouse Irrigation Rate Targets

Calculate greenhouse irrigation volumes based on area, dripper rates and light sum, and compare to actual irrigation volume delivered over the same period

Greenhouse Radiation & Light Units

Compare and convert common light (radiation) units used in greenhouse horticulture (inc. kLux, W/ m^2 , J/ cm^2 and mol/ m^2/h)

Greenhouse Irrigation Pump Capacity

Calculate required greenhouse irrigation pump capacity & maximum number of solenoid valves (media based dripper systems only!)

Free 'Lite' Version

Featuring 5 of the 12 greenhouse calculators

- Volume & area,
- Dripper timings & volumes,
- Acid / product dosing,
- Radiation & light units
- Elemental conversions



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AgVita Analytical proudly supports Protected Cropping Australia. We are the Preferred Supplier of analytical services for both the PCA & HFF



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Graeme Smith Consulting

- + Project Management
- + Greenhouse and Hydroponic System Design
- + Climate & Financial Studies (inc. ROC & EBIT)
- + Training in Commercial Hydroponic Crop Production
- + Greenhouse Growers Toolbox App

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