

Neomed Pharma GmbH presents results from India August 2003

ROBIN PRO NATURA

High Concentrated

ALGAE EXTRACT

ALGIFOL: Report of Mr. Sezhian, Bangalore, India, August 2003

- FRUIT - grapes
- VEGETABLE - brinjal, gherkins,
moringa-drumstick
- TREES - mulberry
- FLOWERS - jasmine,
crossandra, roses

ALGIFOL

Dosage

1 litre / hectare

or 1 ml per litre

for all crops

ALGIFOL SEAWEED EXTRACT –

Among the effects recorded are:

- improved seed germination**
- increased crop yields**
- improved quality of crop**
- increased resistance of crop to frost, drought etc.**
- reduced fungal, bacterial and nematode attack**
- increased uptake of soil nutrients**

Test on Paddy Nursery



Only 1 ml per 1 litre during nursery stage gives healthy well established paddy plants.

Organic ALGIFOL can ideally replace usage of carbofuran granules (Furadon), which is even 3,5 times more expensive.

Kancheepuram District, Tamil Nadu, India

Algifol on Flowers

Performance is found to be excellent tested on

Jasmine, Crossandra, Roses



Feedback from farmers:

- a) Increase in size of the flowers
- b) attractive colour and keeping quality is for 3/5 days
- c) good fragrance

Algifol Fungicidal Effect

- Important reduction of **mildew** on roses
- Early spraying recommended to start protective effect
- Repeat within one week after 1st spray



Algifol on Crossandra



Note: The farmers have started using Algifol for rooting of stem cuttings (crossandra) at 5 ml per litre of water. Stem cuttings are dipped in the solution for 2 to 3 minutes, shade dried and immediately planted

Results : Excellent rooting and well established plants
(New approach in India)

Algifol on Vegetable Brinjal

Usage of Algifol at critical stage, flower initiation, and fruit onset has given excellent results.

Feedback from farmers –

the yield from 1st picking

(**5** bags = **200** kgs) has gone up to

75 bags ($75 \times 40 = \mathbf{3000}$ kgs)

which is a record in Tamil Nadu, India.



Algifol on Tomatoes - Excellent increase, more than 100%



Algifol on Vegetable Moringa-Drumstick



Another important vegetable does not flower during November / December months. Usage of Algifol at 1 ml per 1 litre has induced flowering and results in yield **80 to 100 drumsticks per tree.** (This is a new record!).

Algifol on Grapes

Usage of Algifol at 1 ml per 1 litre during critical stages, e.g. immediately

- after pruning
- flower initiation
- fruit onset



Algifol on Grapes

Results

- uniform ripening of fruit
- uniform sized fruit throughout the bunch
- Increase in sugar content
- less wastage
- no flower shredding

Yield

Control 4000 kg grapes/acre

Algifol 6000 kg grapes/acre

= increase in yield 50%

Algifol on Grapes

Cost Benefit Ratio:

- Control: $4000 \times \text{Rs. } 10 = 40000$ (€ 820)
- Algifol: $6000 \times \text{Rs. } 12 = 72000$ (€ 1470)
- Algifol grapes are priced at higher rate!
- Total 12 acres

Source:

Mr. S. Sahadevan, s/o Mr. P. Subramamiam, Chettiapatti Village,
Dindugal District, Tamil Nadu, India

Algifol on Gherkins



Presently I have tried it on a new vegetable crop (gherkins) that is used as pickles in European countries. We have entered this segment and Algifol has given very good results.

Note: no growth regulators are allowed except Algifol due to its performance (shining quality of the produce and increase in market value of the product)

Mulberry

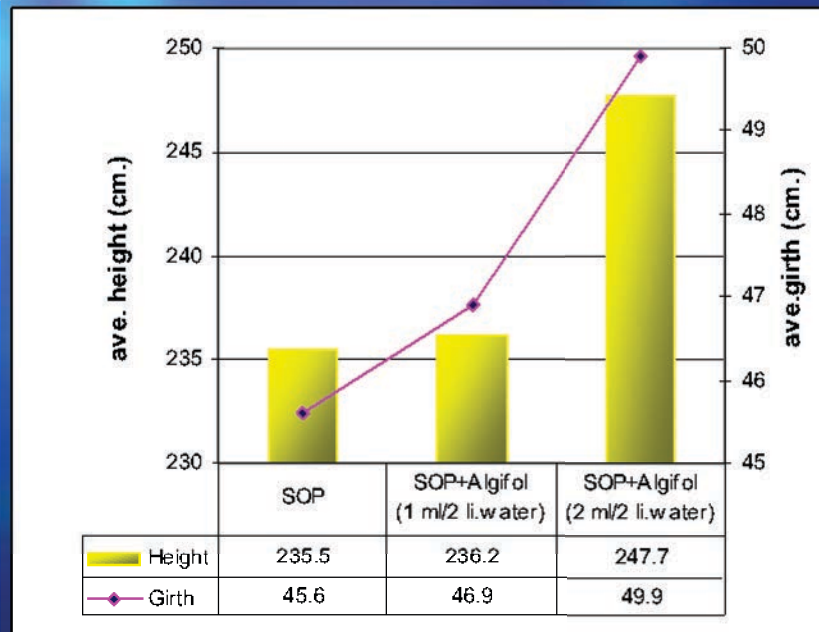
Karnataka reports:

- More leaves of fresher green
- Silk worm eat leaves more completely, therefore less leaves needed



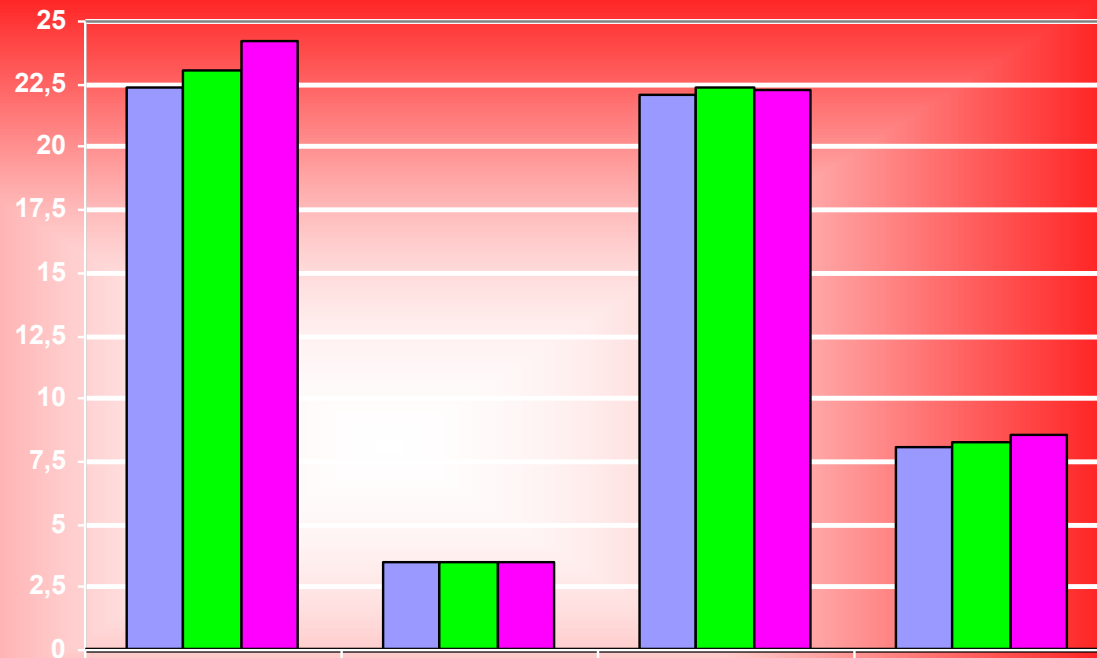
Bananas Philippines 2009

(Sucker Plants) when all Mother Plants were Harvested.



7.4 % yield increase between SOP and Algifol @ 1:1000

water solution in favor of Algifol treated plants.



	Bunch Wt. (kg.)	Calibration (cm.)	Finger Length (cm.)	Hand Class (#)
■ SOP	22,4	3,5	22,1	8,1
■ SOP+Algifol (1 ml/2 li.water)	23,1	3,5	22,4	8,3
■ SOP+Algifol (2 ml/2 li.water)	24,2	3,5	22,3	8,6

Result of Test

- 7.4 % higher yield
- If 15 tons normal yield this is 1.1 ton extra profit for the farmer
- Depending on price achieved more than **US\$ 100 per hectare extra profit**
- No extra work, co-spraying with fungicides or pesticides
- 3 sprayings of ALGIFOL only per growing season

ALGIFOL

is produced by

Neomed Pharma GmbH

Moltkestrasse 38

23564 Lübeck / Germany

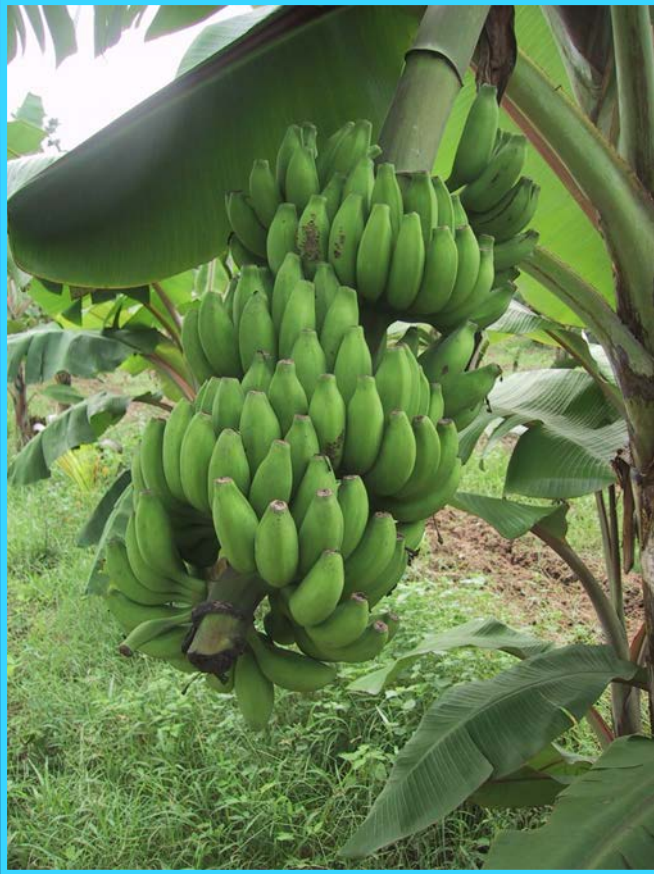
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www.algifol.com

Bananas Sri Lanka



CONTROL



ALGIFOL

Mangoes Philippines



- Improved yield in organic or integrated farming
- Higher sugar content
- General yield increase
- Less fruit drop
- Test showed increase of excellent quality fruit from former 40 to 70% with ALGIFOL

RICE Sri Lanka



- SPRAY PLAN
- Dip seeds in drum with Algifol solution 1:100
- 1st spray after transplant
- 2nd spray at fruit setting
- 3rd spray 4-6 weeks later
- Last spray 4 weeks before harvest
- Extra spray during pest pressure or drought
- extra yield 6-15%

ALGIFOL

ON TEA PLANTATIONS



- TARGET
- Heat tolerance increased
- Stronger rooting
- increased take-up of otherwise locked elements
- Reduced plant stress
- Reduced need for pesticide & fungicide (30%)



Results

Sri Lanka Tea Plantation

Mr. Abbas from B.C.P.E. reported on 20.01.2003:

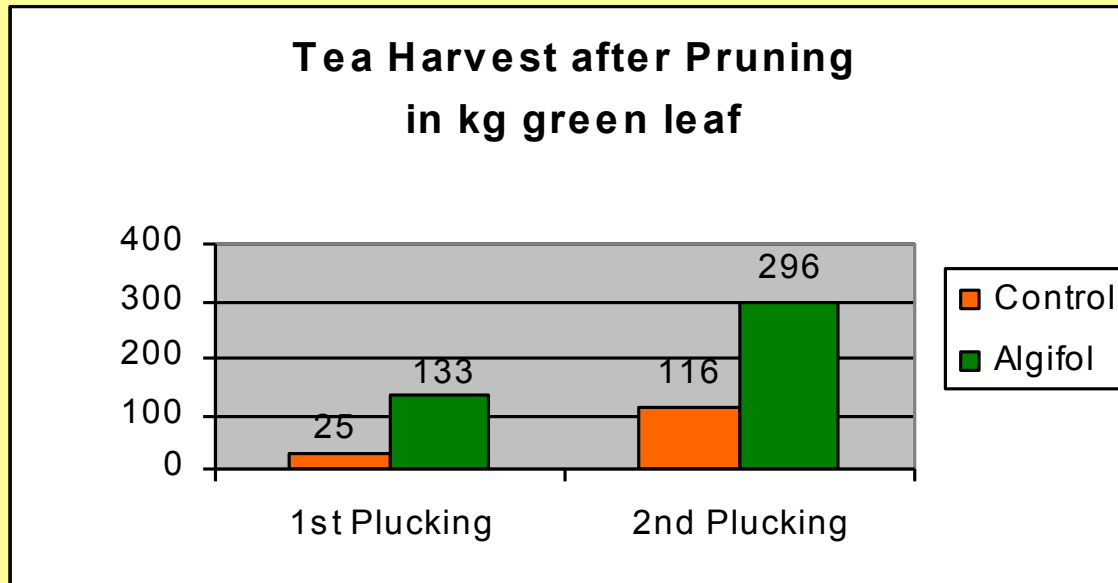
„Yesterday I got information that some of the tea plantations found the plants have yielded **12-15 shoots** per branch after 3 weeks of spraying **ALGIFOL** compared to regular yield of 6-7 shoots.“

Sri Lanka Tea Plantation

Mr. Jayaram May 2003

CONTROL viz 1 spraying of ALGIFOL on $\frac{3}{4}$ acre of land

- CONTROL Urea *fertilizer* 1 month prior to prune viz **ALGIFOL** *no fertilizer*
- CONTROL 250kg Dolomite 47th day after prune viz **ALGIFOL** 300kg Dolomite 25th day after prune
- CONTROL 1st plucking 49th day viz **ALGIFOL** plucking 42nd day
- CONTROL 2nd plucking 59th day viz **ALGIFOL** plucking 53rd day



**ALGIFOL
Dosing
400 ml/acre**

Cultivation Process Coconut



Soak the coconut plants in the mixture of 10ml ALGIFOL™ and 1 litre of water and then plant them. If it is one year old plant spray its leaves with the above said mixture. Even if it is time to put forth spathe spray well on the spathe with the above mixture. This is preventing the coconut trees from dropping young fruit of the coconut. Spray with this mixture from this stage after 21 days as before. As a result, high yielding is achieved while the so-called Mite Attack disease is also eradicated. The land, which produced 1000, Nuts per Acre for every pluck is now giving a return of 2500-3000 Nuts per Acre. This has been already proved in the Puttalam area.

ALGIFOL Action on Roots

- On the left, roots of winter barley treated with ALGIFOL, sprayed in Dec. 97
- On the right, control group

England, Results in
January, 1998



WHEAT

- 4 ha as control, 4 ha sprayed with ALGIFOL, 2 sprayings, 1 litre/ha
- Wheat with ALGIFOL was 10 cm higher, dark green & developed more grains
- Stronger roots underlined this excellent development.

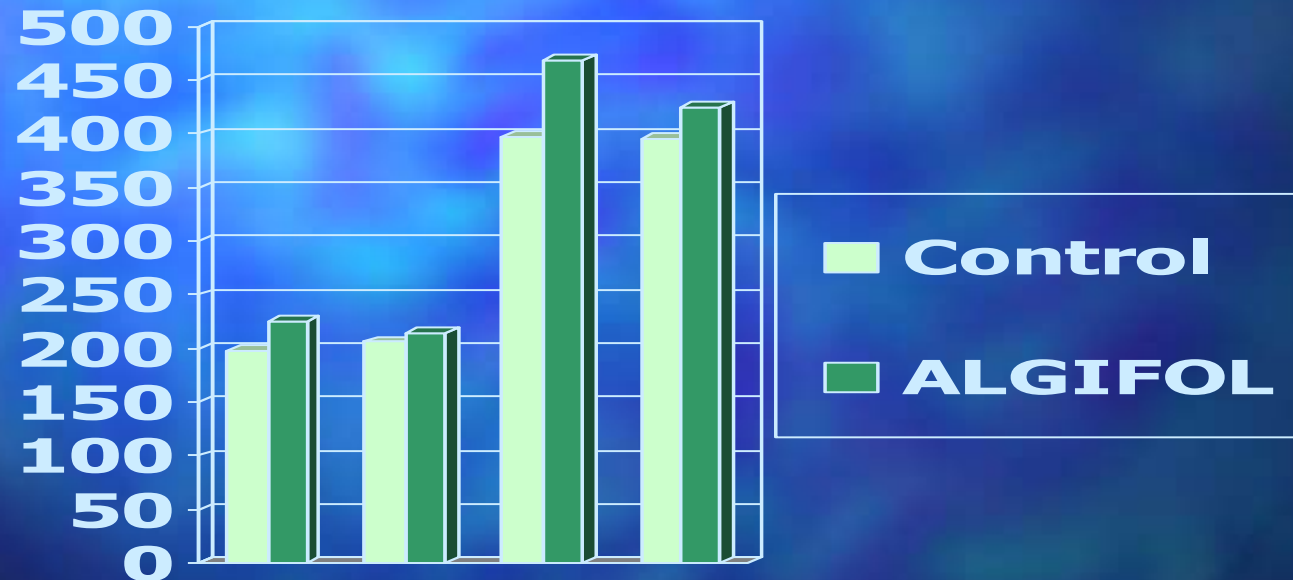
Test on Oranges, China 1998



- Increase in Yield
- Higher Sugar Content
- Better Aspect
- Aromatic Odour
- Healthy Trees & Fruit

Oranges – after 1 spraying

Yield in kg per farm per same number of trees



Results on Oranges



- Average increase in sugar content + 10,9%

- Oranges of even weight, large size & smooth skin with fresh colour

Container Test for Size

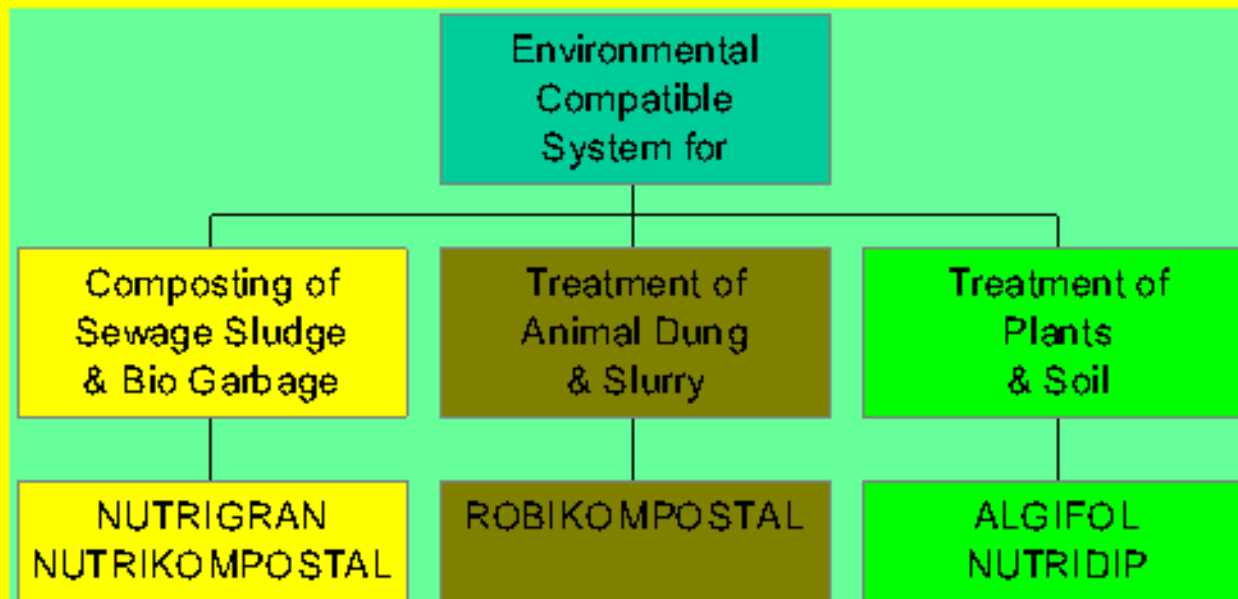
Control	ALGIFOL
205	170
185	175
199	179
192	165
200	173
198	171

Oranges are placed into standard sized containers and counted. Small oranges have higher number in container. Lower number = bigger average size.

Integrated Control of Soil Pests

Einsiedeln, Switzerland 2nd-4th November 2000

Neomed Pharma GmbH Organic Integrated Farm System



Basic Raw Material

Ascophyllum nodosum

All products:

- certified by BCS Nuremberg, Germany
- are in accordance with EEC regulations 2092/91 Addendum II Part A of 22.07.1991 for organic growing



ALGIFOL Leaf Spray Liquid Sea Algae Extract

Dosage for most
plants

3-4 litres per hectare
per season

Seaweed: Another tool for nematode control?

Trials carried out in 1999

Colin Fleming

Applied Plant Science

The Queen's University of Belfast



Seaweed extracts contain:

- **Plant growth hormones (cytokinins, auxins)**

- **Plant biostimulants (betaines, polyamines, oligosaccharides)**

AIM OF STUDY

Can we demonstrate any beneficial effects from the treatment of Potato Cyst Nematode infested potato with seaweed extracts?:

1. Effects on crop?

2. Effects on nematode?

SEAWEED EXTRACTS - Among the effects recorded are:

- improved seed germination**
- increased crop yields**
- improved quality of crop**
- increased resistance of crop to frost, drought etc.**
- reduced fungal, bacterial and nematode attack**
- increased uptake of soil nutrients**



1999 Plot Experiments

4 treatments:

- Control - No application
- Algifol spray (4 applications)
- Product X spray (4 applications)
- Algifol dip (tubers dipped prior to planting)



2 replicated plot experiments in potato cyst nematode (*Globodera pallida*) infested soil at 130 & 185 eggs per gram of soil (high nematode levels)



Control: No spray

Typical symptoms of nematode damage

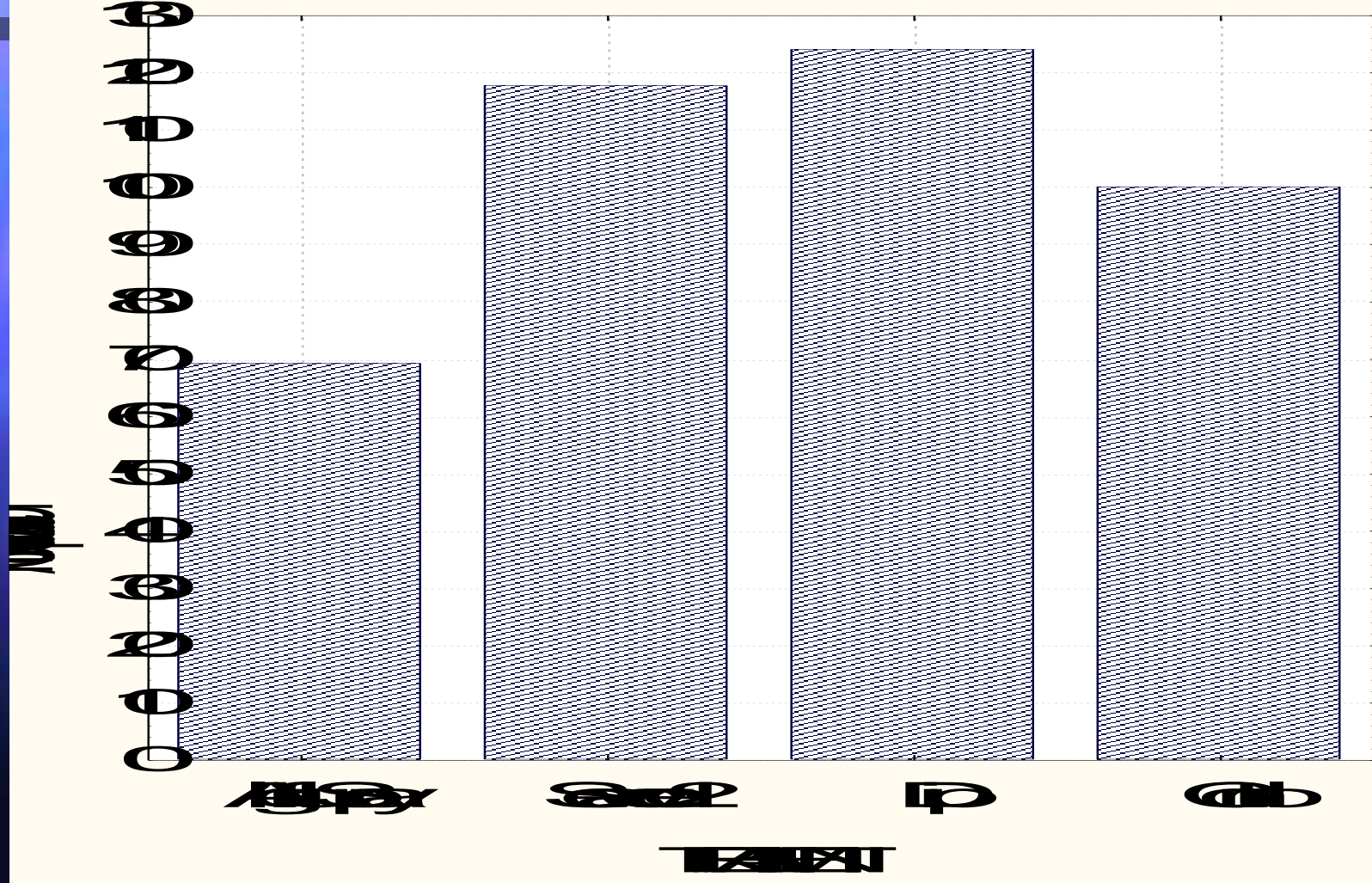


Algifol spray: Replicate 1: better canopy, tallest plants, reduced symptoms



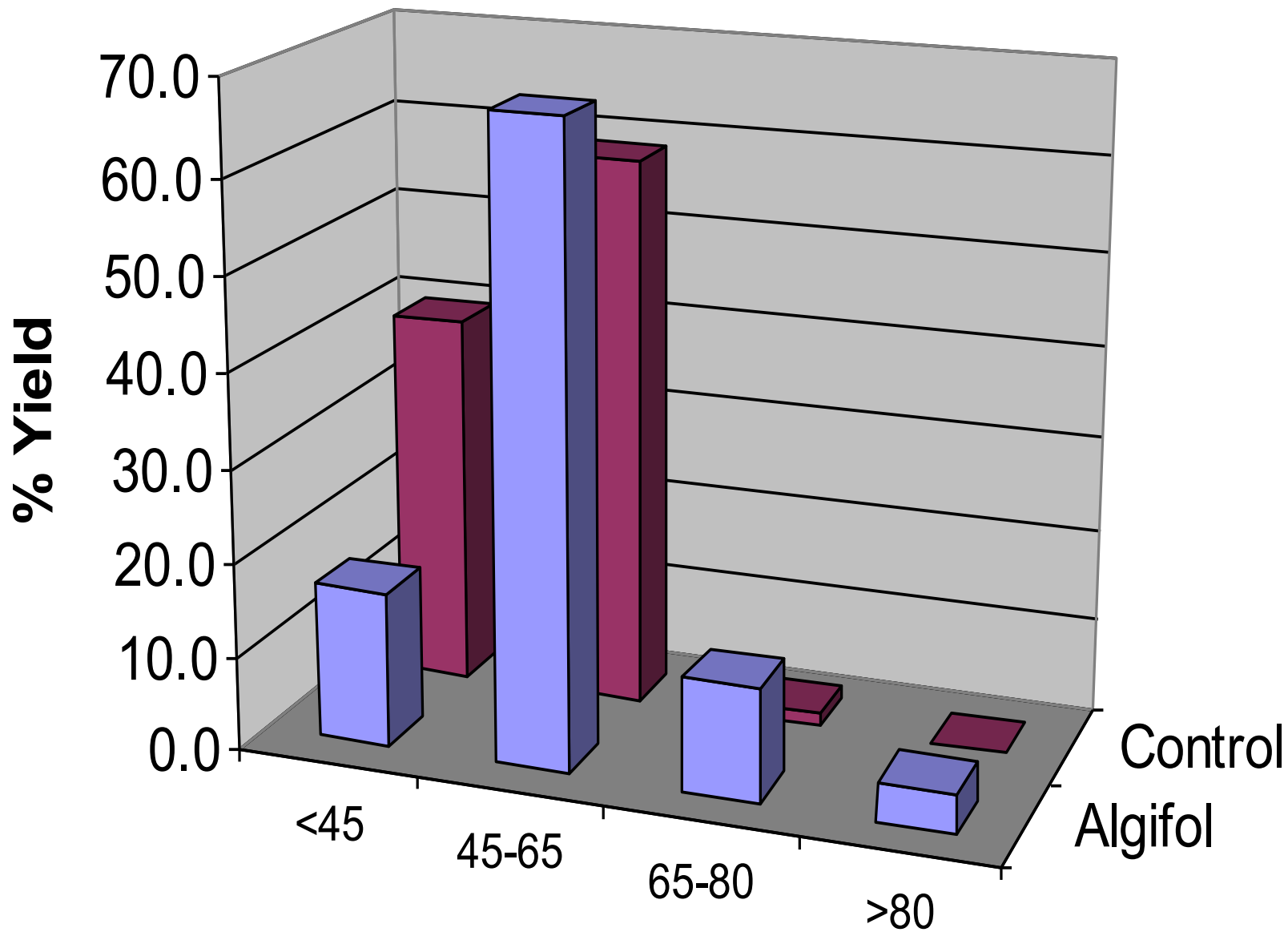
Product X spray: Replicate 1- better canopy, reduced symptoms

Notepad++



SUMMARY OF RESULTS

Lower reproduction of *G. pallida* in Algifol sprayed plots (70% control):



In the presence of high levels of PCN:

- **Earlier 50% emergence in Algifol tuber dip plots (2 weeks earlier)**
- **Algifol sprays gave consistently higher usable tuber yield than controls and other treatments**
- **The increase in usable tuber yield was due to a shift in the size range towards larger tubers**

YEAR 2000 Experiments: Pot experiments (2
PCN levels: 12 eggs/g and 50 eggs/g)

Preliminary data show:

- **Enhanced shoot and root growth in Algifol sprayed plants**
- **No significant reduction in PCN reproduction in Algifol sprayed plts at 12 eggs/g**
- **Significantly reduced PCN reproduction (80% of control) in Algifol sprayed pots at 50 eggs/g**

ALGIFOL on Potatoes

Some Results Year 2000

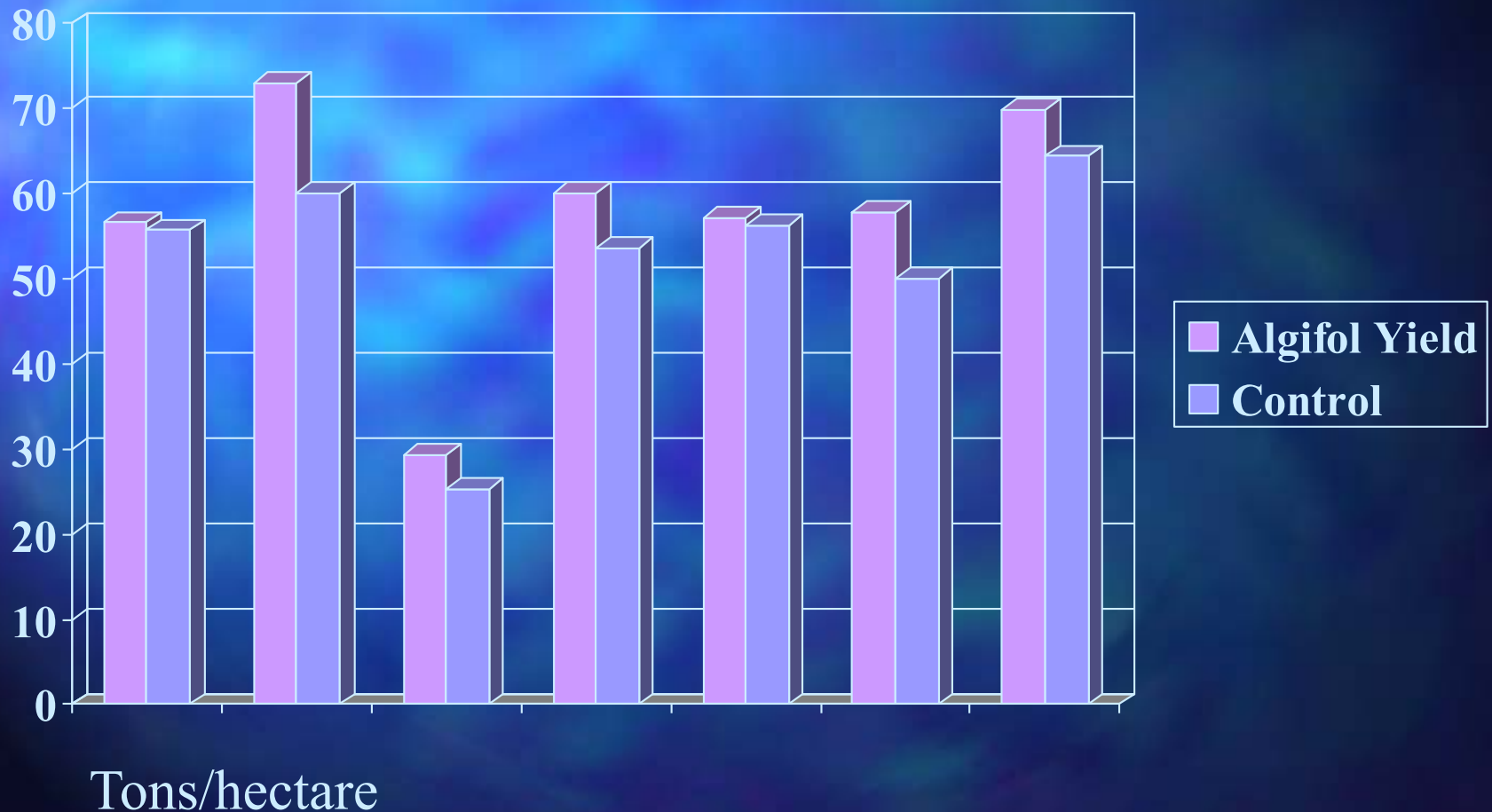
conducted by independant
consultants
in England

Various varieties like *Piper, Estima,
Nadine, Cara, Picasso*

Results on Yield & Size

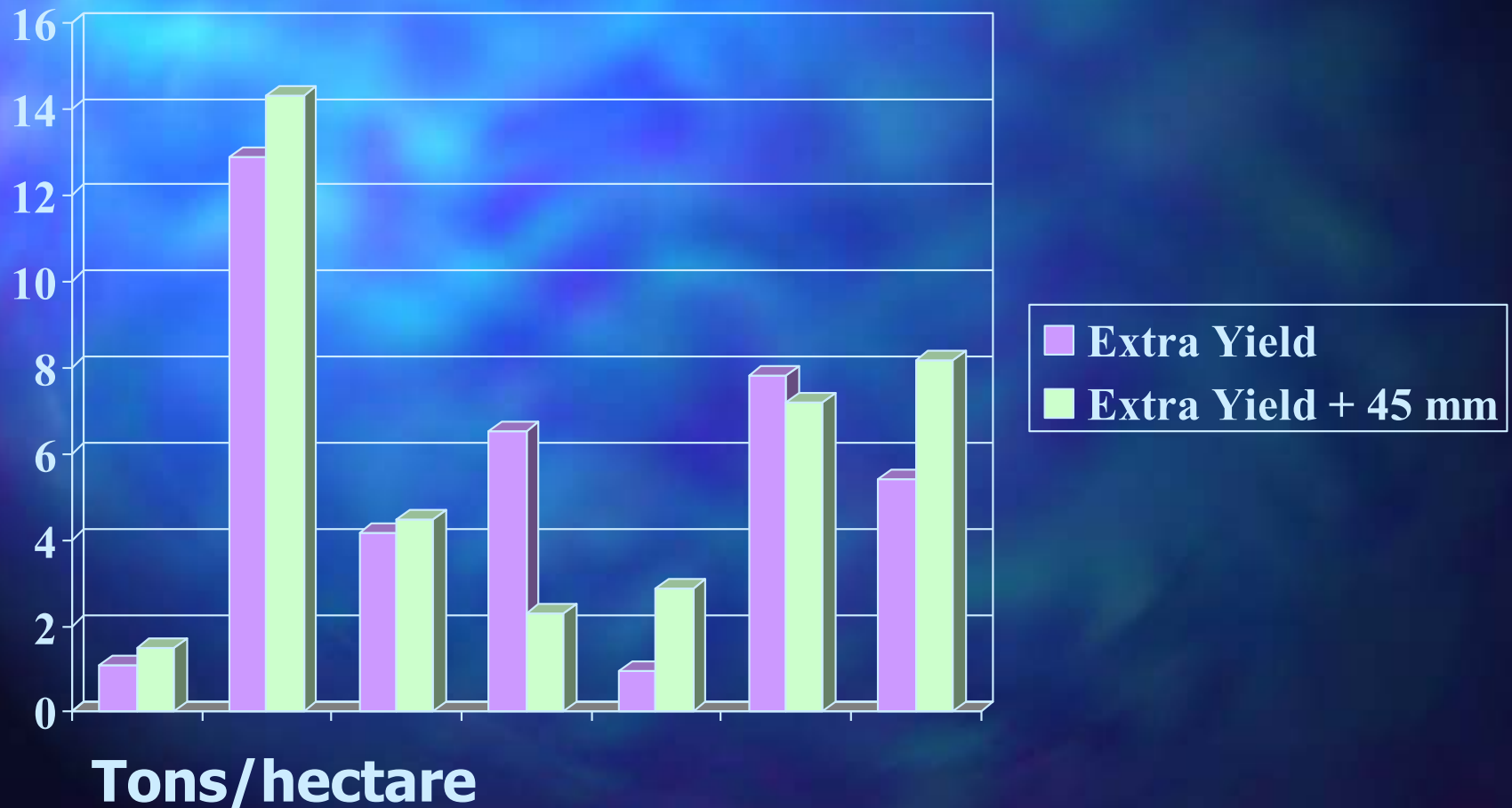
ALGIFOL TRIAL RESULTS 2000

England, Lincolnshire



ALGIFOL TRIAL RESULTS

Shift in Size: Extra Yield Compared to Extra Yield + 45 mm



ALGIFOL TRIAL RESULT

Comparison Control / ALGIFOL

	Control	ALGIFOL
■ <u>Total Yield of Potatoes / ha</u>	50.10 t	57.90 t
■ Potatoes + 65 mm	55 %	36.9 %
■ Potatoes 45 to 65 mm	41.4 %	58.9 %
■ Potatoes – 45 mm	3.6 %	4.2 %

Farmer remarked superior skin quality in the treated plot.

BCS organic Certification



CONFIRMATION OF COMPATIBILITY

for the use of inputs in organic agriculture

issued to: **NEOMED Pharma GmbH**
Moltkestr. 38
23564 Lübeck
Germany

Document No. **NEOMED-7795/09.08/0478-DE**

This document is to confirm that the inspection and evaluation of the following product

ALGIFOL™

produced and distributed by the company mentioned above came to the following result

The final product can be considered as a product allowed in organic agriculture, according to the requirements of

- EU No. 2092/91, Annex II. A (European Union)
- USDA/NOP-Final rule (USA) 205.601 (j) (1)
- JAS Japanese Agricultural Standard for Organic Agricultural Products (Japan)

Anyhow, it has to be remembered that – although BCS confirms the conformity of the products with the requirements of EU Regulation No. 2092/91 – due to the absence of a uniform interpretation of the term "equivalency", every state authority in the EU has got the right to apply its own criteria in this respect.

The inspection and evaluation of the procedure of production was carried out by BCS Öko-Garantie GmbH, Nuremberg, Germany. BCS is an EU-accredited inspection and certification body, controlled by 16 German state supervising authorities. In addition BCS is accredited by the US authority USDA to certify according to the NOP-final rule and as an Registered Foreign Certification Company by the Japanese Ministry for Agriculture, Fishery and Forestry to certify according to the Japanese Agricultural Standard for Organic Agricultural Products.

This confirmation does not constitute any guarantee of product quality. It only confirms that the use of these products can be considered as equivalent to the requirements in the above mentioned regulations.

It has to be taken into consideration that the official registration in every country where the products are to be sold is not covered by this confirmation. It remains the obligation of the distributing company to carry out the respective legal steps for the official registration of these products.

Nuremberg, September 23rd, 2008

Validity of document, until August 31st, 2009

BCS ÖKO-GARANTIE GMBH



for
Peter GROSCH
General Manager
Nuremberg, Germany

Copy

BCS Öko-Garantie



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