



## AG - Rich Foods

### Producers of high quality grain products

Established in 1961 Ag-Rich Foods is a market leader in modern grain growing techniques and sustainable farming methods.

Located in North West New South Wales near the small rural town of Coonamble, the large farming operation operates out of two freehold title properties - "Killara" (5,322 acres) and "Kalawa" (4,823 acres) and includes a combined silo capacity of 1590 tonnes.

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## Guano Australia Launches New Guano Sulphur Gold with 10% Sulphur

*Story on page 3*

## Guano Australia & Amgrow Join Forces

### Guano Australia Pty. Ltd. announces the appointment of Amgrow Specialty as the new wholesale agent for Guano Gold® - Kwik Start®

It has been close on 20 years since John Kismet Jashar first started Guano Australia Pty Ltd, and travelled the nation looking for opportunities for the then new organic phosphate fertiliser "Madura Guano Gold-Kwik Start".

For those who do not know about Guano Gold-Kwik Start, this BFA registered Guano, mined from the island of Madura in Indonesia, boasts the highest quality Di Calcium Phosphate, originating from petrified sea bird faeces, available on the market today.

Guano Gold consists of high levels of Phosphorous, Calcium and Silica of which all 3 nutrients are in an available form. Guano Gold offers a release pattern of phosphorous suited widely to Australian low "P" soils, for pasture, cereal and horticultural crops, just to name a few.

*Story continued on page 6*



1. Chris Chapman
2. Richard Jackson
3. Renier Scheepers
4. Ron Bollard
5. Kathy Bush
6. Caine James
7. Martin Yates

## IMPORTANCE OF CARBON TO THE SOIL - "REPAIRING THE DAMAGE"



### Carbon is a critical part of the ecosystem sustaining life on this planet.

The life-death cycle involves a recycling of the carbon containing structural components of plant and animal matter –through the soil and air – and back into living plants.

The availability of soil carbon as a key ingredient for efficient plant growth, has been recognized by most soil scientists and agronomists as the most important component of a healthy fertile soil.

A fertile soil should contain from 2-8% organic matter; most soils contain less than 2%. Many soils in the crop growing regions of Australia are virtually depleted of essential carbon bearing organic matter.

*Story continued on page 12*

**Guano Australia**  
"We are serious about  
Environmental Sustainability"



## 2012 & Beyond

To our valued clients across Australia we take great pleasure in rolling out our new 2012 edition of Guano News.

To our valued clients across Australia we take great pleasure in rolling out our new 2012 edition of Guano News.

I am sure all will agree that the last 5 years or so, especially have been tumultuous, what with continued droughts, floods, world economies on the brink of total collapse, stock market and currency crashes, all of which hiking up the cost of living and fuelling exorbitant fertiliser prices. And who on earth would ever have predicted a "Hung" Parliament in Australia?

But there you go, in the world we live in there is never a dull moment! After all of the above we can at least be thankful the drought broke in most parts of Victoria, South Australia and New South Wales; unfortunately other states have not fared so well. 2012, will (I believe), be a new era in the Australian Agri Business sector and trust that all will prosper and put the past few years behind us.

The proposed changes to various industry sectors, such as Government rules and regulations pertaining to fertiliser run off into the Great Barrier reef, the much talked about Carbon Emission and the newly introduced Carbon Tax, exchange rates, commodity prices going up and down, and the flooding of overseas imported food products onto the Australian market have and will take their toll. This means that "MORE THAN EVER BEFORE" every single farmer is going to have to re-focus their individual farming practices and cost effectively manage their farm (inputs and output) operations. This is where we believe Guano Australia Pty. Ltd. and AMGROW can assist you in achieving your desired end results by way of specialized organic sustainable products, unique Custom Blends, technical and agronomic services through our national distributor network.

The Guano Australia full range of products are listed on page 7 and that of AMGROW are highlighted throughout this newspaper.

Over the past 20 years Guano Australia Pty. Ltd. has worked solidly in building a strong, reputable business, one which has become a major National player in the Australian Organic, Bio-Dynamic and Sustainable Farming Industry. Many would recall Guano Australia Pty. Ltd. re-locating its head office operations to Queensland 7 years ago in order to foster the expansion and building of its very solid foundation through its product base, marketing and distribution arrangements nationally across Australia. With "Testimony of Time", the dedicated support of our National Distributor base and our regular customer farming community, the time has come to seriously expand our operations and build a stronger National presence across Australia by way of a new **Marketing** and **Distribution** arrangement of our "Guano Basket of Products" within the "Amgrow Group".



**John Kismet Jashar**  
CEO/President/Director

Kismet International Pty Ltd  
For and On Behalf Of Guano Australia Pty.Ltd

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Editor - John Kismet Jashar

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The Amgrow Group includes Amgrow, Paton Fertilizer, Fertico, Nutrismart and Nuturf; all of which sell a comprehensive range of "Specialty Fertilizer" products.

In this announcement, we (GUANO AUSTRALIA PTY. LTD.) pay sincere compliments to one of the worlds leading innovative public companies, **CK-Life Sciences Group**, owners of the "AMGROW" specialty group of companies for having the foresight to recognise the commercial value and merit of Guano Australia and its range of products and services.

We thank AMGROW for this opportunity to work together in fostering greater awareness of the benefits of organic and sustainable farming methods within the Australian farming community. As a result of our new National Marketing arrangement our distributor and farmers' data base will now, on behalf of Guano Australia, be managed by Amgrow. Please note all of our pricing and our "Trading Terms & Conditions" have changed. Please contact us or Amgrow to obtain a copy of our newly revised national pricing and "Trading Terms & Conditions". You will be pleasantly surprised.

Guano Australia Pty. Ltd., via its parent company Kismet International Pty. Ltd., will now expend its energies into further developing new product technology, whilst at the same time maintaining a "Multi World Wide" supply of our core products. In doing so, guaranteeing Australia with an abundant "Commercial" supply of our quality Guano products.

We also announce and confirm as a part of all the above announcements, The Kismet Group including Guano Australia Pty. Ltd. and Agronomy Services Australasia Pty. Ltd. ([www.agronomyservices.com.au](http://www.agronomyservices.com.au)) has now expanded into New Zealand with our basket of products and technical services. Our Asian expansion is happening as we speak and proudly so.

In closing, we thank every one for their support of our operations for the past 20 years. Thanks to you Guano Australia has become a formidable force in the Australian Ag sector and will continue to grow with you. Please take the time to study the information about our products and services in this edition and for any further information please view the following web sites:

[www.guano.com.au](http://www.guano.com.au)  
[www.reefsafe.com.au](http://www.reefsafe.com.au) [www.amgrow.com.au](http://www.amgrow.com.au)  
[www.agrispon.com.au](http://www.agrispon.com.au) [www.organicguano.com.au](http://www.organicguano.com.au)  
[www.kmsfertilizer.com.au](http://www.kmsfertilizer.com.au) [www.agronomyservices.com.au](http://www.agronomyservices.com.au)

Alternatively call on (07) 5445 5300  
or Email us on [kismet@guano.com.au](mailto:kismet@guano.com.au)

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## New One Shot Granulated Fertiliser

### Guano Australia Launches New Guano Gold Sulphur Gold with 10% Sulphur.

*The drive for productivity is increasingly combined with a desire for sustainability. For farming systems to remain productive and to be sustainable in the long term it is necessary to replenish the reserves of nutrients which are removed or lost from the soil. In the case of Nitrogen (N), inputs into agricultural systems may be in the form of fertilisers high in Sulphur (S) such as Guano Gold.*

Guano Gold has 10% Sulphur; giving this product more versatility and negating the need to blend the product, especially in legume crops and legume based pastures. The role of Sulphur as a plant nutrient is also well documented. In a legume system having Sulphur at a safe level can help in the production and fixation of Nitrogen. Crops grown with an adequate level of Sulphur are also higher in protein making the fodder, hay and grain from these crops more nutritious. Composts and manures that are commonly used to supply Nitrogen in the organic system are low in Sulphur. Use of manures, rock phosphates and compost usually means the flow of Sulphur on the organic farm usually result in a negative Sulphur balance in the soil. Nutrients such as Phosphorus (P), Calcium (Ca) and Silica (Si) in Guano Gold have been well documented over the past 10 years in Australian conventional and organic farming systems. The ability of Guano to provide a drip feed of non water soluble phosphorus into the soil environment has assisted crops to be grown in soils hostile to Phosphorus.

The combination of soluble silica and levels similar to "P" in Guano Gold allow the mono silica acids in Guano to stimulate and tie up Iron, Aluminium and Manganese. This then allows the Phosphorus to be more effective in providing the plant available nutrients.

The new Guano Sulphur Gold is a big step forward in providing "One Shot" granulated fertiliser that provides a balance of Phosphorus, Sulphur and Silica. The product flows easily and is perfect for being used through conventional planters and air seeders to deliver the product to the seed zone at planting. Likewise when being used to top dress pastures the granule gives good, even coverage through ground and air spreading.

With the ability to provide P, S, Ca and Si in one product, Guano Sulphur Gold has set a new standard in providing solutions for both organic and conventional farmers in overcoming both Sulphur and Phosphorus deficiencies in most soil types, therefore making way for sound sustainable farming.

Robert Drewitt BcSc (Ag)  
Senior Technical Agronomist

## Nutrismart Active Eco Fertiliser and Guano Gold Kwik Start stocked at Elders Mt. Gambier bulk fertiliser facility.

### Industry veteran Gary Allison, Senior Agronomist of Elders Mt. Gambier, has the following to say about NutriSmart and Guano Gold:

Nutrismart is a carbon based granule similar in size and weight to MAP and DAP. Other constituents of the granule are rock phosphate, starch and 6 specialised yeasts.

Once the granule is placed in the soil with adequate soil moisture the yeasts grow rapidly, feeding on the carbon and phosphate source.

In response to the exudates from plant roots, the yeasts then have the ability to fix atmospheric Nitrogen, unlock soil phosphate and potassium together with improving efficiency and long term availability of applied Phosphate and Potassium.

In conventional fertiliser systems MAP and DAP are the more favoured forms of Phosphorus but not necessarily the best.

Phosphate is rarely found alone in the soil. It is triple negative charged anion which is strongly attracted to double or triple-positively charged cations such as Calcium in alkaline soils or Iron, Aluminium and Manganese in acidic soils.

MAP and DAP are notoriously unstable and liable to lock up and become insoluble any time between 2 - 6 weeks after application depending on soil status. Blending MAP and DAP with Nutrismart ensures longer term plant availability of the applied nutrients and aid in the mineralization and unlocking of organic and soil nutrient reserves.

Guano Gold is a natural organic fertiliser which contains 12% Phosphate in a combination of Citrate Soluble, fast and slow release form which is a unique feature of this product.

This combined with 29% Calcium, 10% Silica, trace elements and high Organic Carbon content make Guano Gold perform well in acid, neutral and alkaline soils.

Guano Gold has high cation exchange capacity of Calcium and Magnesium which is excellent for soil structure, water and nutrient holding capacity.

Silica is an important element for plant pest and disease resistance together with its ability to prevent applied Phosphorus from Complexing with Iron, Aluminium and Manganese in acid soils.

Guano Gold is low in heavy metals so it is both soil and environmentally friendly.

Guano Gold is a 2 - 5mm granulated product so it can be blended with other granular nutrient forms where required which is easily spread by conventional spreading equipment and standard spreading widths.

PHOTO OF GARY &/OR ELDERS LOGO



Gary Allison  
Senior Agronomist  
Elder Mt. Gambier



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# Guano Australia & Amgrow Join Forces

Press Release 14th December 2011

## Guano Australia Pty. Ltd. announces the appointment of Amgrow Specialty as the new wholesale agent for Guano Gold® - Kwik Start®

It has been close on 20 years since John Kismet Jashar first started Guano Australia Pty Ltd, and travelled the nation looking for opportunities for the then new organic phosphate fertiliser "Madura Guano Gold-Kwik Start". For those who do not know about Guano Gold-Kwik Start this BFA registered Guano, mined from the island of Madura in Indonesia, boasts the highest quality Di Calcium Phosphate, originating from petrified sea bird faeces, available on the market today.

Guano Gold consists of high levels of Phosphorous, Calcium and Silica of which all 3 nutrients are in an available form. Guano Gold offers a release pattern of phosphorous suited widely to Australian low "P" soils, for pasture, cereal and horticultural crops, just to name a few. When "Guano Australia" first commenced trading in Australia, their first major client was Paton Fertilisers, now part of the Amgrow Group. At the time, under the guidance of Mr. Bruce Cairns, Guano Gold - Kwik Start was "Kwikly" identified and assessed to contain the best valuable source of Organic "P"; it was also recognised for

its true technical and agronomic potential that money could buy. From those humble beginnings the journey began, building Guano Australia Pty. Ltd. into a major national player in the Australian Organic, Bio-Dynamic and Sustainable farming Input Supplier Industry. With the "Testimony of Time", and the dedicated support of both National Distributors and the regular customers within the farming community, John has decided it is now time to expand the operations and build a stronger national presence. This will be achieved by way of a new marketing and distribution arrangement between Guano Australia and Amgrow Pty. Ltd.

As a result of mutual negotiations, Guano Australia Pty. Ltd. is excited to announce the appointment of Amgrow's rural wholesale division 'Amgrow Specialty' as the new wholesale agent for Guano Gold- Kwik Start. Guano Australia will maintain the role of exclusive importer whilst Amgrow will take full responsibility for the sales, marketing and wholesaling of the Guano Gold range of products.

"I can attest that Amgrow Specialty, under the leadership of Mr. Chris Chapman, will carry on forward as part of our new relationship, and jointly we will "Stamp the Footprint" in the Australian Ag Business as major suppliers for years to come, in this true "Partnership for Growth" agreement for all concerned," according to John Jashar. Guano Australia will offer technical and marketing support, when and where needed, whilst remaining at the forefront of maintaining and sup-

plying the International quality products as well exploring further product developments. In the transitional period John Jashar will play an important role in introducing distributors and users of the Guano Gold - Kwik Start products to Amgrow. The transition should be smooth with most distributors holding current accounts with Amgrow.

Storage and distribution of Guano products will improve with Amgrow stocking bagged material at each Amgrow site nationally. Bulk material handling will continue from current locations in Brisbane, Melbourne, Adelaide and Fremantle.

Please feel free to call and discuss our new arrangement at any time on the below numbers:



John Kismet Jashar  
Chairman & Managing Director  
GUANO AUSTRALIA PTY.LTD.  
Tel: 07 5445 5300



Chris Chapman  
National Business & Marketing Manager  
AMGROW SPECIALTY GROUP  
Tel: 02 9395 1200



**FertiCote**  
Fertiliser

- Designed for your specific crop situation
- Less Nutrient losses due to leaching
- Less side dress fertiliser required
- Uniform growth response

**Controlled Release  
MultiCote Technology**



The FertiCote range of quality products is specifically formulated to release nutrients at a controlled rate to match crops demand.

FertiCote blends are used at planting and side-dressing as the base source of nutrition.

FertiCote blends contain HAIFA MultiCote Technology to release nutrients in line with crop demands.



■ FertiCote ■ Straight Fertiliser

*Helping Australia Grow*

<b>The Amgrow Specialty Team</b>		
<b>Chris Chapman</b>	– Manager, Servicing Victoria and SA	<b>0412 720 943</b>
<b>Robyn Hanson</b>	– Customer Service Officer	<b>07 3802 5007</b>
<b>Richard Jackson</b>	– Servicing Victoria	<b>0448 057 734</b>
<b>Ron Bollard</b>	– Servicing Coffs Harbour to Yandina	<b>0438 166 262</b>
<b>Renier Scheepers</b>	– Servicing Queensland Wide Bay Region	<b>0419 504 716</b>
<b>Caine James</b>	– National Turf Specialist & Servicing Central NSW	<b>0402 911 479</b>
<b>Martin Yates</b>	– Servicing Southern NSW & Procurement	<b>0408 682 933</b>
<b>Kathy Bush</b>	– Small Pack Specialist & Servicing North Queensland	<b>0430 077 230</b>




*Other quality Amgrow Specialty products*



# Guano Gold<sup>®</sup>



available  
exclusively from  
**AMGROW**

**PHOSPHATE**  
as nature intended

*Helping Australia Grow*



*Guano Gold<sup>®</sup>*

Guano Australia Pty Ltd is excited to announce the appointment of 'Amgrow Specialty' as the new wholesale agent for Madura Guano Gold<sup>®</sup> - Kwik Start<sup>®</sup>.



*The Amgrow Specialty Team*

<b>Chris Chapman</b>	- Manager	<b>0412 720 943</b>
<b>Robyn Hanson</b>	- Customer Service Officer	<b>07 3802 5007</b>
<b>Richard Jackson</b>	- Servicing Victoria	<b>0448 057 734</b>
<b>Mark Scovell</b>	- Servicing South Australia	<b>0412 082 727</b>
<b>Ron Bollard</b>	- Servicing Coffs Harbour to Yandina	<b>0438 166 262</b>
<b>Renier Scheepers</b>	- Servicing Queensland Wide Bay Region	<b>0419 504 716</b>
<b>Caine James</b>	- National Turf Specialist & Servicing Central NSW	<b>0402 911 479</b>
<b>Martin Yates</b>	- Servicing Southern NSW & Procurement	<b>0408 682 933</b>
<b>Kathy Bush</b>	- Small Pack Specialist & Servicing North Queensland	<b>0430 077 230</b>

# Guano Gold Head & Shoulders Above The Rest

BY John Kismet Jashar

## Guano Gold has driven right through all of the so called "muck and magic" biological fertilisers!

It is amazing the number of manufactured miracle fertilisers on the market:

- Nutritionally Technical soft rocks, hard rocks and colloidal rocks;
- Naturally Mined rock/moon dusts;
- Naturally Technical "Never-Never" mineral rockdusts added with "fused calcium?" and mixed with "bacillus?";
- Yeast based fertilisers claiming to be Nutritionally Smart, and
- some made from all types of so called magic components.

The list is endless and in our assessment most of these products are classified as "SOUPS!"

Good grief, if only these companies would get jobs as Cocktail shakers in a Voodoo Bar, at least then they may have some real success. Many fertilizing manufacturers/suppliers have in some way endeavored to emulate and factory replicate Guano Gold only to have failed, and failed miserably. Some of the claims that have been made across Australia by some, if not all, of these companies are outrageous. Any wonder many farmers across Australia are questioning the merits of these products.

Guano Australia, having taken a lead position in 'Biological Farming Input supplies', is proud of the most important, No. 1 fact; Reefsafe Guano Gold is the market leader in the Australian Organic-Biological Phosphorus, Calcium, Silica market. When most of these companies attempt to duplicate your product and they can't, you know the game is over and you know you have won! WHY? The answer is quite simple...Guano Gold is a naturally formed product, never to be replicated.

Guano Gold cannot be factory made! Guano Gold is the ONLY naturally formed product on the world market that contains the following as a result of its own natural formation:

- 12% Phosphorus and is 100% Available
- 29% Calcium and is 100% Available
- 10% Silica and is 100% Available
- 8.6% Organic Carbon
- 129me/100g CEC - Cation Exchange Capacity with a range of trace elements.

Guano Australia, through Reefsafe Guano Gold, prides itself in being consistent in product quality; the provision of a service second to none; the provision of independent agronomic advice, and a strong commitment to undertake commercial replicated trial research by accredited registered laboratories. That is why Guano Australia and Guano Gold are Market Leaders NOT followers!

You only have to study the tested replicated trial data, which proves beyond any doubt that the uptake of Phosphorus and Silica (the Silica component in the Reefsafe GUANO GOLD fertiliser) plays a significant role in driving the absorption of phosphorus and calcium. Leaf blade levels of phosphorus and silica are significantly higher in the Reefsafe Guano Gold treatments than the standard treatment. Silica reduces the tie-up of phosphorus by the aluminium



JOHN KISMET JASHAR  
CEO/ President/ Director  
Kismet International Pty.Ltd  
For and On Behalf of  
Guano Australia Pty. Ltd

and iron in the soil. Results indicate that plants in the Reefsafe Guano Gold treatments absorbed more phosphorus, even though almost 20% extra phosphorus was applied to the standard treatments. Referring to the Reefsafe Website ([www.reefsafe.com.au](http://www.reefsafe.com.au)), the equation is very simple and critical. The P, Ca and Si components of Guano are proven. Each component is available all year round as and when the plant requires them. The rest is HISTORY!

We constantly request farmers to research the Unit cost of fertilisers and not focus on the TONNE cost, encouraging them to determine what, in real terms, are they getting for their money when it comes to available Phosphorus, Calcium and Silica compared to other **Rock Phosphates**, Super phosphates, etc... the cost differentials are substantial as is the quality and quantity of the crop.

At the end of the day farmers need to take into full consideration all of the following when choosing the right fertiliser for their crop:

1. Soil requirements;
2. The fertiliser which best addresses the needs of the soil and crop;
3. Unit cost of fertilisers;
4. Yield results (quality and quantity), and
5. Soil deterioration and which fertilisers reduce the risk of depletion of the natural nutrients in the soil (sensible farming methods will ensure soils continue to

provide farmers and their families a decent livelihood for many years to come rather than be depleted of natural nutrients and literally become barren soil). What then should "YOU" the farmer be asking and checking when purchasing fertilisers/inputs?

### 1. Request from your supplier:

- i. Independent Laboratory Product Analysis;
- ii. Copies of MSDS;
- iii. Check for heavy dangerous metals eg. Cadmium, Lead, Mercury.
- iv. Replicated trial data from an independent reputable laboratory;
- v. Details pertaining to registration of the fertiliser you are considering purchasing, which Government Dept and where (most types of so called biological / rock phosphates/crusher dusts/soft rocks etc. of these inputs are NOT registered as fertilisers); as most of these products are sold as Soil Conditioners and passed off as fertilisers;
- vi. Origins of the product, and
- vii. Whether they meet all environmental guidelines and OH&S.

### 2. From your Agronomist you need to ascertain the following:

- i. The type of soil tests they are using and whether they are adequate;
- ii. How they try to educate their clients about sustainable farming methods, and
- iii. Who is conducting the soil test interpretations, in who's interest, and WHY? REMEMBER... "YOU" the "FARMER" are paying for it one way or another!

### 3. Attend a training day run by Guano Australia Pty. Ltd.

### 4. Above all else listen, explore and evaluate exactly what you are paying for.

REMEMBER... "it is your livelihood on the line". Farm inputs are skyrocketing in price and it all comes off your bottom line; the line which has just become that much thinner.

When incorporating Guano Gold as your source of available P, Ca, & Si, choose carefully what you blend it with; ensure it is a reputable proven product(s). Our national distributors are credible, proven companies located across Australia and they are here as part of the overall team to support you in your decision making.

With regard to inputs in the "Organic Industry" cheque book diplomacy has taken over and as a result hundreds of so called input products have been certified as "Registered Certified" inputs.... in my opinion most of these products are "Snake OILS". Farmers, who invariably endeavor to cut costs, go from one product to another, instead of focusing on genuinely running their farms/businesses with proven products. At the end of the day...how does that old saying go? "What you miss out on the spinning wheel you'll make up on the merry go round!" The main point here is to stay focused on the real thing.

Another example of ineffective farm management would have to be when farmers

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# CALL NOW

Story continued on from page 4

go from one soil test brand to another every year instead of sticking by the same soil test for two years straight. If you remain with the same soil test for at least two years you will then be able to obtain a reliable comparison.

After 20 long years of repeated agronomic success across Australia, Guano Australia now steps into the bigger picture of Australian Agriculture "mixing it with the best". Along with our new product Guano Sulphur Gold with 10% Sulphur, our product list includes:

- ~ Guano Gold - Kwik Start "Premium" Granule
- ~ Guano Gold - Kwik Start "Standard" Granule
- ~ Guano Gold Micronized Powder D.P.I approved product for the Stock feed industry
- ~ Reefsafes Guano Gold
- ~ Agrispon Natural Plant Extract Bio- Stimulant

Taking the opportunity of the crossfire between the larger players with regard to supplies and pricing, all the major fertiliser players have sharply increased their prices so high that farmers won't have a hope of survival unless they get a grip on proven alternative Biological farming and proven INPUTS.

This is exactly where Reefsafes Guano Gold is playing an even greater role in Australian Agriculture by incorporating Reefsafes Guano Gold into a range of "Select", specialised Custom Blends and enjoying the agronomic benefits in so far as cost effective inputs are concerned. Guano Australia has also been shaving its cost structure across the board. Suppliers, shipping, trucking, and many other areas have all been renegotiated.

NETT RESULT? In more recent years, the majority of major chemical fertiliser companies have escalated their pricing structures due to world supply and demand positions. Here at Guano Australia we rode out the pricing storm with the nett result being no increases in the cost of our products. When one compares the

cost of Guano Gold, ie available "P" from Guano compared to Super, MAP/DAP- Guano Gold is streets ahead, it just takes a little longer for some to realize... But then again, regular repeat clients who have purchased Guano Gold during the past 20 years, worked out the cost benefits a long time ago; that is how and why we were able to successfully grow our business so "Kwikly."

Based on the solid strengths of our long term national distributor relationships, Guano Australia is now poised to expand further into the Australian Agriculture industry. What with oil/fuel/shipping costs rising over the top and the ever increasing importation of fresh produce from many overseas countries, Australian farmers, in order to survive and prosper, will, without question have to seriously consider exactly which proven products and services to use.

There is no room for error! Farmers don't have the luxury of error of margin to fall back on ANY MORE...times up!  
It's time to farm "Biologically".

Obtain independent, credible agronomic advice, be very selective in product purchases, turn the soils back into a proven balance, cut chemical inputs or they will be history.

In this comprehensive edition of GUANO NEWS we invite farmers across Australia to study what some of our select farmer clients, turf managers, agronomists and distributors have to report as to measured agronomic results and rewards by applying Reefsafes Guano Gold and associated products.

For further product information and technical services please view our comprehensive web sites:

- www.guano.com.au
- www.reefsafes.com.au
- www.agrispon.com.au
- www.amgrow.com.au

Or call your local nearest distributor or Guano Australia Pty. Ltd  
Tel: (07) 5445 5300 or Email: kismet@guano.com.au

## Seed Potato Operation Thriving

**The Abel family grows certified seed potatoes near Warragul in the West Gippsland district of Victoria. Our goal is to increase saleable yields of certified potato seed through increasing the numbers and quality of the potato tubers.**

Several years ago we trialled various fertiliser blends including one which contained Madura Guano Gold.

Because of the short and long term benefits we saw each year since then, we have increased the area of the crop which is sown with Madura Guano Gold blends.

In our experience, Madura Guano Gold in the blend has contributed to:

- ◆ Significantly stronger root growth which has assisted the plant with greater capacity to access nutrition and water for the duration of the crop.
- ◆ Increasing the phosphorus availability for the potatoes throughout the full duration of the crop because Madura Guano Gold contains phosphorus which is available short, medium and long term.



Peter Abel displaying his seed potatoes

- ◆ Improving the calcium availability, because Madura Guano Gold is high in calcium, making plant cells stronger and improving the quality of the potato.
- ◆ Improving the calcium availability also increases storage life of the potato and their capacity to withstand transport interstate and overseas.
- ◆ Improving the yields in some of the potato varieties where it is typically difficult to achieve high yields. This is because of the balance of phosphorus, calcium and silica in Madura Guano Gold.
- ◆ Increasing the phosphorus availability for crops or pastures which follow the potato rotation because the combination of phosphorus calcium and silica in the Madura Guano Gold reduces phosphorus tie up.

We are convinced that Madura Guano Gold has multiple benefits to our beef and seed potato operation.

## West Gippsland Potatoes Benefit from Guano Gold

TESTIMONIAL

**Laurie and Maria Germano and family grow potatoes and other vegetables on their 105 hectre farm in the rolling hills of South Gippsland at Delburn.**



Laurie Germano overlooking the family property in Delburn, South Gippsland.

In recent years Laurie has moved toward fertiliser blends containing Madura Guano Gold because:

1. The product grows as good or better quality vegetables of good size.
2. The residual phosphorus left in the soil allows the following crops to get off to a good start without additional fertiliser being applied. "The Guano Gold does not get tied

up in the soil like other sources of phosphorus" explains Laurie.

3. To highlight the above points, new Tetilla Annual Rye grass has been drop sown on paddocks recently harvested from potatoes.

The clear benefit of the residual quantities of the Madura Guano Gold can be shown in how the pasture has grown so quickly despite very low rainfall occurring and the ground had been cracking.

Note the photograph in the "Mushroom" paddock where the irrigator winch track that did not receive any Madura Guano Gold but was sown with the same seed at the same time.

4. Madura Guano Gold is also very good on the garden around the house.

Laurie has been actively encouraging other farmers to look towards the benefits of using Madura Guano Gold - Kwik Start by incorporating some into their own fertiliser blends and to use it on their own local farms as well.



## NutriSmart® belongs in your fertility program!

**NutriSmart** is a soil conditioner / nutrition alternative which is based on the activity of active carbon and specialised microbiology. **NutriSmart** is used at planting, it is applied into the soil with traditional fertilisers where it stimulates plant root growth, forms a symbiotic relationship with the plant roots to support nutrient and water access, and acts to solubilise locked up nutrients within the soil.

**NutriSmart** Integrates chemical and organic/biological fertilisers this allows growers to manage their fertility programs with less chemical fertiliser and minimal nutrient leaching. Each **NutriSmart** application improves the soil's structure and its ability to support microbial activity critical to plant nutrition and health.



### BENEFITS TO CROPS

- Improves & Sustains plant growth and yield
- Improved crop quality and productivity
- Provides long efficacy delivering nutrients throughout the growing cycle
- Supports Healthier plants and improves the development of the root systems.

### BENEFITS TO THE GROWER

- Reduced input costs
- Emphasises USE EFFICIENCY rather than chemical rate
- Is user friendly and cost effective

### BENEFITS TO THE ENVIRONMENT

- NutriSmart is Natural and environmentally friendly
- Nourishes and sustains the soil's biodiversity
- Reduces rates of chemical fertiliser application; reducing the amount of salts entering the ecosystem
- Significantly reduces pollution caused by the leaching of excess nitrogen
- Improves the soil quality - increases the soil organic matter & improves soil environment for beneficial micro-organisms



# The smart choice is here, Guano Gold plus Nutrismart

**Now you can harness all the benefits of Guano Gold combined with the environmentally friendly microbial fertiliser and soil amendment, Nutrismart.**

What is Nutrismart? Nutrismart is a soil conditioner and nutrition alternative which is based on the activity of active carbon and specialised microbiology. NutriSmart is used at planting and is applied into the soil with traditional fertilisers where it stimulates plant root growth, forms a symbiotic relationship with the plant roots to support nutrient and water access and acts to solubilise locked up nutrients within the soil.

The NutriSmart® granules act as “biological factories” which, once incorporated into the soil, become activated and start fixing N

from the atmosphere, decomposing P from the phosphate rock and making insoluble P and K in the soil available on-demand to the plant.

Guano Gold with its non water soluble phosphorous creates both fast and slow release phosphorous. The product also contains calcium, silica, and a high amount of Organic Carbon together with a high CEC (Cation Exchange Capacity) and a very high moisture holding capacity which makes the perfect partner to be blended with Nutrismart.

Both Guano Gold and Nutrismart work together as soil conditioners, improving soil quality by increasing the soil organic matter and improving the soil environment for beneficial micro-organisms. Both Guano Gold and Nutrismart are natural, environmentally friendly, BFA registered products approved for organic farming systems.

Physically both Guano Gold and Nutrismart are hard free flowing granules which can be harmoniously blended into various ratios, for example a 75/25 Nutrismart Guano blend. Alternatively for non-organic farming systems the Nutrismart Guano blend can also incorporate trace elements or synthetic N,P,K fertilisers for soils or crops with specific or greater nutritional needs.

Nutrismart Guano blends will provide crops with long term nutrient supply for use through out the growing cycle and in turn improve and sustain plant growth, yield, crop quality and productivity.

For more information on Nutrismart, Guano Gold and the advantages of Nutrismart Guano Gold blends please contact Amgrow Specialty on 02 9395 1200 or visit [www.amgrow.com.au](http://www.amgrow.com.au).

## FERTICO

**Specialists in Custom Blending Nutrismart and Guano Gold**

### FERTICO OFFERS BEST OF BOTH WORLDS

Combining the proven NutriSmart technology with organic and inorganic fertilisers is a cost effective nutrition option for farmers. Available from the Elizabeth, South Australia factory, Fertico offers a range of standard products as well as offering custom blending to meet the requirements of any farming enterprise. Products are available in:

- Loose Bulk
- 1 MT bags
- 40kg bags
- 25kg bags

Agronomic advice from their technical sales representatives is available to growers and distributors to aid in the selection of the right blend for the designated soil and crop.

**Fertico recommends Nutrismart and Guano Gold-Kwik Start**



# Fertico



## NATURAL FERTILISERS

This article appeared in Acres Australia 2006

# Farmers and suppliers embrace trials for new organic fertilisers

**N**ATURE is a whiz at cooking up its own recipes to aid ailments, fill bellies and continue the great circle of life. So it comes as no surprise that a natural compound is holding its own against its chemical counterpart in the soil fertiliser stakes - and saving the Great Barrier Reef as well.

Throw in coral, sea birds, fish and seaweed. Compress for thousands of years. And there you have it - one of the best sources of phosphorus, calcium, silica and cation exchange products in the world.

The compound is called Reefsafe Guano and is being marketed by Guano Australia Pty Ltd. The company's two main products are: Reefsafe Madura Guano Gold - Kwik Start Organic Fertiliser and Reefsafe Agrispon Bio-stimulant Multi Plant Extract - Soil Activator and Soil Conditioner. These products are also marketed under the Reefsafe label.

These natural fertilisers significantly reduce, by a massive 50 per cent, the run-off of nitrogen and phosphorus into the river systems and to the Great Barrier Reef. This run-off is a major environmental threat facing Australia.

After years of research and study of the ever-expanding growth of organic-based products and markets around the world, Guano Australia Pty Ltd's CEO John Jashar identified and secured a long-term supply of Guano Gold 100% Natural Organic Phosphatic Fertiliser from Indonesia.

Guano Gold - Kwik Start was launched into the Australian horticultural, agricultural and turf marketplace in early 1994.

Both products have proven their value in a number of independent trials recently conducted on Queensland farms by proving that farmers can cut their urea fertiliser concentration by 50 per cent and still enjoy the same quality growth and yield. These trials replicated those conducted in recent years around the world.

Mr Jashar said introducing the chemical free, granulated organic phosphorus fertiliser product to farmers across Australia had opened the doors to a more environmentally-sustainable future.

Guano Gold - Kwik Start is a certified organic product, (BFA-AI-M309), which has received outstanding support from certified organic growers across Australia.

"We value the support of the organic Biodynamic industry, all certification entities and in particular, the Biological Farmers of Australia," Mr Jashar said. "We are great supporters of agronomists, farmers and distributors who are our customer base - and we have a team of agronomists working across Australia."

Mr Jashar's research and studies proved that worldwide demand for chemical-free, organic products was increasing - underpinning the future of sustainable agriculture. Further investigations revealed that the Australian marketplace had no regular, reliable supply of high quality organic phosphate, yet Reefsafe guano had long been successfully marketed in the sensitive Japanese market.

"For 13 years our company has grown at a rate of 20 per cent every year. We have survived the drought and are opening new distribution points all over Australia," Mr Jashar said.



Guano Australia Pty Ltd's CEO John Jashar

"We are not only dedicated to organic farmers - the bulk of our customers are conventional farmers heading down the organic track," Mr Jashar said.

"We must address the issues of soil inputs and run-offs - and reduce the amount of nitrogen and phosphates running into our rivers and the Great Barrier Reef.

"It has been proven that Reefsafe Agrispon is an important tool in decreasing the use of urea by 50 per cent - that's 50 per cent less not going to run-off into our rivers and the Barrier Reef. Our phosphate doesn't leach or run away."

Mr Jashar said his company had great faith in Australia's organic farming industry.

"We have a number of plans in the pipeline - company expansion and linking up with a greater number of companies aligned to our way of thinking and promoting more sustainable farming," he said.

"Farmers are now open to new products because they have been proven by independent trial data - they are no longer regarded as 'snake oils'," Mr Jashar said.

### The Trials

**I**N the past few years a number of independent trials testing the value of Reefsafe Guano fertiliser have been carried out in Bundaberg by locally-based Crop Tech Laboratories. The trials, on cane farms, were overseen by Crop Tech's senior technical agronomist Robert Doyle. A similar trial with sweet potatoes was also conducted by P&H Rural Bundaberg.

"We conducted the study on four farms over one crop cycle only and at the end of the day it was certain that the Reefsafe trial blend cost the same amount, was less destructive to the environment but yielded a crop that was just as good - there is a long-term benefit," Mr Doyle said.

"We used the Reefsafe Agrispon on three farms in small trials and proved that if you cut the nitrogen back 50 per cent (using Reefsafe Agrispon) you still achieved the same results as using an industry-standard NPK fertiliser."

'Research and studies proved that worldwide demand for chemical-free, organic products was increasing - underpinning the future of sustainable agriculture. Further investigations revealed that the Australian marketplace had no regular, reliable supply of high quality organic phosphate.'



Suncorp's senior agronomist Robert Drewitt

The farms featured different soils: red volcanic soil; white sandy soil; and thirdly; grey sandy loam.

Four treatments were used in the trials: Trial A had industry standard fertiliser with 100 per cent nitrogen; Trial B had industry standard fertiliser with 100 per cent nitrogen and Reefsafe Agrispon applied at one litre per hectare; Trial C had industry standard fertiliser with 75 per cent nitrogen and Reefsafe Agrispon and Trial D had industry standard fertiliser with 50 per cent nitrogen and Reefsafe Agrispon.

The plantings were also randomised so as not to favour particular soils. The trials were scientifically conducted.

"The results showed no differences at all between the four trial patches. Thus farmers can cut their nitrogen use back by 50 per cent and use Reefsafe Agrispon at one litre per hectare and still get the same result as they are getting with conventional fertilisers," Mr Doyle said.

"That's good news for the environment and represents dollar savings for farmers," he said.

"Reefsafe Agrispon works best in the worst soils - hard crusting soils. It encourages microbiotic growth in soil, encourages water filtration and allows stronger root growth because the soil becomes finer. Good, deep open soils may not show much of a response.

"It's a good tool in whole farm management practices," Mr Doyle said.

The trials proved that farmers could cut back urea application by 50 per cent, and yet still obtain same yield, CCS and stick count. Plus the trials showed superior shoot emergence in the Reefsafe Agrispon treated plots and a similar root development across all of the assessed plots. Results were better nutrient usage, improved soil texture and less compaction, improved root, plant and growth performance. This result achieved by applying one litre of Reefsafe Agrispon per hectare - repeated in 45 to 60 days.

Bundaberg farmer Tony Chapman allowed his farm to be used in the Reefsafe Guano trials. Half-an-acre of a 12-acre cane field was used for the trial.

*Continued next page*



# NATURAL FERTILISERS

## 'This is the sort of research that needs to be done'

*From previous page*

Two treatments (Reefsafe Guano and conventional fertiliser) were used side by side - three rows by three rows. This process was repeated 12 times, so there were 24 x 3 rows in the trial.

"Everything was replicated - tonnage, CCS - and at the end of the trial we could conclusively conclude that no one fertiliser was superior to the other," Mr Doyle said. "The farmer was no worse off financially or yield-wise, and yet the organic fertiliser more greatly benefited the environment."

The trials proved that Reefsafe Guano provided high amounts of available phosphorus, calcium and silica. Reefsafe was a very well suited fertiliser for problematic areas where leaching of phosphorus was an issue. The trials also proved that silica plays a major role in increasing the cell strength of plant tissue, and thus the rigidity of the plant.

The continuous release action of phosphorus from Reefsafe Guano fertiliser may also result in less lock-up and leaching losses than conventional chemical fertilisers. This would indicate that results from Reefsafe Guano fertilisers may be more significant in lighter coastal soils, in high rainfall seasons.

Mr Chapman said he was not familiar with the Reefsafe Guano product when the trials were held, but now believes we must become more aware of what we are putting into our soils.

"Visually, you couldn't see any difference between the trial crops. It showed there was a benefit in using the organic fertiliser because it reduced the amount of heavy metals being put into the soil to very little or nil," Mr Chapman said.

The trials have been enthusiastically supported by the senior agronomist for Suncorp, Robert Drewitt.

Suncorp is the biggest financial backer of the Queensland sugar industry and plays a vital role in the industry's future. Some 20 percent of the area under cane in Queensland is owned by farmers who are Suncorp clients.

"This is the sort of research that needs to be done to offer proven results to the cane industry to reduce their costs and reduce chemical inputs into the environment," Mr Drewitt said.

Meanwhile, trials using Reefsafe Agrispon conducted in Bundaberg last year on a sweet potato crop delivered similar results.

The trial, conducted by P&H Rural, saw alternate rows of sweet potato treated with Reefsafe Agrispon and conventional fertiliser - planted in heavy red clay soil.

P&H Rural's Craig Baker said the trial saw no improvement in either crop.

"There was no extra yield and the quality of the sweet potatoes were no different," he said.

"The surprising thing, though, was that when we dug the sweet potatoes from the Reefsafe Agrispon rows, we found that the soil had a lot finer silt quality compared to the other conventional fertiliser rows.

"This was a big advantage because when using the digger to remove the tubers, they were removed more easily and there was less damage to the tuber than those in the harder soils," he said.

Similar, but unreplicated, trials have been hosted by Elders Mackay in the past three years. Most of the trials have been conducted on sugar cane crops, but maize and smaller crops such as soybean and grass pastures have also been trialled.

Elders senior agronomist Noel James and field officer Joe Bartolo said the trials, while not published, did demonstrate that Reefsafe Guano and Reefsafe Guano blends did "stand up well against conventional grower methods with no loss of yield or CCS in the sugar cane.

"We also noted a higher rate of residue phosphorus and silica in the soil. The trials also demonstrated the product's versatility - it blended easily with oth-



*Sugar cane rows in the trial at Bundaberg*

er nutrients and could be applied quite easily using conventional farm machinery," they said.

The trials with the liquid Reefsafe Agrispon were conducted on sugar cane, maize and soybeans.

"The trials demonstrated that the product was equally as good, if not better than, conventional fertilisers," they said.

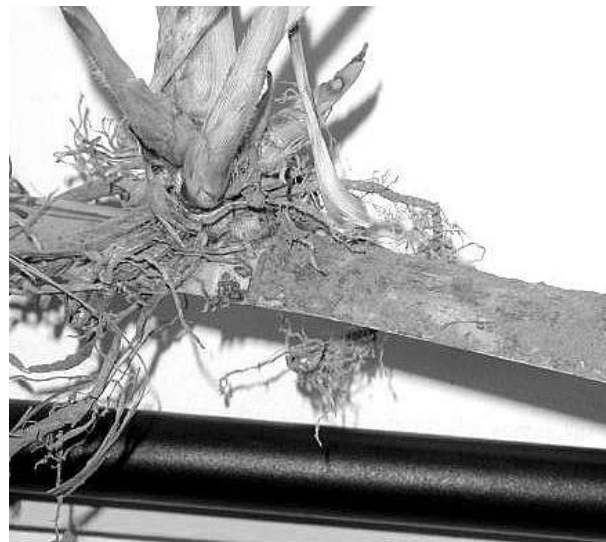
"We noticed that the trial plants showed a tendency for the plant to put down a more substantial root base - thus were healthier to take up more nutrients," they said.

Mr James said the farmers in the Mackay region were under immense pressure, particularly from the media, to reduce the run-off to the inner-reefs of the Great Barrier Reef region.

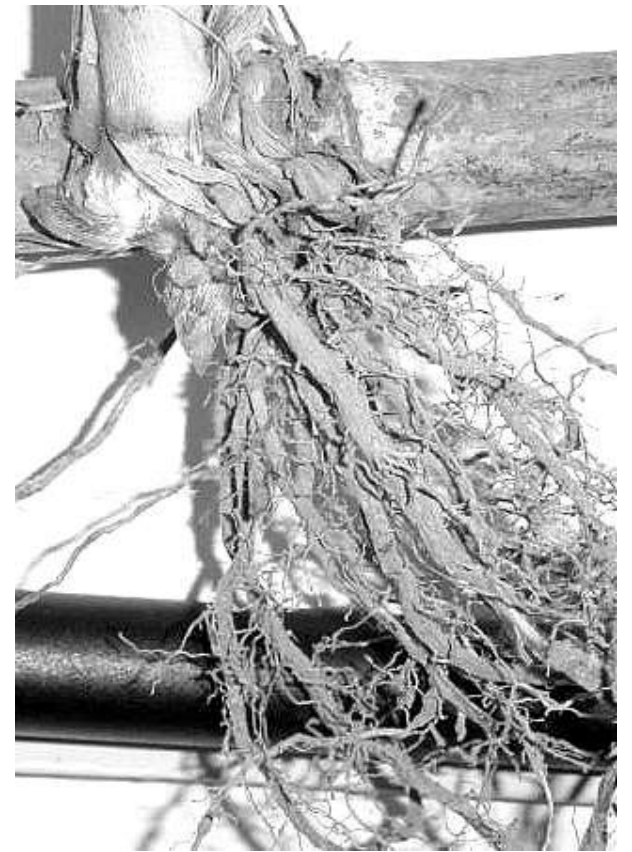
"We are more aware now that we have to re-consider conventional fertiliser products and become more educated in the use of organic products such as the Reefsafe products," he said.

Mr James said the Reefsafe products had also secured markets in the region's Central Highlands where sorghum growers had been working well with the products for the past two summer seasons.

For Trial Data and Technical information consult the new websites [www.reefsafe.com.au](http://www.reefsafe.com.au) and [www.guano.com.au](http://www.guano.com.au) and [www.agrispon.com.au](http://www.agrispon.com.au)



*Sugar cane shoots from a plant fertilised with conventional fertilisers during the trials at Bundaberg.*



*Shoots from sugar cane being fertilised with guano*

### Great Barrier Reef Threat

THE Great Barrier Reef and its catchment are an integrated eco-system. Over the past 150 years, sediment and nutrient levels flowing into the Reef have quadrupled.

This has happened largely due to grazing and cropping expansion in the catchment and loss of native vegetation, wetlands and riparian areas.

At present, it is estimated that current sediment discharges into the Reef are around 14 million tonnes per year, which is much bigger than prior to European settlement (between 1-5 million tonnes per year).

Current estimates suggest that around 43,000 tonnes of nitrogen (at least twice the pre-European level) and 7,000 tonnes of phosphorus (at least three times the pre-European level) flow into the Great Barrier Reef every year.

Annual loads are increasing.

A Science Panel confirmed that there is a serious risk to the long-term future of at least the inshore reef area as a result of land-based pollution, and that action is necessary to avoid such damage.

If more effective action is not taken to reduce the sediment, nutrient and pesticide run-off, the present threat to the World Heritage Area and adjacent freshwater systems will worsen. □



*Sugar cane shoots - the more vigorous shoot was treated with Reefsafe Agrispon, the other with conventional fertilisers.*

# IMPORTANCE OF CARBON TO THE SOIL - "REPAIRING THE DAMAGE"

Prepared for and on behalf of Guano Australia Pty. Ltd.



**Carbon is a critical part of the ecosystem sustaining life on this planet. The life-death cycle involves a recycling of the carbon containing structural components of plant and animal matter –through the soil and air – and back into living plants.**

The availability of soil carbon as a key ingredient for efficient plant growth, has been recognized by most soil scientists and agronomists as the most important component of a healthy fertile soil.

A fertile soil should contain from 2-8% organic matter; most soils contain less than 2%. Many soils in the crop growing regions of Australia are virtually depleted of essential carbon bearing organic matter. Humic substances are the components of humus and as such make up the high molecular weight compounds that together form the brown to black hydrophilic, molecularly flexible, polyelectrolytes called humus. They function to give the soil structure, porosity, water holding capacity, cation and anion exchange, and are involved in the chelation of mineral elements.

Humic substances such as organic matter, humus, humate, humic acid, fulvic acid and humin, play a vital role in soil fertility and plant nutrition. Farming practices have tended to disregard the importance of humic substances when it was discovered that soluble acidic based N-P-K fertilisers could stimulate plant growth. The sustained use of such fertilisers, without adequate replacement of humic substance, has depleted overall soil quality and resulted in a deterioration of plant growth efficiency.

"There is now a growing awareness that farming practices need to change in order to sustain and make more efficient the farming land available"

Humic substances and non-humic (organic) compounds provide the energy and many of the mineral requirements for soil micro organisms and soil animals. Beneficial soil organisms lack the photo-synthetic apparatus to capture energy from the sun and thus must survive on residual carbon containing substances on or in the soil.

A healthy fertile soil must contain sufficient carbon containing compounds to sustain the billions of microscopic life forms required for a fertile and a healthy plant. A living soil is a fertile healthy soil. (Dr Robert E. Pettit "The Wonderful World Of Humus And Carbon") Humus also functions to improve the soil's water holding capacity. The most important function of humic substances within the soil is their ability to hold

water. From a quantitative standpoint water is the most important substance derived by plants from the soil. Humic substances help create a desirable soil structure that facilitates water infiltration and helps hold water within the root zone.

Australian Agricultural Soils In Australia, human activity including land clearing, poor grazing practices, poor land cultivation techniques and the use of chemical fertilisers, has reduced the amount of carbon being held in the soil and this has resulted in a marked reduction in carbon levels in many of the country's agricultural regions.

Due to the prolonged use of chemical fertilisers, the Australian farming sector has been drawing down its soil carbon levels for the last 100 years, and this lack of soil carbon has impacted the soil's ability to retain rainwater. It has also decreased the levels of microbiological activity in the upper soil profile. It is now time to reverse this situation, and the use of organic fertilisers such as Guano Gold can assist this.

Across the Australian dryland cropping and grazing sector it would be unusual to find actively farmed soils with a carbon content of 1.5% or more. Normal soil carbon levels for quality agricultural soils should be above 5%.

Soil carbon sequestration transfers CO<sub>2</sub> from the atmosphere into the soil, catalysed by the use of bio-organic fertiliser, with the CO<sub>2</sub> being captured permanently in the soil. Soil carbon sequestration is accomplished by farming systems that add high amounts of biomass, use minimal tillage and enhance soil biota activity.

Australian soil scientist, Dr Christine Jones, has undertaken a 10-year crusade to raise the profile of soil carbon processes and what she calls the microbial "carbon highway". After the oceans, the soil is the earth's largest carbon sink with plants facilitating, through photosynthesis, conversion of CO<sub>2</sub> to sugars to accelerate plant growth and the release of oxygen into the atmosphere. The fundamental biological processes which produce humidified soil carbon are part of Dr Jones's "microbial bridge" and the key to the formation and maintenance of healthy soils.

Dr Jones says "this cannot happen where farm chemicals kill the essential soil microbes. When chemical use is added to intensive cultivation which exposes and oxidises the humus already in soil it is easy to see why soil has become a huge net source rather than a net sink for atmospheric CO<sub>2</sub> under current farming practices.

Conventional cropping methods have reduced soil carbon levels in Australia to half to a third (1/2 - 1/3rd) of their original levels CSIRO research has found that the rate of carbon sequestration resulting from proper pasture management is

sufficient to increase soil carbons. "Boosting soil carbon by 1/2% on 2% of farm land could sequester about 685 million tonnes of CO<sub>2</sub>, more than the 603 million tonnes emitted nationally from all sources", Dr Christine Jones said in a recent Senate Enquiry into Federal Tax Breaks for Carbon Sink Forests.

## Organic Fertilisers

There are a number of ways to facilitate and increase carbon levels in the soil. They include:

- Restoration of the microbial and chemical health of the soil. This increases plant growth and the natural recycling process resulting in more carbon being sequestered. This can be done on a large scale using more biologically sustaining fertilisers such as Guano Gold.
- Low impact cultivation. By reducing the disturbance of the soil, the physical structure of the soil is allowed to develop. This process involves the formation of soil particles called macro-aggregates – a long term storage site for carbon.
- Pasture and vegetation management. Through the careful management of grazing, previously worn out grasslands can be brought back to health. This increases the root and plant mass available for decomposition which in turn boosts the carbon cycle.
- Subtle retention should be encouraged at all times and in intensive agriculture, horticulture or viticulture cultivation of green manure crops need to be encouraged, grown and incorporated wherever possible.

About 75% of fertilisers and fertiliser technology used around the world today were developed or improved during the 1950's - 1970's at the Tennessee Valley Authority (TVA). However, Dr Norman Borlaug, 1970 Nobel Laureate, has expressed concern about the current state of the fertiliser industry. "With the price of energy increasing, we need to find cheaper, more effective ways to nourish food crops.

Farmers are paying way too much for fertiliser products because we are transporting millions of tonnes of material that is not nutrient and because much of the nutrients in applied fertilisers are never used by the crop. Nutrient losses to the environment are high with consequences for global warming and water pollution."

Dr Amit Roy (IFDC President and CEO) has said "it's time to launch a radical initiative to develop a new generation of energy efficient fertilisers".

The use of bio-organic fertilisers to improve soil carbon levels meets the requirements outlined by Dr Borlaug and Dr Roy.

*Story continues on next page*

**Guano Gold**

Reefsafe Guano Gold Kwik Start is a natural di-calcic phosphate fertiliser which is hand mined and granulated in Indonesia for distribution nationally across Australia.

The product has a broad analysis including:

- 11.6% Total Phosphorus
- 29% Calcium
- 10% Silica

While this analysis may vary slightly as organic fertilisers do, there is a comprehensive analysis undertaken by the Independent Laboratory - Swep Pty. Ltd. Reefsafe Guano Gold Kwik Start also contains Organic Carbon and has a high Cation Exchange Capacity of 129 Me per 100 grams.

Reefsafe Guano Gold-Kwik Start has a low Phosphorus water solubility relative to many other manufactured phosphorus fertilisers. However some 50% of the Total Phosphorus is a citrate soluble and growers report that crops and pastures are off to a "Kwik Start" as the name implies. The insoluble fraction then becomes available as the plants approach maturity. The Features & Benefits chart, together with the replicated trial data information, relating to Reefsafe Guano Gold-Kwik Start can be viewed on [www.guano.com.au](http://www.guano.com.au) and [www.reefsafe.com.au](http://www.reefsafe.com.au)

The benefits of the silica in Reefsafe Guano Gold -Kwik Start are considerable and associated with an efficient utilisation of phosphorus and avoiding the problem of nutrient lock up. Basically the silica in the monosalicic acid form combines with the soil nutrient that would normally bind with phosphorus. This then forms a compound such as calcium silicate, iron silicate, aluminium or manganese silicate and releases the phosphorus in the soluble phosphoric acid form available for plant absorption and utilisation.



Thus Guano Gold is ideally placed to be part of the carbon soil enriching programme for Australian farmers. It is an organically based fertiliser that will enhance plant efficiency of uptake, and not leach into the water table or be eroded by run-off into the waterways.

Guano Gold's benefits in stimulating root biomass development via efficiency of nutrient uptake in the plant, will contribute to enhanced residual carbon sequestered into the soil.

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# LANDMARK BACKS REEFSAFE GUANO GOLD SPECIALITY BLENDS.

Listed below are several sample Speciality Custom Blends for Sugar Cane, Bananas, Capsicum/Horti and Broadacre crops. Ultimately the blend mix will be determined by soil types and crop requirements; taking into account seasonal application requirements. Upon request individual Custom Blends can be made to suit each soil and market segment requirement. Adding Reefsafe Guano Gold as a base component in any of the following fertiliser blends will enhance crops and crop yields. Reefsafe Guano Gold contains available P, Ca and Si and is a trialled and proven product.

Refer to [www.reefsafe.com.au](http://www.reefsafe.com.au) for complete trial data.

For a blend of your choice contact

**Guano Australia Pty Ltd on Tel 07 5445 5300 or Landmark as per below contact details.**

## SUGAR CANE BLENDS

Description	Analysis					
	N	P	K	S	Ca	Si
Acid Soil Starter	11	6	0	11	15	5
Acid Soil Starter High Ca	8	6	0	0	24	5

## TROPICAL BANANA BLENDS

Description	Analysis							
	N	P	K	S	Mg	Ca	Si	Cl
Guano Gold High K No.1	8.3	3.2	25.3	4.1	0	7.8	2.7	15
Guano Gold High K No.2	9.2	2.4	27.3	5	0	5.8	2	15

## CAPSICUM HORTICULTURAL BLENDS

Description	Analysis					
	N	P	K	S	Ca	Si
Guano Gold / SOP / DAP / SOA	10.4	8.3	10.3	11	5.8	2

## BROADACRE BLENDS

Description	Analysis							
	N	P	K	S	Mg	Ca	Zn	Fe
Guano Gold / Big Z / SOA / MAP	4.3	13.3	5.1	3.1	0.2	12.9	2.3	0.4
Guano Gold / Big Z / SOA / MOP	11.2	5.2	5.5	11.8	0.1	7.9	1.2	0.2
Madura Guano Gold / Starter Z	5.2	15.5	0	1.1	0.3	14.4	1.2	0.5

<b>Landmark</b> Lot 59432 Bruce Hwy TULLY QLD <b>Phone: (07) 4068 3900</b>	<b>Landmark</b> Cnr. James & Basalt Sts MAREEBA QLD <b>Phone: (07) 4092 3711</b>	<b>Landmark</b> Cnr. Bruce Hwy & Collinsville Rd BOWEN QLD <b>Phone: (07) 4785 2068</b>
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**OR YOUR NEAREST LANDMARK BRANCH AUSTRALIA WIDE**

**THE ONLY PHOSPHATE YOU SHOULD CHOOSE GUANO GOLD® KWIK START**  
 "10 OUT OF 10"  
 "ON TIME EVERY TIME"

**COST EFFECTIVE PRICE**  
 ★★★★★

**SUSTAINABILITY**  
 ★★★★★

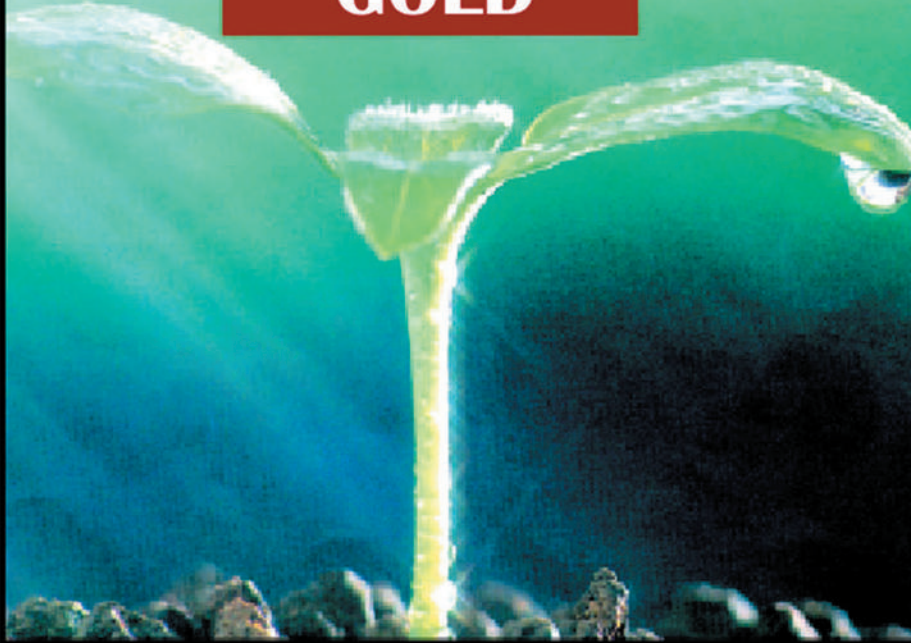
**PERFORMANCE**  
 ★★★★★

**% UTILISATION**  
 ★★★★★

**100% AVAILABLE SILICA**  
 ★★★★★

**AUSTRALIA'S ONLY NATURAL DI-CALCIUM GUANO GOLD®**  
**PHOSPHATIC FERTILIZER & SOIL CONDITIONER WITH MICRO-BIOLOGICAL LIFE**  
 ★★★★★

*Madura*  
**Guano® Gold**  
 "Kwik Start"



**100% Natural Phosphatic Fertilizer and Soil Conditioner**



For all national supplies, blends, agronomic and technical advisory services.

Call details as listed below.

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ACN 074 053 026

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Tel: 13004GUANO OR Tel: (07) 5445 5300

Fax: (07) 5476 6400

Email:sales@guano.com.au  
 www.guano.com.au

**Guano Gold-Kwik Start**  
*Tried - Proven - Trusted*

Why It Works!

1. Available phosphorus - not tied up ✓
2. 50-50 phosphorus split ✓
3. Phosphorus not water soluble ✓
4. Active calcium availability ✓
5. Directly and indirectly adds organic matter ✓
6. Improves water and nutrient holding capacity ✓
7. Active silicon availability ✓
8. High cation exchange capacity ✓
9. High organic carbon level ✓
10. Acts as soil conditioner ✓

Secondary factors that flow from the above

1. Better metabolism of nitrates in plants
2. More phosphorus over the growing period
3. Stronger cell walls leading to:
  - a. Flavour enhancement
  - b. Resistance to mould and fungus attack
  - c. More upright stems and open leaves
  - d. Enhanced photosynthesis
4. More fertile and viable seed production
5. Increase in soil microfauna
6. Longer shelf life of produce
7. Food that is better to eat

Guano Gold Features & Benefits

- Natural Organic Product
- Fast & Slow Release of Phosphorus
- High in Cation Exchange Capacity (C.E.C.)
- Granulated (2mm-5mm), easy to handle and spread through all spreaders and combines
- Minimal in Cadmium & Mercury
- Suitable for blending with all other types of Fertilizer
- No Odour
- Allowed and Certified Input to Organic and Bio-Dynamic Growers under the National Standards, and for conventional growers as well
- Environmentally Friendly

Product Analysis

Phosphorus .....	11.6%
Calcium .....	29.0%
Silica .....	10.0%
Organic Carbon .....	8.6%
C.E.C.....	129Me/100Grams

*For comprehensive range of trace elements refer to extensive technical data reports from your nearest Guano Gold dealer.*

**Available from over 250 Authorised Distributors Around Australia**

# Introducing Agronomy Services Australasia Pty Ltd

**“Where Corporate Agronomy Services Starts and Finishes in the Boardroom”**

**Agronomy Services Australasia offers a holistic approach in dealing within the Agricultural production system.**

Agronomy Services Australasia systematic approach deals with agronomy as part of a total farming system.

Soil health and its effects on crops and pastures, as well as farm finances and ultimately the value of the farm as an asset, are the areas of utmost importance to Agronomy Services Australasia.

You could say Agronomy Australasia has a holistic approach to the services it provides to the client.

Agronomy Services Australasia undertakes farm soil analysis, crop and pasture analysis and helps the client to implement achievable programmes that are both environmentally and cheque book friendly.

Agronomy Services Australasia also undertakes analysis for clients of properties that are being acquired.

This service provides a report on the property, gross margins and cash flow that can be used in conjunction with historical financial records to secure the best possible funding arrangement from your bank or institution.

Agronomy Services Australasia can undertake work for banks that are holding stressed or impaired agricultural assets and requires an understanding of the business farming programme and its ability to achieve yield and cash flow forecasts.

Agronomy Services Australasia specialises in the delivery of a wide range of information and services relevant to agricultural producers and agribusiness.

Managed by experienced professionals we deliver profitable solutions in a number of key areas including:

- General Crop and Pasture Agronomy
- Soil and Plant Nutrition
- Soil Testing Services
- Price Risk Management
- Project Management

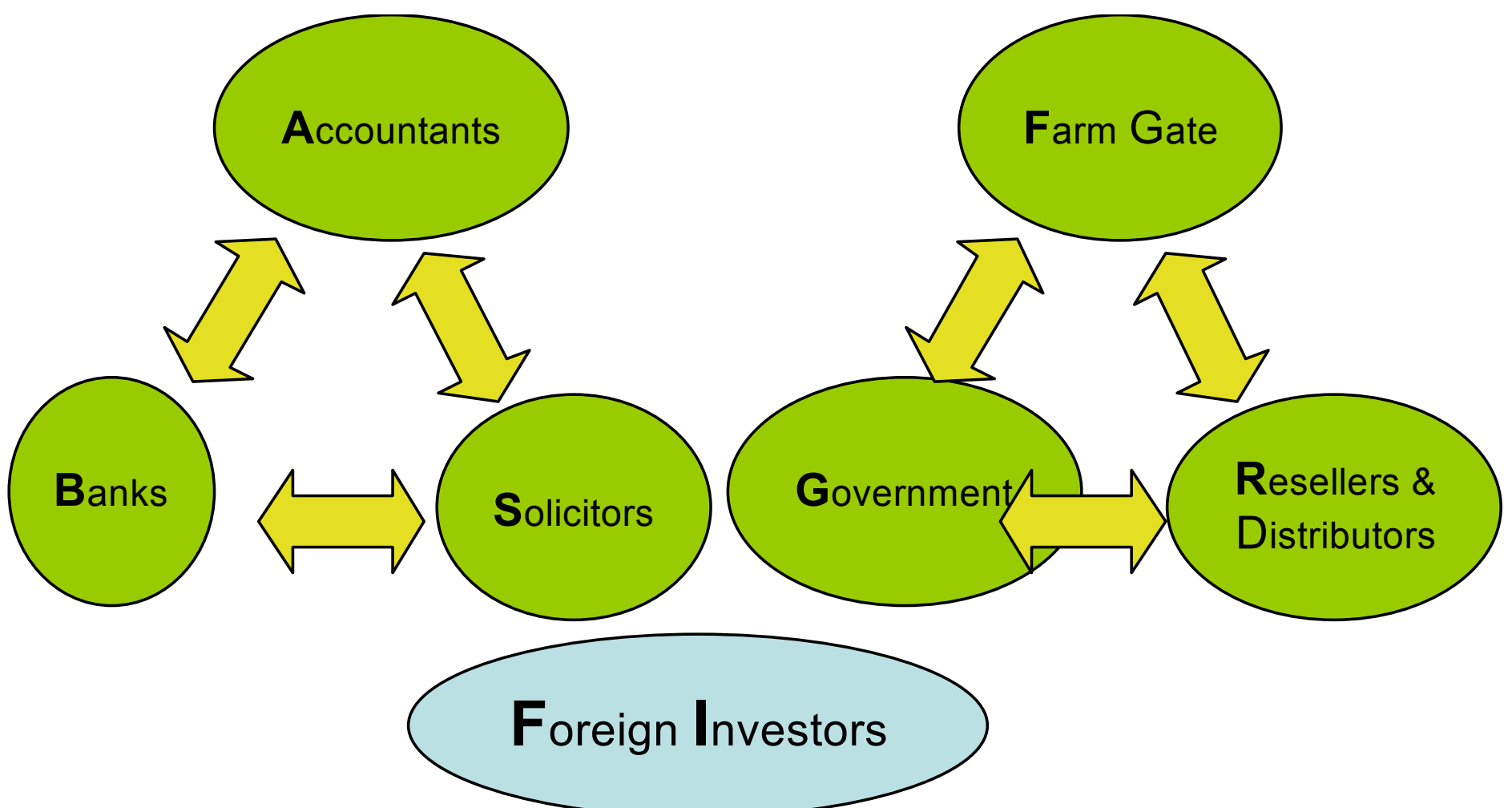
For all enquires contact Agronomy Services Australasia:



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**AUSTRALASIA**

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web: www.agronomyservices.com.au  
mobile: 0412 474 049



# ROVING AGRONOMIST ON THE 'FROG N TOAD' FOR GUANO AUSTRALIA



**Having collected a hire car at Melbourne Airport I drove onto Coonabarabran early on the morning of Tuesday 27th September, 2011.**

There I met up with Julian White of Fertile Farms. We discussed the use of Guano Gold generally and especially the precise role of the silica in allowing phosphorus to be made more efficiently available.

We then drove onto Ag-Rich Foods property "Ferndale" owned by Rob Rich (some 50km west of Baradine and 20km east of Coonamble). Here Rob runs 10,500 acres of which 5500 will be cropped this year, including 1400 acres of Mung beans planned to be sown in December. His aim is to grow 2 legumes and 1 cereal crop in 18 months whenever soil moisture allows.

The area had fallen back into severe drought again with only 7" or some eg. 1.25ml of rain falling during the growing period from when the cereal crops had been planted. Needless to say the top soil was bone dry, but sub soil moisture had been very good. The wheat looked to be very even and better than other crops in the area. Julian estimated that yields had been naturally compromised due to the very dry conditions, suggesting they are likely to yield from ½ -1 tonne per acre ie 1.25 → 2.5 tonnes per hectare.

Julian attributed the relative success of the crops to date and their potential to yield rather well from here to a combination of:

- accurate precision planting of seed using his new 'Excel Stubble Warrior' drill which disturbs the soil assisting in crop establishment;
- use of Guano Gold-Kwik Start to provide phosphorus, calcium and silica;
- use of Trichodema and VAM which solubilises Calcium phosphate, stimulates early stage growth and suppresses Crown Rot;
- full moisture profile at planting, and
- appropriate post emergent weed control.



Big Precision Excel Sowing Combine Drill

When we visited Rob Rich on 27th September, 2011, the ground was hard as concrete, as a result of extremely low rainfall. However crops looked remarkably good with dry and hard top soil. Where there were no crops and a winter fallow, good deep soil moisture still existed and an early Mung Bean planting on or about 23rd September, 2011 showed that the beans were in fact germinating after a few days.

These were sown at 33kg seed per ha and Guano Gold at 76kg per ha. Soil temperature was estimated at 15°C at sowing, and rising to 20 ° C as at 27th September, 2011. Rob Rich reported having used Guano Gold for 3 years and together with the help of Julian White are beginning to see real and substantial benefits from this integrated and attention to detail approach to the sowing and growing of their crops.

Rob Rich said that for cropping to be successful you need a product and system that works well, is risk free and economically feasible. It has taken 3 years to see these big improvements and only 7" of rain to date. Next day I travelled long and hard to arrive at Mara Seeds to visit MD Stuart Larsson. Stuart had a long history as a HiFert agent while cultivating his Soy bean production factory/business and where they turn over AUS\$10,000,000 pa exporting soy flour and grits. The huge plant runs 24 hours per day employing 30 staff, and is run by his son Ross ie Mara Global Foods Pty Ltd.

In addition to his soy processing factory Stuart also runs:

- a) **Rhodes Grass cubing**  
plant where they export to Korea (from a separate factory at Sandilands). They are perfecting these cubes to hold better, and I told Stuart about the use of the Guano powder as a DCP for adding to stockfeed.
- b) **Biochar Unit**  
which is the only established unit of its kind in Australia based on buckwheat screenings. The process uses green waste and produces liquid biochar with lower methane levels, however more work is being undertaken to reduce the cost.
- c) **Compost production**  
which currently sells 6000 tonnes per year and wishes to add and fortify with Guano Gold at some stage. They use chicken manure as a base and need to adjust manure/compost in order to produce quality soy beans with a 2 to 1 ratio of fat to protein. This is important as it keeps the cost of 'soy milk' cheaper rather than when they need to add fat. They also have access to compost hay, tea tree base (distillery nearby) and Rumen content from a local abattoir. The compost is turned 8-9 times and added water needs to be of a good quality using 50,000 litres per 150 meter now.



Stuart Larsson looking over his compost piles near ready for use and sale

Results of using the compost (which is in big demand) at 1 tonne per acre had produced good wheat crops of 1.5 tonnes per acre in the Goodiwindi area.

- d) **Stuart as a farmer**  
also crops 2000 acres per year out of his 5000 acres and has 40 employees. In addition they run 2000 head of cattle producing organic beef.

From here I travelled on to visit with Colin Barnes, Field Sales Agronomist of Norco Rural, South Lismore. Colin as you know is well versed with Guano, sells it to dairy and beef farmers, and soon to farmers growing macadamia and other crops. Colin is keen on Guano and is happy to promote it further to his colleagues in other branches. He was glad to meet me and guided me to their other branches. I then saw Tony the Assistant Manager at Norco, Casino. He said that he had sold a lot of Guano when he worked for Rural Buying in Lismore previously. There are a lot of both soy beans farmed in the area and 2 agronomists are employed out of their Casino branch. Lots of potential there I suggest. Later I visited Norco, Alstonville and spoke to Darren Linton, Merchandise Salesperson. They sell Guano to sweet potato, potato farms etc and are increasing their sales all the time.

Branch Manager, Ian McClintock said that although they "sell a bit" he thought that growers needed acid soils for the phosphorus to release, so I explained that clearly. Other Norco stores I visited include Norco, Koogle where I spoke to Robin Harley, Store Manager who informed me that growers are using Guano on pasture, soy beans and blended for corn production. At the Murwillumbah Norco Rural store I spoke to Assistant Manager Alan Gallard. All-in-all I had a very productive few days meeting with some very special people who have continued to support the Guano Australia product range. Whilst there may be some more serious work to be done in marketing the features and benefits of Guano Gold I am heartened to know there are people throughout this region who understand the benefits of and the role Guano Gold can play in sustainable farming of this region.



# AG-RICH FOODS

## Producers of High Quality Grain Products



**Established in 1961 Ag-Rich Foods is a market leader in modern grain growing techniques and sustainable farming methods. Located in North West New South Wales near the small rural town of Coonamble, the large farming operation operates out of two freehold title properties – “Killara” (5,322 acres) and “Kalawa” (4,823 acres) and includes a combined silo capacity of 1590 tonnes.**

Operating on a mixed farming principle, Killara and Kalawa grow five different types of grain: Broad Leaf Lupins, Chic Peas, Mung Beans, Wheat and Oats.

The primary Sustainable Farming method utilised by Ag-Rich is “Zero Tillage” or minimum tillage. This technique basically requires the least amount of soil disturbance with the maximum amount of crop residue retention as possible. The successful implementation of this method will maintain and improve soil structure, soil biology, organic matter and ultimately carbon levels.

An essential component of this farming method is the Mulching of crop residue after harvesting. As we all know mulching greatly improves the retention and preservation of soil moisture loss whilst enhancing the soil’s biological activity. Mulching also greatly reduces dust problems which are often associated with summer fallow spray applications.

Whilst Ag-Rich employs the zero tillage method as its primary farming practice, their general philosophy is not to make generalizations about which farming method to apply; each farm and its location has to be assessed with all factors taken into consideration before developing and applying the most suitable system to maximise profitability whilst at the same time looking after the land.

In 2008 specialist agronomist consultant Julian White developed a fertiliser programme that helped mitigate the disadvantages that petrochemical farming system had on the soil biology.

The fertiliser product Julian recommended was Guano Gold - Kwik Start. With its high Calcium, Phosphorus and Silica content which are non acidic do not have a deleterious effect on soil fungi. Guano Gold-Kwik Start is applied at rates

of 50kg to 90kg per ha. Guano Gold-Kwik Start is the product used when planting any crop on “Killara” or “Kalawa” at a cost of approximate \$21AUD per acre. The application of this fertiliser product has worked in extremely well with the overall farming practice of Ag-Rich.

Another method, “Deep Ripping”, has also proven to be very beneficial on both “Killara” and “Kalawa”. Because of the red loam soil once every 4 to 5 years “Deep Ripping” alleviates any compaction problems as well as stimulates microbiological activity at a reasonable depth. This process oxygenates the soil and promotes an increase in soil activity which in turn improves nitrification.

Boron Humates are also injected into the main fertiliser line at rates of 6kg per ha. Boron trace elements are fundamental to effective plant flowering, seed set and legume pod retention. In North Western NSW Boron is lacking in most

soils therefore it is important to inject Humates, which are an enriched form of carbon, into the soil to help feed soil fungi’s that are added as a seed dressing to the soil.

Ag-Rich has a number of other interesting projects on the boil:

- investigations are being carried out into a specific application of Broad Leaf Lupins to Aquafeeds, and
- the making of Lupin flour and Mung Bean flour.

For further details about the highly progressive and innovative farming practices of Ag-Rich please feel free to go to their web site [www.ag-richfoods.com.au](http://www.ag-richfoods.com.au)



**Guano Australia is incredibly proud of its association with Julian White and his company Fertile Farm.**

We have had a long standing professional relationship with Julian who has not only supported Guano Australia and our philosophy through the purchase of our products but primarily through Julian’s continued effort to educate the local farming community to the benefits of organic fertilisers such Guano Gold-Kwik Start and sustainable farming methods.

**This is what Julian had to say:**

“It is becoming increasingly obvious we need to become more efficient in our use of fertiliser (sic) on farm. Now there is so much more to a fert (sic) program than simple NPK.

We need to look at the whole equation to identify the real constraints and come up with a long term strategy to build a fertile soil that requires minimum inputs.

He stated that the purchase and use of a suitable fertiliser is the most expensive input in many agricultural production systems.

Good independent advice is required to determine rate, timing, placement and what products to combine for optimal economic results.

“Rather than just throwing more soluble nutrients at the plant to get a response, we need a thorough understanding of the resources already in the soil and how to optimise the plant uptake of them. At the same time we can’t afford a shortfall in plant nutrition so monitoring in crop is very important.”

Julian went on to say “in some situations a nutrient replacement strategy may also be important, so the proper research needs to be done.”



Julian White of Fertile Farm

# MARA SEEDS

**“the seeds to grow”**



**Mara Seeds is a family owned business located 50 kms west of Casino in northern NSW. Mara Seeds is involved in the production, processing and marketing of a range of organic products from oilseeds to grass seeds.**

Mara Seeds was a pioneer soybean grower in northern NSW, being the second farming operation to ever grow soybean on the Far North Coast.

In addition to their strong soy industry links the business has developed a strong position for temperate and sub tropical grass seeds and cereal crops in domestic and export markets, based on innovative niche quality led strategies.

In the mid 1990's management identified the diminishing returns on artificial fertiliser and chemical systems and increased costs, both financially and health related.

In 1996 management changed its approach to an organic farming system to allow for the development of niche specialised products and also to cater for the growing organic culinary soybean and beef markets both here in Australia and overseas.

Mara Seeds products are free from harmful pesticides, herbicides, fungicides and artificial fertilisers.

In 1997 the company saw an opportunity to develop a composting facility to produce organic compost and biological tea products for use on-site as well as for commercial sales. The compost and biological tea to date has yielded tremendous results in several vegetable and cropping programs.

Mara Seeds continues to build and develop organic products for domestic and export markets with the view of promoting the Australian Organic Industry.

## Organic Products

- Organic Cattle
- Planting Soy, Cereal and Grass seeds
- Organic Culinary Soybean
- Organic Cereal Grains
- Organic Composts
- Organic Compost Teas
- Organic Stock Feeds
- Organic full fat Soy Flour
- Organic Soy Grits

## Grading and Processing

Mara Seeds offers producers of grass seeds, cereals and oilseeds the service of having products dried, graded and packaged.

In some cases crops are stored through the

respective growing seasons, this being subject to availability.

Producers can take advantage of this service knowing that only the highest quality management strategies are used to give the producer a high quality product.

## Prescription Compost and Biologicals

Mara Seeds offers producers from any industry the opportunity to have prescription made compost and compost teas developed for use on their enterprises.

The use of the organic certified compost is not only aimed at organic enterprises but also producers who are interested in using “softer” farming methods to help develop not only healthier soils but also healthier final products.

## Advisory Service

Mara Seeds provides advisory services to people that are interested in finding ways of using softer farming methods. Advice is also given on how to turn your farming enterprise into an organic operation through providing proven advice on structuring your operation.

For further details check out Mara Seeds website: [www.maraseeds.com.au](http://www.maraseeds.com.au)



**07 5445 5300**



**CALL NOW**

# RECIPE FOR HEALTHY DRY LICK & STOCKFEED USING GUANO GOLD DI CALCIUM "P"



## We made dry lick for country areas in Northern NSW, on the North West slopes and plains.

These areas are traditionally 30 inch rainfall areas with frosty winters. The grass was mainly hayed off summer grass.

The lick was aimed at cows and intake was around 100 grams per day feed, at least every third day.

So a herd of 100 cows required 30kg every 3 days.

### A standard mix would be:

- 35% Salt
- 25% Guano (granulated) would give us 3 grams per cow of phosphorus per day plus 9 grams of Calcium and 2.5 grams of silica
- 10% Cottonseed meal or copra meal
- 8% Urea
- 8% Zeolite
- 8% Dolomite
- 5% Bentonite
- 0.5% Feedlot minerals
- 0.5% Liquid molasses (or vegetable oil) for dust suppression

In this mix if we were starting out at 3% Urea then we would take out 5% Urea and 5% Zeolite and increase the Bentonite by 10%.

Likewise if going to 10% Urea then increase Urea by 2% and Zeolite by 2% and bring Bentonite back to 1%. Bentonite acts as the buffer in the mix if more of any items needs to be increased to suit a particular farmer.

Another example would be in calving heifers to increase Dolomite to 12% and drop Bentonite to 1%, etc.

Prepared by Robert Drewitt BcSc(Ag)  
Senior Technical Agronomist  
Mobile: 0427 147 239

## Guano Gold-Kwik Start

"12 | 29"  
Dicalcium Phosphate

### Guano Gold-Kwik Start

is an approved stockfeed grade Dicalcium Phosphate that is Organically Certified (BFA No. 309M1)

#### Natural Mineral Properties

Phosphorus	12%
Citric Soluble P	50%
Calcium	29%
Si	10%
Ph	8.6%

#### Physical Properties

Particle Size	12mm-5mm
Bulk Density	1.2 Cu/M/Mt
Appearance	Brown Granule
Package	Bulk, Bulka Bags or 25kg bags

- \* *Guano Gold-Kwik Start* is widely used as a component of both organic and conventional cattle and sheep supplements.
- \* *Guano Gold-Kwik Start* granule size makes it ideal for loose dry licks.
- \* *Guano Gold-Kwik Start* has high levels of Ca which reduces the amount of fine limes needed to balance cattle and sheep supplements. It is also suitable for inclusion in feedlot rations and pig rations.

## NATIONAL DISTRIBUTOR LIST

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#### Elders Ltd

Katherine (08) 8972 2500  
Palmerston (08) 8931 3455  
or your nearest branch in the NT

#### Landmark

Alice Springs (08) 8952 1722  
Katherine (08) 8972 2311  
Palmerston (08) 8983 0831  
or your nearest branch in the NT

#### Tropiculture Australia Pty Ltd

Humpty Doo (08) 8988 1119

### Western Australia

#### Carnarvon Growers Association Inc

Carnarvon (08) 9941 8384

#### Elders Ltd

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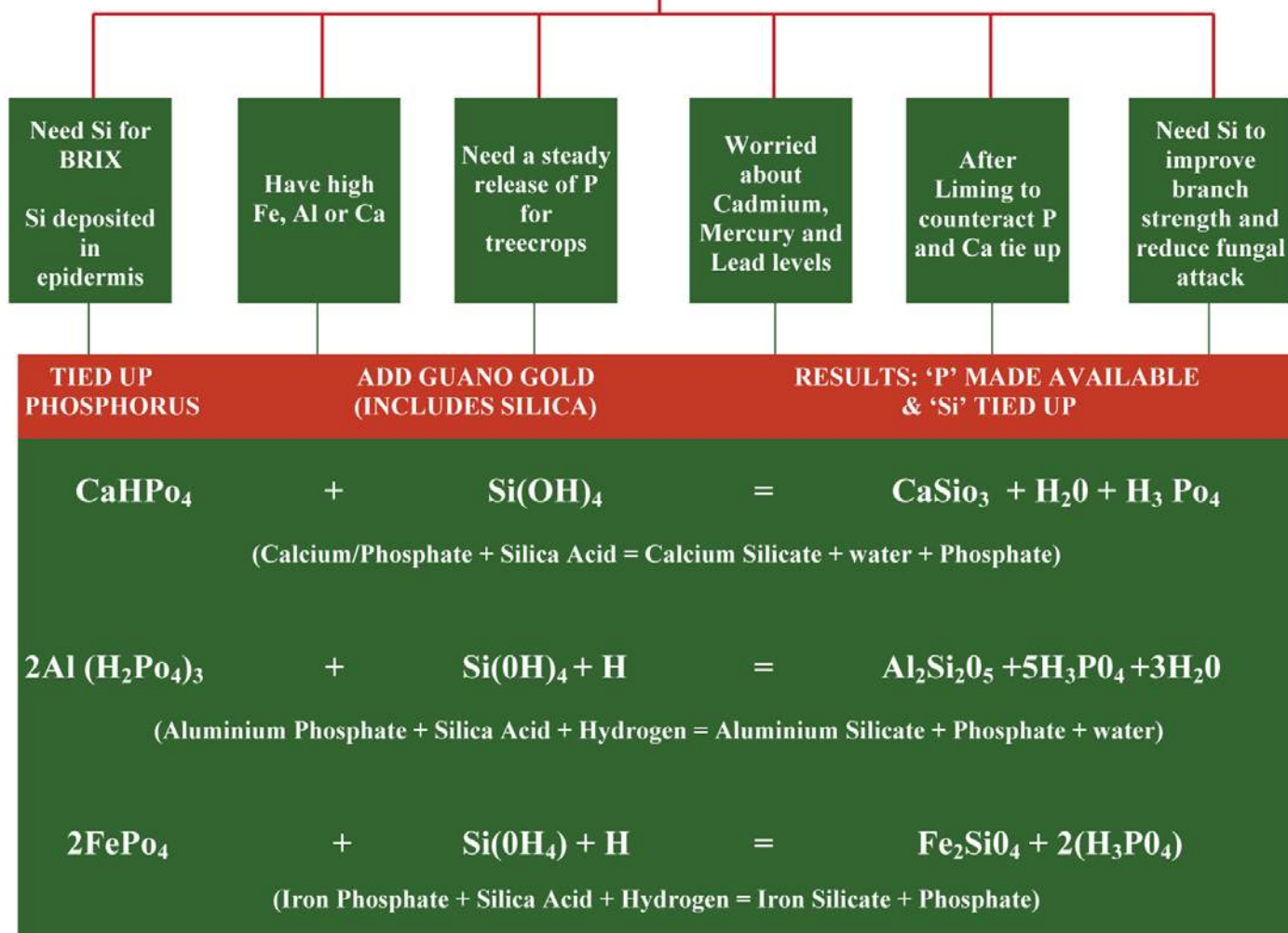
Ballarat (03) 5337 9999

Bairnsdale (03) 5153 1999

Geelong (03) 5222 1622



## When Do I Need *Guano Gold* "Kwik Start"



## GUANO GOLD - ACID SOIL STRAWBERRY PRE PLANT WITH SILICA & KMS



Acid soils have always required different management practices to reach their optimum potential. Low organic matter, low acid and low Cation Exchange (C.E.C) offer up real challenges in the management of phosphorus and potassium.

In sandy soils iron and aluminium are very active. When water soluble phosphorus fertilisers are added to these soils new compounds can be formed that "Tie up" the phosphorus. The young strawberry plants can't use these compounds.

The problem with non-water soluble forms of phosphate fertiliser has always been to place this product at the billet or having to incorporate it through the soil profile.

So what is new about GUANO GOLD Acid Soil Strawberry Preplant? This Fertiliser contains three types of phosphorus as well as silica (Si (OH) 4). The role of the silica in the blend is to protect the water-soluble phosphorus. Silica

does this by binding with iron and aluminium and thus allowing the phosphorus to stay plant available for longer.

The starter has a blend of water soluble, citric soluble and non-citric soluble phosphorus. This allows the phosphorus in GUANO GOLD Acid Soil Strawberry Preplant to "drip feed" into the crop over its whole growth cycle.

Silica is also now classified as a beneficial element. Its function in the plant is related to cell thickening. Strawberries grown with silica have thicker skins, higher sugar levels and have higher "wilt points".

### Why Blend with KMS

"Yield and Quality" .....these are the two most critical factors that determine a strawberry crop's profitability. Strawberries demand high levels of nutrients, particularly in the flowering-to-fruiting period. KMS helps supply needed nutrients throughout the growing season so superior crop quality can be achieved.

KMS is the fertiliser choice for profitable, perennial strawberry planting. When yields and quality are critical, growers rely on this naturally occurring source of three essential nutrients: POTASSIUM (20%), SULPHUR (16%) and MAGNESIUM (7%).

### KMS Features and Benefits

#### A Balanced Diet

Effective strawberry fertilization programs must provide a continuous nutrient supply to carry this long-season crop through the demands of late-season fruiting. Quality strawberries require large amounts of potassium, but high K rates can restrict plant absorption of magnesium. Using KMS in a fertilization program will help maintain a proper balance between potassium and magnesium.

#### The Perfect Three Nutrient Combination For Superior Performance

**Potassium**, the quality nutrient, is a primary nutrient that helps build well-balanced root systems while increasing plants' resistance to disease and drought. Petiole sap concentration results show that strawberry plants assimilate

more K during early development stages than at any other time.

**Sulphur** is vital for the synthesis of several important vitamins in plants. In fact, without S, proteins can't be synthesised. S is an essential component of three amino acids; the building blocks of proteins.

**Magnesium** is essential for chlorophyll production, phosphorus absorption and stimulation of plant growth. The nutrient also increases plant strength and helps strawberries withstand stress caused by insects and spray damage.

#### Readily Available Nutrients

The magnesium in KMS, along with the sulphur and potassium, is in the highly available, water-soluble sulphate form, so the nutrients reach plant roots and go to work immediately. This is important, considering that most magnesium sources are not readily available.

#### Doesn't Affect Soil pH

The optimum soil pH for strawberry production is 6.0 - 6.5. Strawberries will grow at a wider range of soil pH, however some micronutrients become less available as pH increases. KMS is a neutral salt and does not affect the soil pH, regardless of the amount applied.

#### Low Chloride

Because of KMS' low chloride level, growers can apply it with confidence, particularly when using as a row or starter fertiliser. When high potassium rates are required, KMS provides this nutrient in a low-chloride form that works to enhance crop quality.

Strawberry plants require high levels of K, as well as Mg and S, to achieve yield and quality goals. KMS helps supply these essential nutrients in a balanced, water-soluble and low-chloride form.

If your strawberry plants require a boost in yield and quality, it may be time to consider adding KMS via a GUANO GOLD Acid Soil Strawberry Preplant. blend to your fertiliser program.

Analysis: P 4 K 13 S 10.5 Mg 4.5 Ca 10 Si 3.5

# Guano Gold

## "Kwik Start"

### Key Crops

- Pasture / Dairy/ Beef
- Sugar Cane
- Bananas
- Broadacre/Cereal Crops
- Fruit & Vegetable Crops  
E.g. Watermelons, Mangoes, Avocados

**0:12:0:0 Ca 29% Si 10%**

### Features

- Natural Organic Fertiliser
- Low in Heavy Metal Contamination
- 50% Citrate Soluble Phosphorus
- 50% Citrate Insoluble Phosphorus
- High in CEC
- High in Silica
- No Odour
- Granulated
- Suitable for Blending
- Excellent Grower Reports
- Organic Product
- High in Organic Carbon

### Benefits

- Widely recognised and endorsed by Organic Organizations and growers
- Environmentally Friendly
- Rapid release for plant establishment and growth
- Residual phosphorus supply towards plants maturity
- Excellent for plant growth/soil enhancer/conditioner
- Important for flavour, colour, taste; assists to resist pest and disease, plant cell structure and untie "P"
- No objection to humans or attraction to dogs or cats
- Easy to spread
- Ability to blend to suit any growing requirements
- Assurance of yields if used appropriately
- Directly and indirectly adds organic matter. Improves water and nutrient holding capacities
- Important for soil structure

### Why It Works

1. Available phosphorus - not tied up
2. 50-50 phosphorus split
3. Phosphorus not water soluble
4. Active calcium availability
5. Directly and indirectly adds organic matter
6. Improves water and nutrient holding capacity
7. Active silicon availability
8. High cation exchange capacity
9. High organic carbon levels
10. Acts as soil conditioner

### Secondary Factors That Flow From Why It Works

1. Better metabolism of nitrates in plants
2. More phosphorus over the growing period
3. Stronger cell walls leading to:
  - a. Flavour enhancement
  - b. Resistance to mould and fungus attack
  - c. More upright stems and open leaves
  - d. Enhanced photosynthesis
4. More fertile and viable seed production
5. Increase in soil microfauna
6. Longer shelf life of produce
7. Food that is better and more flavoursome to eat

### THE IMPORTANCE OF PHOSPHORUS

- Phosphorus is 50% prompt and 50% sustained release
- Safe for soil ecology and soil microbes

### THE IMPORTANCE OF CALCIUM

- Improves plant strength
- Improves plant stress tolerance

### THE IMPORTANCE OF SILICA

- Reduces the leaching of Potassium
- Improves plant stress tolerance
- Maintains phosphorus in a plant available form
- Reduces the "tie-up" of phosphorus by aluminium and iron
- Transformation of slightly soluble phosphates into mobile forms
- The physical absorption of mobile phosphates by silicon-rich surfaces

### THE IMPORTANCE OF PHOSPHORUS, SILICA & CALCIUM COMBINED

- Does not increase soil acidity
- Complements conventional phosphorus fertilisers
- Certified input for organic production
- Analysis of 12% Phosphorus, 29% Calcium and 10% Silica



## Key Crops

- Pastures
- Turf
- Sugar Cane
- Cotton
- Broadacre/Cereal Crops
- Fruit/Vegetable & Citrus Crops.  
Eg. Corn, Potatoes, Pineapples  
Citrus & Stone Fruits



## What is Agrispon?

Tested and proven world wide for more than a decade. Agrispon is a natural, easy-to-use and cost-efficient bio-stimulant that dramatically improves plant performance and/or yield. Derived from plant and mineral extracts this liquid concentrate is effective in any climate suitable for plant growth. It performs especially well where there is stress due to soil or weather conditions.

## Features

- Bio-stimulates
- Improves Crop yield
- Cost Effective
- Improves Soil Texture
- Natural Product
- Enhances Nitrogen and other Nutrient's Release
- Safe for the Applicator and the Environment

## Benefits

- Stimulates beneficial processes in the soil that stimulate plant and root growth.
- Yields can increase significantly as can material, sugar or protein content, which are the standards of quality.
- Returns more than it costs.
- Improves soil aeration, water infiltration and percolation. This limits run off and soil erosion, adding to the sustainability of agriculture and horticulture.
- No chemical residue problems or withholding periods.
- Cost savings and fits into integrated plant and soil management.
- No withholding period and worker safe. Fits the clean and green concept that many primary producers are striving for.

## How Agrispon Works

Microbial activity is necessary to transform nitrogen, sulphur and phosphorus into more plant available forms. However, modern day agronomic practices can quite often lead to conditions that are highly detrimental to microbial activity. This in turn can limit nutrient availability and in turn restrict turf growth even if adequate fertiliser has been applied. Root building phosphorus is especially dependent on microbes for its release into the soil especially in high or low pH conditions.

In 1994 a trial was carried out to identify the benefits of using Agrispon on golf course turf. In all instances the use of Agrispon resulted in healthier more vigorous roots and leaves, with chlorophyll content and leaf greening being better for those areas treated with Agrispon than the control. Copies of this report are available upon request by emailing [spencerjh@optusnet.com.au](mailto:spencerjh@optusnet.com.au)

The use of Agrispon in turf fertility programmes has lead to increased root density coupled with an increase in the efficiency of nutrients such as nitrogen and phosphorus.

The world renowned Sydney Football Stadium, Brisbane's Suncorp Stadium and Melbourne's Kingston Heath Golf Course all apply Agrispon to their turf with outstanding results.

**“Agrispon has been used here every month, 12 months a year for the past eight years.”**

Graham Logan of ANZ Stadium, Sydney









**NORCO - "SPLIT P" SUPER**  
**Blends for Pasture**



ALLOWED INPUT 309AI  
BFA REGISTERED PRODUCT

**"The BEST of both worlds"**  
-with Guano Gold Sustainable Phosphorus customised blends

**Norco Rural introduces "Split P Super Blend", this new blend extends the effectiveness of single super by adding non water-soluble phosphorus and silica. The citric and non-citric soluble phosphorus is slower release and compliments the mid to long-term growth patterns of pasture. The silica in the blend protects the water-soluble phosphorus by forming chemical compounds with iron and aluminium. Once the silica ties up these elements it allows phosphorus to stay plant available for longer.**

### Split 'P' Super Pasture Blends

Phosphorus:Sulphur:Calcium

<p><b>Pasture blend 0 : 10 : 0 : 6.6 : 25 with 4% Silica</b> + 5.4% water soluble: 2.3% citric soluble :2.4% non citric</p> <p><b>Rate of Application : 175kg/ha</b></p> <p>Extend the effectiveness of the water soluble phosphorus of 'single-super', with the silica in Guano Gold.</p> <p>In acid soils the silica in Guano Gold combines with aluminium and iron and protects water soluble phosphorus by keeping it in a plant available form, and reducing 'Lock up'.</p>	<p>Complement the water soluble phosphorus of 'single-super', with the citric and non citric soluble phosphorus in Guano Gold to extend phosphorus availability.</p> <p>These combinations give the advantages of immediate, mid-term and sustained release of phosphorus for pastures.</p> <p>These Guano Gold and phosphorus combinations can be custom blended with nitrogen, potassium and sulphur to meet your requirements.</p>
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### Drive your phosphorus \$ Further

With all three forms of phosphorus

1. Water soluble phosphorus for immediate release
2. Citric soluble phosphorus for mid-term release
3. Mon citric soluble phosphorus for sustained release

**ADDED BENEFITS FOR SOILS....**

In acid soils, iron and aluminium are often in excess. When water soluble phosphorus fertilizers ('super') are applied to acid soils, chemical reactions form that can 'lock up' phosphorus before the plant can utilize it. But by combing Guano Gold, continues to release phosphorus to the plant/crop for the whole of the growth cycle.

**PLUS SILICA.....**

Guano Gold also comes with silica (Si (OH) 4). The role of the silica is to protect the water soluble phosphorus. Silica does this by binding with iron and aluminium and allowing the water soluble phosphorus to stay in a plant available form for longer, reducing phosphorus 'lock-up'. In addition, the citric soluble and non citric soluble phosphorus in

Guano, continues to release phosphorus to the plant/crop for the whole of the growth cycle.

**PLUS MORE AVAILABLE POTASSIUM.....**

In acid soils, aluminium can prevent potassium from being able to hold onto the soil particles. This is because aluminium has a stronger charge than potassium. The aluminium can 'kick' potassium off the soil colloid, which contributes to potassium leaching. Silica as found in Guano Gold acts as a buffer by bonding to aluminium and allows the potassium to remain plant available.

So add Guano Gold to your fertilizer and you'll have more plant available


PHOSPHORUS and POTASSIUM

### Guano Gold - "Kwik Start"


available Phosphorus, Calcium and Silica

Key Benefits of Guano Gold for pastures

<ul style="list-style-type: none"> <li>Naturally occurring and available phosphorus and calcium</li> <li>Phosphorus is 50% prompt and 50% sustained release</li> <li>Silica reduces the leaching of potassium</li> <li>Silica maintains phosphorus in a plant available form</li> <li>Silica reduces the 'lock-up' of phosphorus by binding with iron and aluminium, thus allowing the phosphorus to stay plant available</li> </ul>	<ul style="list-style-type: none"> <li>Calcium to improve plant strength</li> <li>Does not increase soil acidity</li> <li>Certified input for organic production</li> <li>Silica and calcium improves plant stress tolerance</li> <li>Safe for soil ecology and soil microbes</li> <li>Complements conventional phosphorus fertilizers</li> <li>Analysis of 12% phosphorus, 29% calcium and 10% silica</li> <li>Good granulation for easy blending and spreading</li> </ul>
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## GUANO GOLD... Norco says "IT WORKS"

"I have been involved with Agriculture all my life either through family or advisory work. The industries being Dairy, Beef, Sugar Cane, Macadamia, Tea Tree, Maize, Soy Beans and general horticulture.

I was introduced to Guano through Norco by John Jashar when he arranged a training session for Norco Staff. This was followed by another session to further aid in the digestion of understanding this new product...Guano Gold.

I was impressed with its potential and decided to set a gentle introduction to selected clients over a one to two year period. My aim was to hasten slowly so all clients on their farms proved to themselves that it did or did not have a place.

My experience prior to this had been rock phosphates from Egypt, Peru and Australia with only limited success. Norco has now reached Club 500 status with Guano sales reaching 500 tonnes. Feedback and word of mouth now sees a steady growth.

**I promote Guano Gold now because "IT WORKS".**

It is organic and kind to the soil. Farmers see more clover, increased yields in crops and are very happy with the concept. Some quick release of phosphorus with some slow release is ideal".

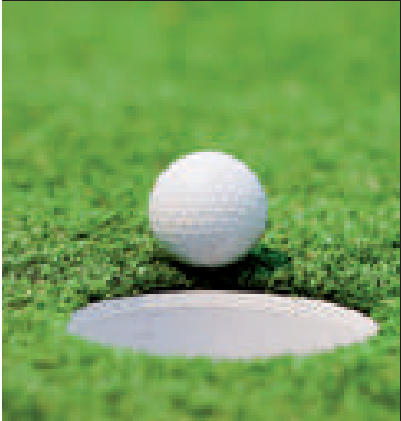


Colin Barnes, Sales Representative, Norco, Lismore, NSW

# 07 5445 5300



# CALL NOW



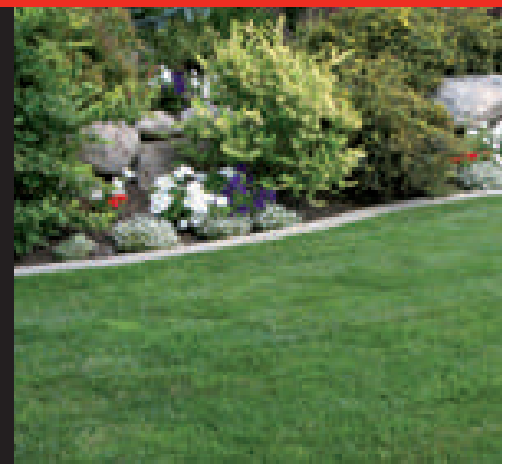
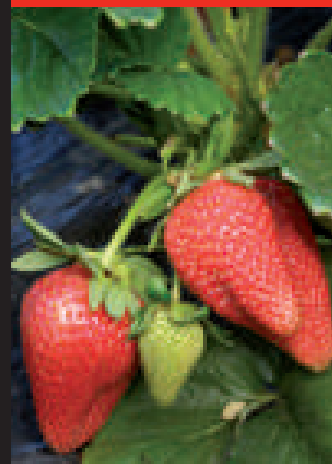
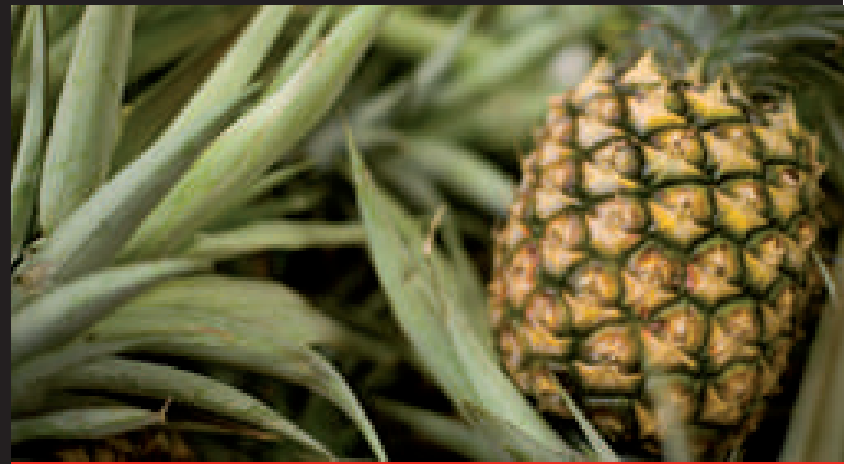
Amgrow Specialty, a new name in the Agricultural market, combines the agricultural related businesses of the Ecofertiliser group.

Amgrow Specialty will focus on own branded and manufactured products, and distribution of key manufacturer brands.

Amgrow Specialty, through superior quality and supply efficiencies, offers a differentiated product mix, to ensure real value for rural retailers and the farming community.

Amgrow Specialty key product offering:

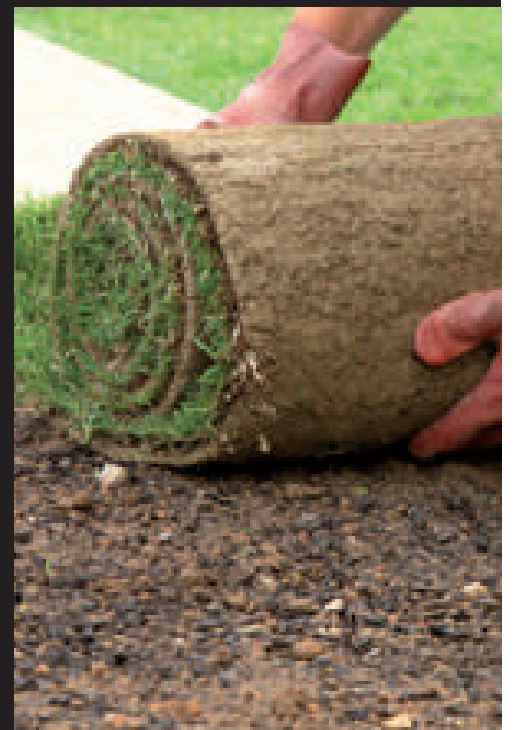
- Specialty Fertilisers and Custom Blending
- Controlled and Slow Release Technologies
- Organic Base Fertilisers
- Water Soluble Nutrients and Custom Blending
- Specialty Plant Protection Products
- Soil Wetting Agents
- Granular Soil Amendments



## Helping Australia Grow

### The Amgrow Specialty Team

<b>Chris Chapman</b>	– Manager, Servicing Victoria and SA	0412 720 943
<b>Robyn Hanson</b>	– Customer Service Officer	07 3802 5007
<b>Richard Jackson</b>	– Servicing Victoria	0448 057 734
<b>Ron Bollard</b>	– Servicing Coffs Harbour to Yandina	0438 166 262
<b>Renier Scheepers</b>	– Servicing Queensland Wide Bay Region	0419 504 716
<b>Caine James</b>	– National Turf Specialist & Servicing Central NSW	0402 911 479
<b>Martin Yates</b>	– Servicing Southern NSW & Procurement	0408 682 933
<b>Kathy Bush</b>	– Small Pack Specialist & Servicing North Queensland	0430 077 230





# Help grow the Organic School Gardens Program!

**With over 900 Australian schools registered nationally across both metropolitan and rural areas, and expanding rapidly, the OSGP is a terrific opportunity to inspire and educate children.**

As a not for profit organization, the BFA is looking for partners to develop the OSGP to its full potential.

To view the sponsorship opportunities, to make a tax deductible donation or to obtain further details please refer to [www.bfa.com.au](http://www.bfa.com.au) or [www.organicschools.com.au](http://www.organicschools.com.au)

To be provided with an overview of suitable options for involvement, or to register your interest, contact Cheryl Vaughan on ph 07 3350 5716 ext 229 or email [Cheryl.vaughan@bfa.com.au](mailto:Cheryl.vaughan@bfa.com.au)

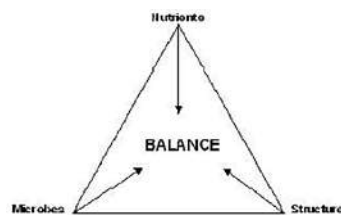


# SAVING OUR SOIL!

While the list of 'ills' in agriculture seems to grow almost daily (salinity and sodicity are on the increase, soil structure decline is rampant, biodiversity is threatened, soil and nutrients wash down to pollute rivers, even the climate seems to be affected), the question remains: "Is there anything left to be done, or have we left it all too late? One man who has devoted himself to finding solutions to these kinds of problems is Ted Mikhail - founder and Managing Director of SWEP Laboratories. Now after more than 40 years, Ted's research continues to ensure that the light at the end of the tunnel continues to shine brightly. Still based on his concept of 'Balance' and a belief that soil is the foundation of everything in agriculture, he has now extended the analytical 'reach' of SWEP laboratories into the 'final frontier' of agricultural management - soil biology.

Ted's vision is that three functional components of soil contribute strongly to sustainable agriculture - Cation balance (as they influence the physical nature of the soil), balanced plant nutrition and soil biology. Each of these components needs to be managed in a balanced way and then balanced with each other if true sustainability is to be achieved.

"I believe in treating the soil as a living system," Ted says. "The health of this system has similar requirements to those of healthy people. For example, it is important to have good strong bones and for this you need Calcium, Magnesium, Sodium and Phosphorus - in the right proportions. In a similar way, strong, healthy soil needs Calcium, Magnesium, Sodium, Potassium and Hydrogen - in the right proportions."



Similarly with plant nutrition (in contrast to the usual system of using the soil as a nutrient sponge for plants - filling it up to 'Luxury' levels with a few major elements, squeezing it dry and filling it up again), Ted has developed a system of balanced plant nutrition that adjusts the levels of all essential nutrients in the soil to a point where they are sufficient to provide the needs of a specific Land Use through the period of its growing season. This system has proved successful in maintaining high levels of productivity without the need to maintain luxury levels of soil fertility.

It is also important to understand why the Mikhail System places such an emphasis on achieving BOTH cation and nutrient balance in the soil. "Without a good skeleton, a man or woman cannot grow strong muscles. But they need more than just strong bones; they also require carbohydrates, protein and fat - in the right proportions. So too with plants, the main nutrients are N, P, K - in the right proportions!

"But healthy people need more than just 'Carbs', Protein and Fat - they also require certain amounts of minerals and vitamins. Plants are no different and they need the right balance of Trace Elements for good productivity."

The validity of Ted's vision has been confirmed several times over the years, with the successes achieved through application of his soil balance and plant nutrition principles. Now it has been confirmed yet again with results from recent research showing that soils balanced according to the Mikhail System show a consistent and predictable balance in proportions of certain key indicator groups of soil organisms.

Again, Ted likens this to the situation with other living organisms - including people. "Healthy people do not live in sterile bubbles", he says. "We all need the right balance of 'good bacteria' in our digestive systems and on our skin to help us make the most of available nourishment and help ward off infection. I have always believed that the same would be true in soil and now our research has proved it."

One particular breakthrough from the SWEP research has been in establishing a link between the active populations of the five indicator groups of micro-organisms (Fungi, Yeast, Photosynthetic Bacteria, Lactic acid Bacteria and Actinomycetes) in well-balanced soils and the Adjusted Cation Exchange Capacity.

This is important, because while other soil biology tests are available, none has ever been able to accurately relate their results to basic soil functions and develop meaningful corrective recommendations. But as a result of its proprietary research into this field, SWEP now offers the first truly complete diagnostic service for those interested in genuinely sustainable, high quality production.

Ted Mikhail has long contended that the key to sustainable soil management lies in 'Balancing' each of the three main soil components - Chemistry (nutrients), Physics (cations) and Biology. This approach has come to be known as the "Mikhail System" and is now proving to be one of the most successful and reliable production support systems available.

The new Complete Soil Balance Report includes 33 laboratory tests and 17 calculated results in three sections, covering Plant Nutrition, Soil Cations and Soil Biology. The tests also include both Total Phosphorus and Total Nitrogen as standard inclusions (optional inclusions with the Standard Soil Analysis). The introductory price for the Complete Soil Balance Analysis is \$350 per sample (plus GST). This makes the new service significantly cheaper than other 'biology-only' tests presently available - while providing much, much more! The price for our Standard Soil Balance Analysis remains at \$100 per sample (plus GST).

\*If you have any questions about soil balance or would like a free soil kit, call SWEP on (03) 9701 6007.



E.H. (Ted) Mikhail MSc, BSc Agri, Dip Land Recl. & Improv., Dip Agric Ext. MAIAST, MRACI. Founder and Managing Director of SWEP Laboratories.

In 1980 he established SWEP Analytical Laboratories in order to better serve the agricultural community by applying his principles in soil, plant and animal relationships to achieve the highest quality in life through our soil. He was then also able to extend his research to soils from around the world. In 1986, this all came together into what we now call "The Mikhail System".

### The SWEP Guarantee:

- > You get results in no more than 5 working days from the date we receive the samples (less for some tests and urgent samples).
- > Our work is based **exclusively** on research on **Australian Soils**.
- > We give you all the information you need to make informed decisions - not just the bits that someone else thinks is enough!
- > We are 100% independent, with no promotion of any products.
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