

## REVISTA BIA # 336

por el respeto.... El Futuro es Vegetal





### Women Who Surround Themselves With Plants Live Longer

So if you're feeling stressed (or just want to tack a couple extra years onto your life), and you can't move to the country — go buy a plant.

CUTTING EDGE WORLDWIDE
GREEN NEWS

The research comes out of the Harvard T.H. Chan School of Public Health and Brigham and Women's Hospital. It analyzes the results of an eight-year study that looked into a potential link between vegetation and life expectancy.

The findings? Women who lived in the greenest surroundings were found to have mortality rates a whopping 12 percent lower than those of women who lived in plant-less homes and areas. And these women not only had a longer life expectancy but better mental health, too.

THE STUDY, wasn't a small study at all, despite it being one of the first nationwide studies to cover the connection between plants and health. Researchers looked at data from 108,630 women collected between 2000 and 2008.

The link between greenery and mortality rates is rooted in a few different components, according to the research. Those surrounded by plants demonstrated lower levels of depression, increased opportunities for social engagement, higher levels of physical activity and reduced exposure to air pollution.

## Colombia: Flower festival colors the city of Medellin

One of the largest flower festivals in Colombia is currently being held. It is called "Feria de las Flores" and started Friday August 3 and will run till August 12. In total 400 activities and 100 events are organized, including the world famous parade of "Silleteros". The Festival not only attracts people from all around Colombia to the city of Medellin, but tourists from other countries as well.

## GREEN NEWS



Every year, over 500 men make these displays and carry them on their backs through the city of Medellin. The majority of the flowers are donated by Colombian growers or come from their own gardens.

## CUTTING EDGE WORLDWIDE GREEN NEWS

Kenya: Crowdfunded solar panels provide 50% of rose grower's energy

Rift Valley Roses is about to meet 50 percent of their electricity demand with solar energy. The costs to realize this project at this 22ha farm is 94,000 Euro and will be financed through the crowdinvesting platform of ecoligo.investments. Berlin-based solar company ecoligo will manage the project, which is the third solar project for a flower farm in Kenya to be financed on the ecoligo.investments platform.

## CUTTING EDGE WORLDWIDE GREEN NEWS

Nearly 70% of the water in the world is used for agriculture and this trend seems to be upward one in relation to water needs. Under these conditions in which the requirements in other industry sectors is also increasing and the impacts of climate change influence ever-increasing water shortages, measures for saving water have turned out to be an unavoidable challenge if the sector has to be maintained and life preserved.



#### **PLANT PESTS NEWS**

AUSTRALIAN researchers have a new weapon in the fight against fungicide resistance in grain crops, with confirmation that a specially adapted approach to detection, involving cancer technology, is effective for this purpose. Researchers at the Centre for Crop and Disease Management (CCDM) – a national research centre co-supported by Curtin University and the Grains Research and Development Corporation (GRDC) – have used digital Polymerase Chain Reaction (dPCR) technology, combined with 'baiting' trials, to develop an advanced early warning system that researchers can use to better detect fungicide resistance.

Baiting trials are field trials that can optimize the capture of fungal pathogens that show fungicide resistance. The adapted and fine-tuned dPCR technology will enable earlier, more targeted information to be delivered to growers so they can move more quickly to counteract any potential yield losses.

It has also expanded knowledge about the extent of fungicide resistance in the damaging disease barley powdery mildew, and shown that the disease is more widespread than previously thought.

A paper with the details of the dPCR research has been published in the prestigious science journal Frontiers in Microbiology and can be found at https://www.frontiersin.org/articles/10.3389/fmicb.2018.00706/full

## CUTTING EDGE WORLDWIDE GREEN NEWS

The first document on green agriculture published by the General Office of the Communist Party of China Central Committee and the General Office of the State Council, according to Minister of Agriculture Han Changfu.

The overall goal is to maintain the area of arable land and prevent the quality of land from worsening, Han said.

By 2020, farmland quality should be improved by 0.5 grade on average, while the total arable land area should be no less than 124 million hectares, according to the guidelines. China grades its farmland quality on a scale of one to ten.

The government aims to prevent excessive exploitation of groundwater and improve irrigation. The document set the target of zero growth chemical fertilizer and pesticide use in major crops by 2020. Forest coverage is to exceed 23 percent. The comprehensive production capacity of grains should be stabilized at or above 550 million tones by 2020, with the quality of farm produce markedly improved.

China sets goals for green agriculture [886,6,22] published at 2015-06-03 15:30:23 from #10 by 赵谦 **0** 2017-10-01 09:20





#### Japan: Imported flowers replace domestic production

Since 2000, the volume of domestic cut flowers in Japan has been in a downward trend. In 2017, 3.7 billion flowers were shipped, the lowest amount since statistics were first collected in 1990. The main causes are thought to be the aging of growers, typhoon damage, and a steep rise in fuel prices leading to decreased use of greenhouses for cultivation.

Imports of cut flowers have been increasing to compensate for these reduced domestic shipments. Plant quarantine statistics published by MAFF show that in 2017 imports of cut flowers increased by 2% to 1.34 billion. With imported cut flowers accounting for 26% of the market, this is close to the peak in 2012 of 1.39 billion flowers. Colombian carnations and Malaysian chrysanthemums have seen a noticeable rise.

Read more at Nippon.com

Taiwanese researcher creates genetic mapping for orchids



A Taiwan government-funded research agency has successfully developed genetic mapping of Phalaenopsis genome, which is set to provide insights into species adaptation.

The Agricultural Biotechnology Research Center under Academia Sinica released a statement saying that the genetic linkage map has been figured out by the team, and that will allow researchers and growers in the future to design new breeds at the desired colors, shapes, and other features demanded by buyers.

The study has been published at Plant Biotechnology Journal in late April, 2018.

**Read more at Taiwan News (Sophia Yang)** 

CUTTING EDGE WORLDWIDE

GREEN NEWS

#### Kenya: Cut flower exports up 16 percent

Kenya's economy is estimated to have expanded by 4.9 per cent in 2017 compared to a revised growth of 5.9 per cent in 2016. The slowdown in the performance of the economy was partly attributable to uncertainty associated with a prolonged electioneering period coupled with adverse effects of weather conditions.



#### Flower Market



**Growth in the agriculture** sector was supported by notable increases in production of cut flowers, fruits and vegetables whose exports grew by 19.7, 16.8 and 10.7, per cent, respectively, in 2017. This translated to a significant increase in the value of export of horticultural produce from KSh 101.5 billion [1 billion USD] in 2016 to KSh 115.3 billion [1.15 billion USD] in 2017.

#### **PLANT PESTS NEWS**



The Institute of Agrobiological Sciences, NARO (NIAS) has discovered that certain proteins (MLX56 family proteins) contained in mulberry latex inhibit pest growth with a completely new mechanism that has never been reported. This family of proteins were found to cause digestive dysfunction by abnormally thickening the thin peritrophic membrane in the digestive tract of larvae of moths. Moreover, it inhibits the growth of larvae remarkably even if it is added to the diet at an extremely low concentration of 0.01-0.04%.

Plants are immobile and are therefore known to produce substances such as proteins which act like "poison" to prevent being eaten by insects and other organisms. Such substances can be used as pesticides for controlling insect pests. With the appearance of insects that develop resistance traditional pesticides. proteins these are drawing attention could potential source of materials that may lead to the development of new formulation of pesticides.

Konno K, Shimura S, Ueno C, Arakawa T, Nakamura M (2018) Abnormal swelling of the peritrophic membrane in Eri silkworm gut caused by MLX56 family defense proteins with chitin-binding and extension domains. Phytochemistry 147:211-219.

#### Eri silkmoth larvae

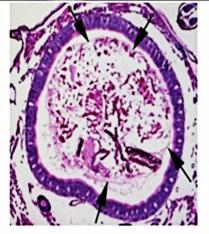
ulberry latex

(MLX56 family proteins)

Control diet (Artificial diet only)

Addition of 0.04% MLX56 family protein

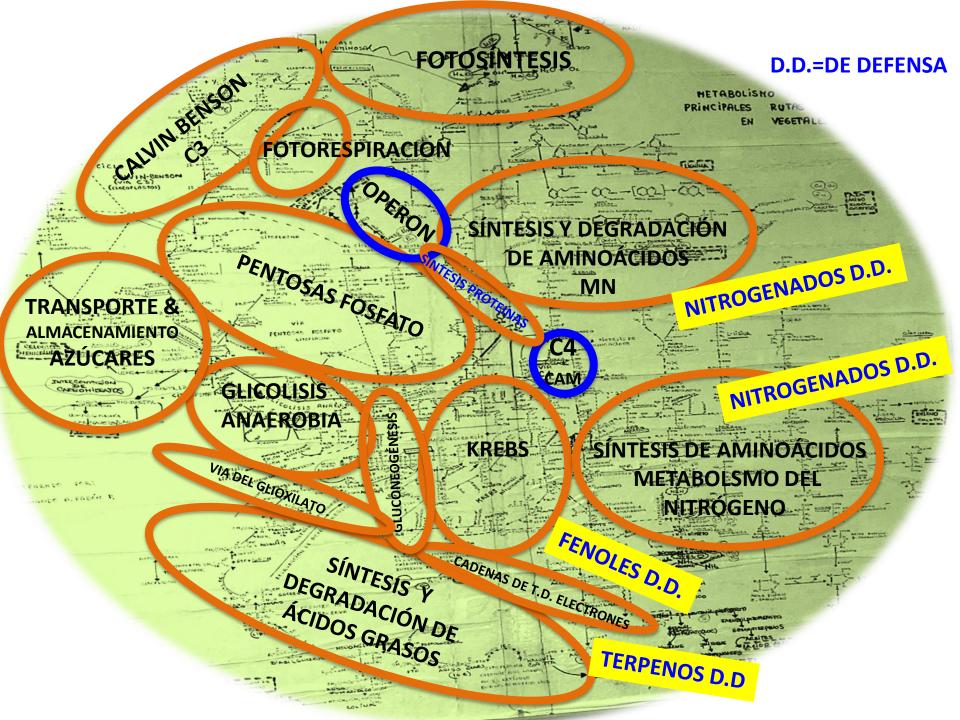


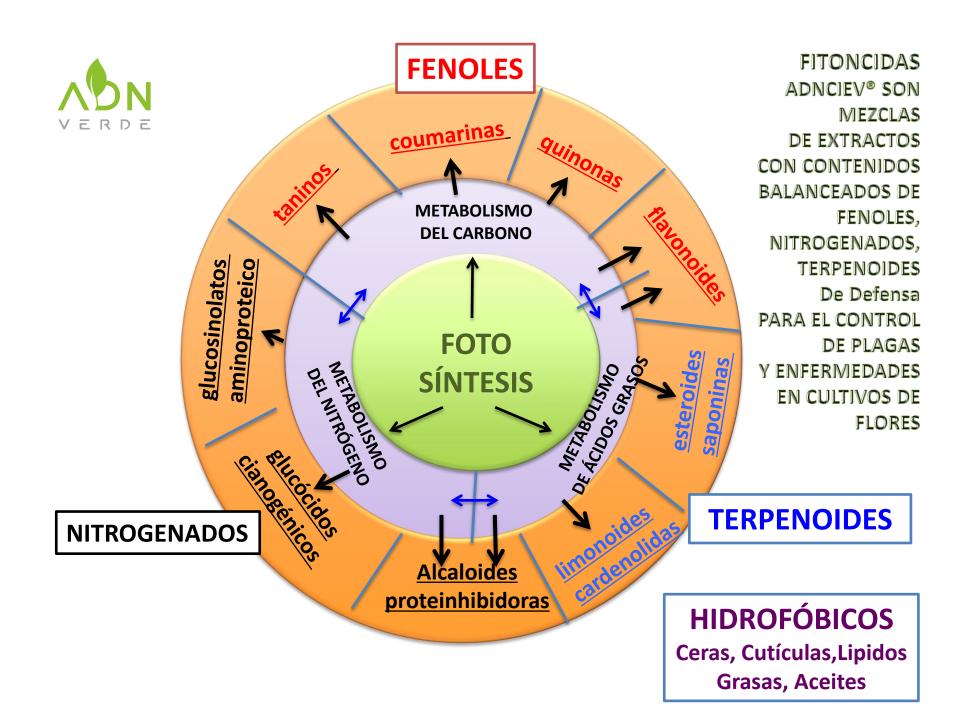


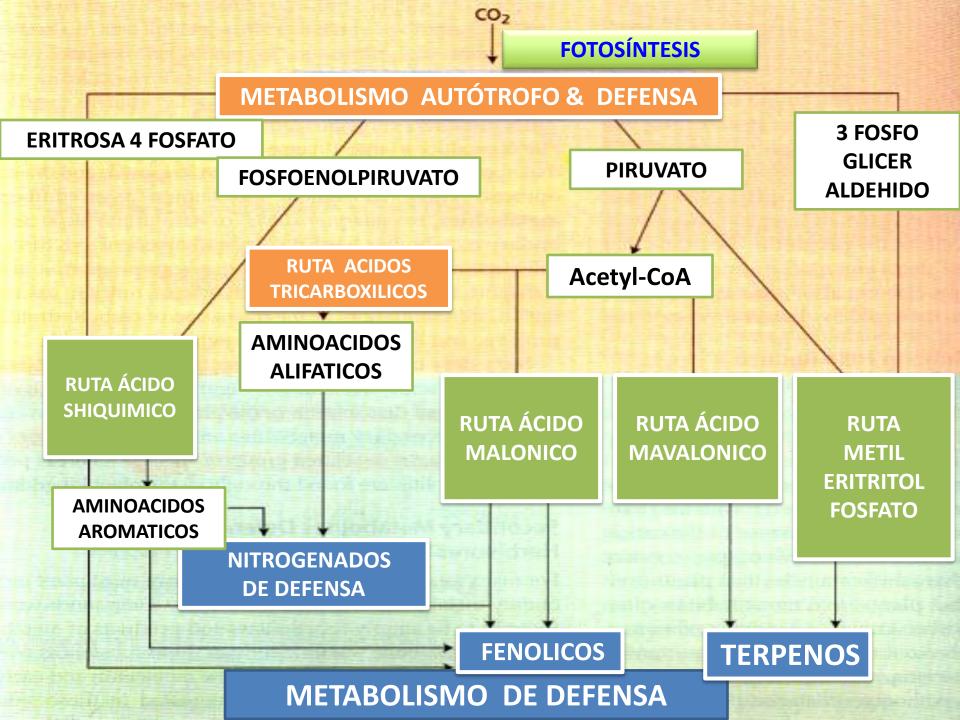


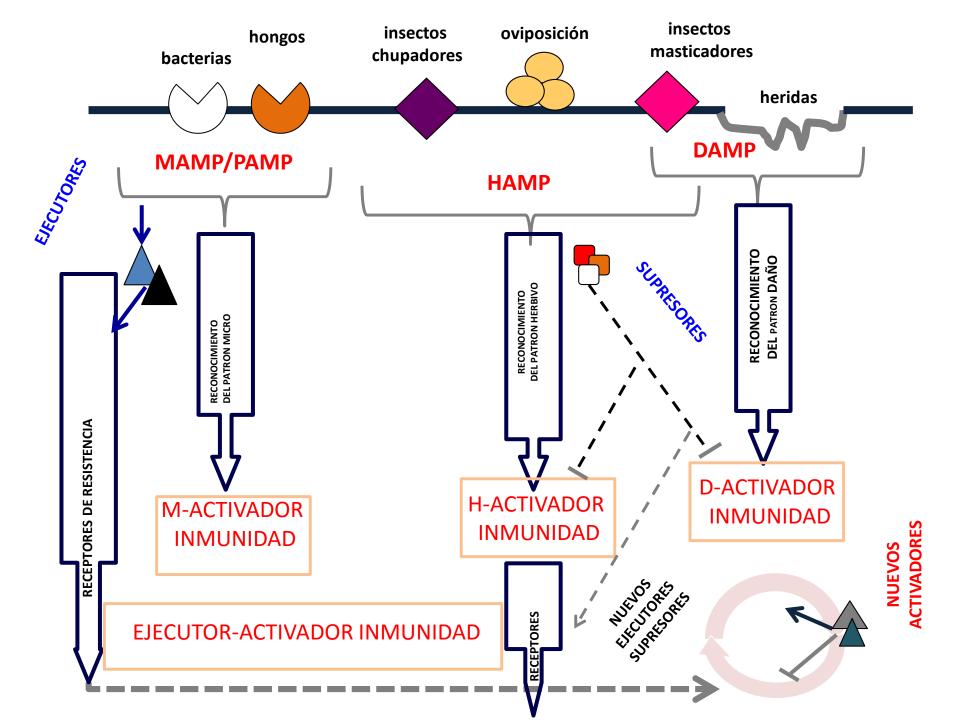
Abnormal thickening of the peritrophic membrane (PM) in Eri-silkworm fed MLX56 family protein-containing diet

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#### **FITONCIDAS**

Mezclas de compuestos especiales de defensa extraidos de mezclas de vegetales con elementos minerales estabilizados y homogenizados que sirven para controlar plagas, enfermedades y arvenses en los cultivos

#### **NUEVOS DESARROLLOS ADNCIEV®**

## NUEVO OVICIDA ACARICIDA NATURAL CÓMO ACTÚA?

Haga click en el link inferior

https://drive.google.com/file/d/10tV00cBd62H2NUipXEbI54MLHHMKgNqn/view?usp=sharing



NUEVO FITONCIDA DESARROLLADO EN COLOMBIA EN EL CENTRO DE INVESTIGACIÓN DE EXTRACTOS VEGETALES CIEV FINCA VILLAVERDE-VEREDA BARRO BLANCO-RIONEGRO ANTIOQUIA



#### Fitoncidas y Nutraceúticos CREADOS, DESARROLLADOS Y PATENTADOS EN COLOMBIA INNOVACIÓN CON EXPERIENCIA





FITONCIDA INSECTICIDA



FITONCIDA MEZCLADOR ACARICIDA



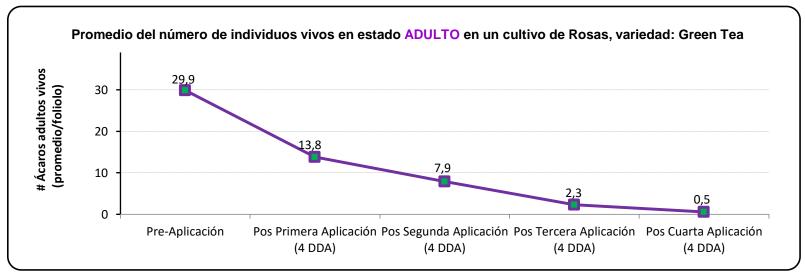


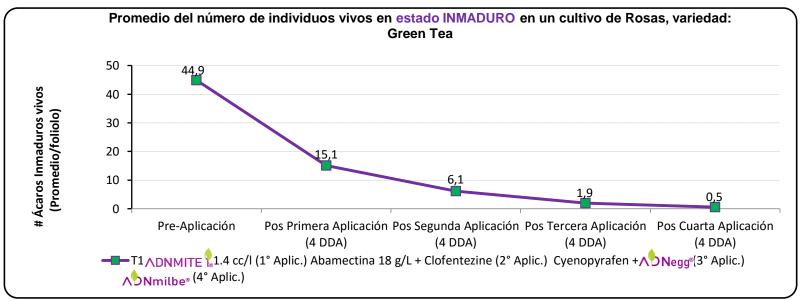
**NUTRACEUTICO PROTECTANTE** 



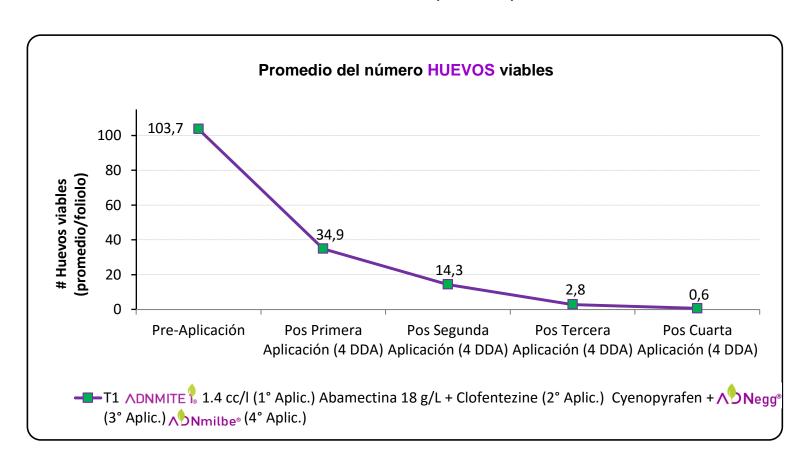


#### EFECTO DE UNA DEMOSTRACIÓN COMERCIAL DEL USO DE FITONCIDAS ADNVERDE® EN ROTACIÓN CON QUÍMICOS PARA EL CONTROL DE ÁCAROS (*T. urticae*) EN UN CULTIVO DE ROSAS

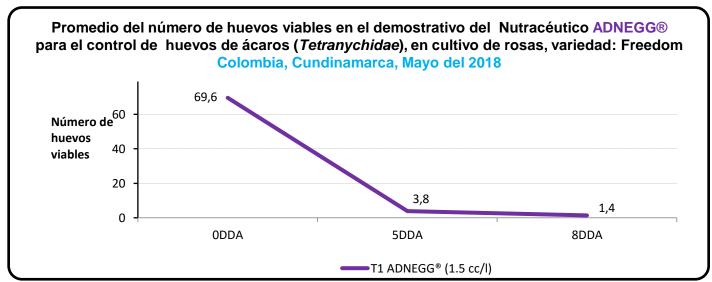


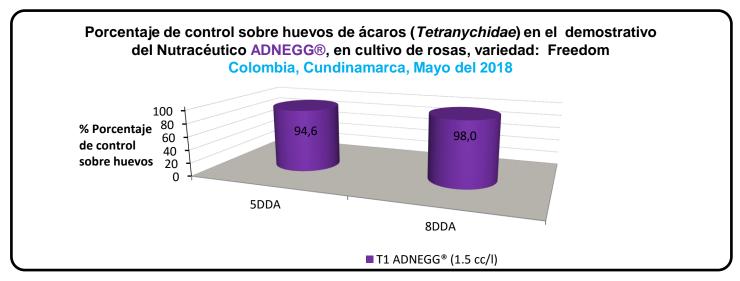


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## DESPUES DE 16 AÑOS DE TRABAJO Descubrimos el ADN de nuevos Fitoncidas en Proceso de Registro



**MUESTRAS DISPONIBLES EN ADNCIEV** 

VERDE	MILDEO VELLOSO (% EFICACIA)		MILDEO POLVOSO (% EFICACIA)	
PROMEDIOS % FITONCIDAS	PREVENTIVO	CURATIVO	PREVENTIVO	CURATIVO
FBOSAI8DO (1,5 cc/L)	79	51	45	2
FBPVADNBO (1,5 cc/L)	93	32	57	7
FBPVCAR5S (1,5 cc/L)	94	18	59	3
ADNCLEAN® (1,5 cc/L)	81	94	79	53
ADNCLEAN (1 cc/L)	81	90	45	7
FPVBBERSUY (1,5 cc/L)	80	15	74	11
ADNFUN6® (1 cc/L)	95	15	72	79
FVBOPANLI (1,5 cc/L)	92	45	71	39
ADNFUN6® (1,5 cc/L)	59	22	98	90
FVPPHZSUP (1,5 cc/L)	94	31	74	10

**REPLICADO 6 ENSAYOS EN TRES LABORATORIOS: AGROIDEA, SAVE Y CIEV** 



#### POR EL RESPETO:

" MAS QUE BUSCAR ELIMINARLOS DEBEMOS BUSCAR MANEJARLOS"

# PLAN

#### Principle of Health

Healthy soil, plants, animals, humans = a healthy planet.

#### Principle of Ecology

Emulating and sustaining natural systems.

#### **Principle of Fairness**

Equity, respect and justice for all living things.

#### Principle of Care

For the generations to come.