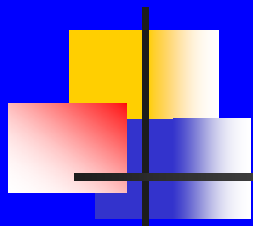


Dear colleagues and friends



Specials thanks to the organizers for giving me the excellent chance to speak about a topic directly related to the future of our sciences, to the future of our profession.

It is a real honour for me to open with a plenary lecture the 13th MPU Congress in Rome.

Both the date and the country are milestones for the onset of close cooperation among plant pathologists of the Mediterranean countries.

In this country, where 50 years ago eminent and unforgettable scientists from Italy and elsewhere from the Med region established the Mediterranean Phytopathological Union.

PHYTIATRY:

SCIENTIFIC PRIORITY AND CHALLENGE FOR THE WORLD AGRICULTURE AT THE 21ST CENTURY

- ***Eleftherios Tjamos***
- ***PROFESSOR IN PLANT PATHOLOGY***
- ***AGRICULTURAL UNIVERSITY OF
ATHENS, HELLAS***

***This plenary lecture is dedicated to the
participants of the 13th MPU congress
as a friendly reminder to always keep an
open eye and be continuously updated and
not isolated in our research **microcosm*****

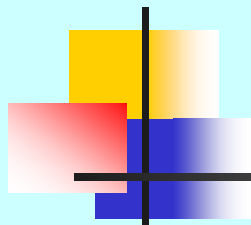


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Rome, 20-25 June 2010

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Medicine /Phytiatry



- **Medicine**

The Science of healing and prevention of human diseases

- **Phytiatry**

The Science of protecting plants by preventing plant diseases and pests, healing plant diseases and managing pests



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PHYTIATRY:

- *It focuses on concepts used broadly but occasionally erroneously to*
- ***Clarify** the confusion over the proper meaning of the scientific terms Plant protection, Plant health and Phytiatry*
- ***Designate** discrepancies among them*
- ***Demonstrate** the significant role of Plant Medicine Doctors today and in the future and*
- ***Bring out** the need for establishing Phytiatry as new University multidisciplinary science*

PHYTIATRY:

An emerging concept covering sciences beyond those involved in Plant protection and Plant health

- *What is the rationale?*

Why Phytiatry,

Phytiatrie,

Fitoiatria,

Φυτιατρική in Greek?

Plant Medicine

Phytomedicin

and not Plant Protection

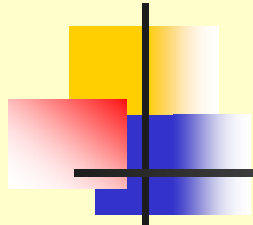


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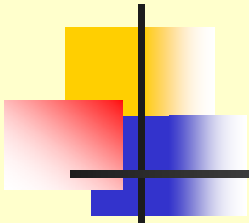
Plant or Crop Protection,
Plant Health,
Phytiatry



- Are the scientific terms **Plant Protection or Plant Health** similar and broad enough to cover all aspects of **Phytiatry**?

And then

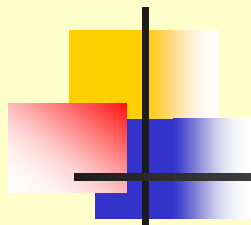
- **Is Phytiatry necessary** for an economically profitable and better world agriculture?
- for food quality and safety and for the protection of the environment?
- **So that Phytiatry could become a distinct University science offering even bachelor's degrees**?



Plant Protection:

Plant protection is a rather

- *artificial-technical concept, coined out as a term related to the control of plant pests and plant diseases*
- *Generally it deals with the use of chemical means, cultural practices or state regulations for pest control. Thus, plant protection deals mainly with applied plant health aspects*
- *Several meanings have being diachronically given*



Plant Health:

Plant health

*refers mainly to national or international rules and **legislations***

- ***Protecting safety of plant food***
- ***Securing the health and quality status of crops***
- ***Regulating the trade of plants and plant products***
- ***Supervising the sale and use of plant protection products, or pesticides and***
- ***Setting standards to monitor and control pesticide residues.***



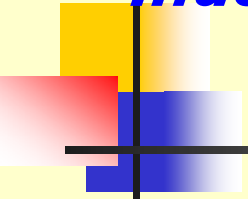
PHYTIATRY:

On the contrary the term

- *Phytiatry is directly correlated with all aspects of basic and applied topics of various multidisciplinary plant health sciences*
- *additionally includes all measures and regulations concerning Plant protection and Plant health necessary to manage pests and pathogens*
- *Due to these differences it will be soon shown that we can use the term Phytiatry for educational purposes*

PHYTIATRY:

***Indeed more than 40 different scientific disciplines
could be involved in Phytiatry***



- ***Production Systems***
- ***Disease and pest Monitoring***
- ***Disease and pest Diagnosis***
- ***Plant Protection Strategies***
- ***Phytopathological Mycology, Bacteriology, Virology***
- ***Epidemiology***
- ***Entomology***
- ***Nematology***
- ***Weed Science***
- ***Phytopharmacology***
- ***Soil Management***
- ***Seeds and Plant Propagation***
- ***Biotechnology***
- ***Variety Selection***
- ***Stored-Product Protection, Harvest Processing, Horticulture, Agriculture, Forestry, Soil Science, Biometry, Vertebrates,, Technology, Molecular Biology, Breeding,***

Plant protection is just an applied part of the multidisciplinary science of Phytiatry

- ***Here are the arguments for clarifying the
occasionally misleading and inadequate term
plant protection as a general term***

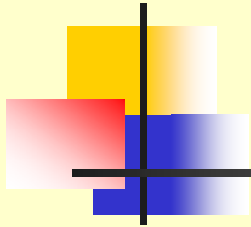


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International Plant Protection Congresses

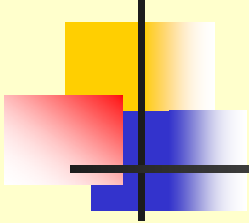


The first IPPC was held in **Louvain, Belgium in 1946.**

Congresses up to 1979 focused principally on new means of controlling insects with discussion relating to the chemical control of plant diseases.

The Congress held in Washington, DC in **1979** was the first organized by a multidisciplinary group with emphasis on integrated pest management (IPM).

IPPCs have provided a **forum for plant protection scientists to communicate and discuss important problems and** new discoveries related to crop losses due to pests and their management.



Wrong or limited use

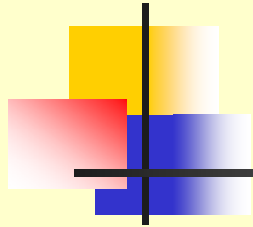
Phytiatry - phytiatricie

- **Canadian Journal of Plant Pathology - 1993**

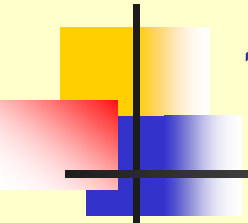
...

- in **Phytiatry/Phytiatricie**
- *virus*
- *Rhizoctonia solani*
- *loose smut of wheat*
- **in 1994**
- *Aceria parapopuli*

***The Journal
Archives of Phytopathology &
Plant Protection***



- ***The title of the Journal indicates that Phytopathology is not plant protection only***
- *The journal Archives of Phytopathology and Plant Protection* publishes original papers and reviews covering all scientific aspects of modern plant protection.
- Subjects include phytopathological virology, bacteriology, mycology, herbal studies and applied nematology and entomology as well as strategies and tactics of protecting crop plants and stocks of crop products against diseases.



Late Prof. *C. Van Assche* from
Leuven, Belgium in Agro-Ecosystems
1974

Speaking about chemical soil disinfestation
used the term of **Plant protection** as part of the
Phytiatry

- *Even currently UCL*
- *Principles of Phytiatry*
- This course is taught in the 1st semester.
- Teacher(s): Claude Bragard, Anne Legrève
- Language: French
- Level: Second

Prof. Dekker, J. of Wagenigen

redefined the concept of plant protection

(International Symposium on **Crop Protection**, Gent (Belgium), 1988)

- **Introduced the terms**

Phytiatry and Phytopharmacy

instead of Plant protection to cover all
aspects of Phytiatry including research and
application

While recently
AGROINNOVA, using the *proper* Italian term
refers to Phytiatric congresses

PROTEZIONE DELLE COLTURE

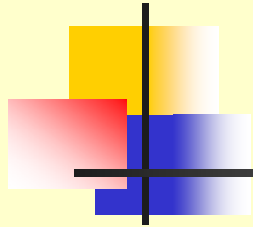
RIVISTA SCIENTIFICA DI PATOLOGIA VEGETALE, ENTOMOLOGIA
AGRARIA E DISERBO DELLE COLTURE

EDIZIONE SPECIALE:

INCONTRI FITOIATRICI 2010



International organizations



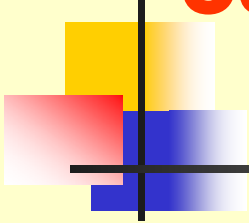
- **The purposes involved in the operation of several relevant international organizations, demonstrate the restricted meaning of the terms Plant protection and Plant health compared to the term Phytiatry**

Several international organizations deal with Plant health



- *But this is not Phytiatry*
- *Obviously the relation of Phytiatry to Plant health*
- *is similar to the relation of Medicine to Public health*





APHIS

Center for Plant Health Science and Technology

- Plant Health Science and Plant Protection and Quarantine (PPQ).
- Scientifically valid regulatory and policy decisions.
- Practical tools for pest exclusion, detection, and management.

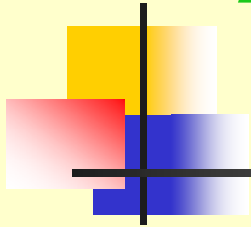
Efsa

European Food Safety Authority

- ***PLH*** - Plant health Panel
- deals with ***organisms posing a risk to plant health***. These include plant pests which threaten crop production and species which threaten biodiversity.

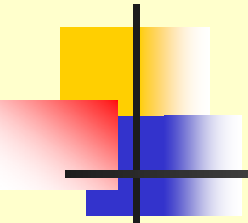
EPP0

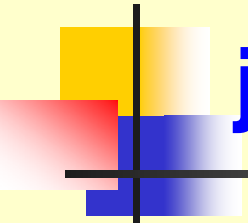
***European and Mediterranean Plant
Protection Organization***



- **EPP0 European cooperation in plant health.**
- protect plants, develop international strategies against the introduction and spread of dangerous pests and to promote safe and effective control methods.
- standards and **publications on plant pests, phytosanitary regulations, and plant protection products.**

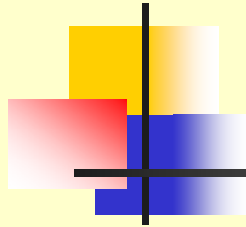
Plant protection and Plant health are part of the Phytiatry

- 
- Consequently ***'Plant Protection'*** is a rather narrow term, thus unable to cover the concepts of *protection, recovery and therapy in plant disease and pest management for both educational and practical purposes.*
 - Indeed ***fundamental or applied research***, which contributes to better understanding plant health problems and inventing means or methods of managing them, ***are not just plant protection.***
 - Furthermore, problems in studying ***nature, biology, ecology*** and obtaining ***correct identity of the causal agents, pests or plant pathogens***, which create vast difficulties in the ***diagnosticians***, must not be considered simply as plant protection

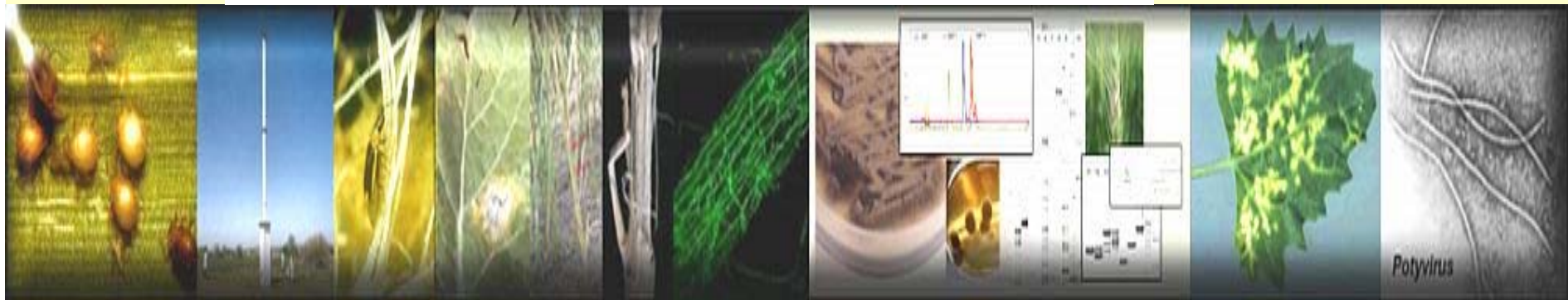


Plant protection and Plant health are just part of the Phytiatry

- Several Universities around the globe offer master courses under the title of *Plant or Crop Protection* and in several cases students are dealing with molecular research aspects as part of the request of the degree but this is not plant protection only
- I will elaborate on this soon



Georg-August-Universität Göttingen
Division of Plant Pathology and Crop Protection



New Master program: CROP PROTECTION

Starting: October 2010.

This master program is a job and research oriented,

interdisciplinary program. Graduate students have the opportunity to learn about the basic and applied aspects of research of a broad range of disciplines including plant pathology, nematology, entomology, virology, weed science, pesticide use, legislation and toxicology, molecular phytopathology, mycotoxin research, plant nutrition and plant breeding.

For more information click here >>>

<http://www.uni-goettingen.de/en/135654.html>

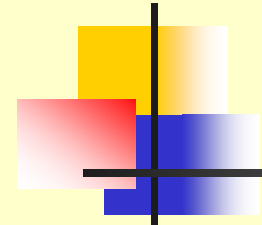
British Universities: Postgraduate Crop Protection courses

University Of Dundee 1 course

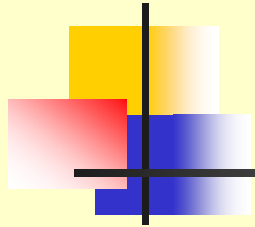
Harper Adams University College 3 courses

University Of Reading 6 courses

Imperial College London 2 courses



- ***Postgraduate Crop Protection courses***
wrong name
- ***Could we call
the post graduate courses in medicine***
- ***public health courses?***



PHYTIATRY:

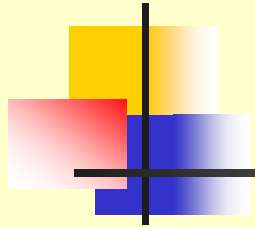
- ***EDUCATION***
UNIVERSITY STUDIES

1.UNDERGRADUATE STUDIES

2.POSTGRADUATE STUDIES

***Masters in Europe or elsewhere
or PhD in USA or elsewhere***

Specific University studies



- ***why?***
- ***Because today there is a **scientific gap** in **Phytiatric sciences** mainly at the **undergraduate level**.***
- ***There is no University in the world, with possibly very few exceptions, **offering first University degree in Phytiatry**.***
- ***Before analyzing the educational aspects of Phytiatry I am going to refer in detail to the **consequences which are apparent today due to this **scientific gap*******



Phytiatry in application

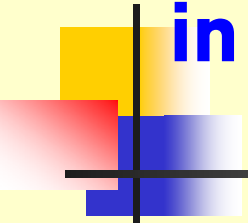
Diagnosing Plant health Problems

We have to ask the Plant Doctors
What's wrong with these plants

- **But**
- **Are they, the so called plant doctors, scientifically reliable?**
- **Are they all eligible for the job?**
- **Are they available at the actual sites of plant production?**

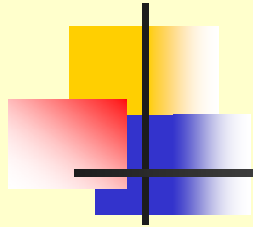
Resemblance

in disease symptom expression in plants



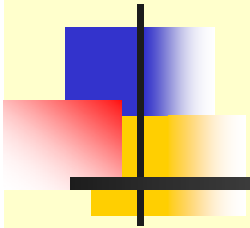
- *Symptom recognition in plant diseases or identity of pests, are fundamental tools in clinical or laboratory plant disease and pest diagnosis and management.*
- *However, Symptom recognition becomes even more difficult due to the vast number of non-parasitic diseases and plant stress problems causing indistinguishable symptoms.*
- *This is more complicated with the variability of cultivated plants and cropping systems around the globe.*

Empirical plant doctors.....in the 21st century ?



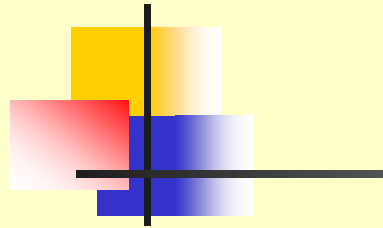
- ***Several people consider that plant health service could be still based on a general crop production knowledge, simply increased and specialized through the everyday practice.***
- ***But this service is occasionally based on inadequate superficial knowledge, on empirical information or on unethical attitude of practitioners.***
- ***Unfortunately **leading** to tragic diagnosis and proposals for management with negative financial and environmental impacts.***

Plant disease and pest Diagnosis



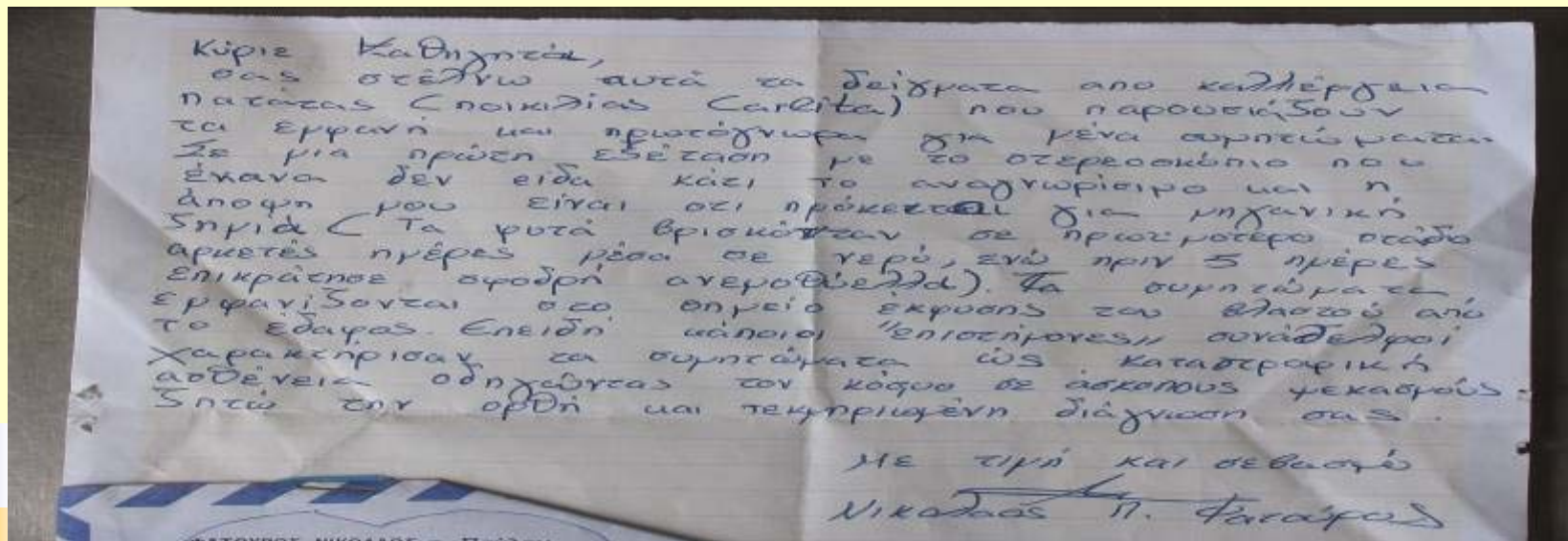
Difficulties related with the vast number of problems in Plant disease and pest diagnosis

Examples of Phytopathological problems arising from wrong disease diagnosis



**Strong Winds
Causing
Stem wounds**



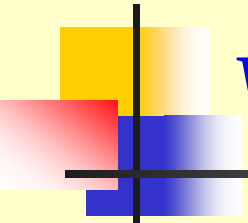


Dear Professor,

I sent you these samples of potato plants with some peculiar symptoms I saw for the first time.

My diagnosis is mechanical damage, due to strong winds and continuous heavy rainfall.

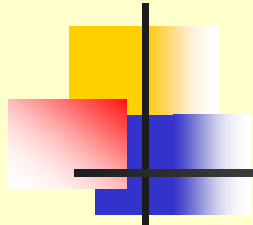
However, many other agronomists so called specialists characterize the symptoms as a serious disease and they convinced the farmers to apply useless chemicals. Please diagnose the disease.



*Just one out of thousand cases of
wrong disease diagnosis...*

- *Simply proving the need of specialized scientists, who with certainty and responsibility will consult farmers to confront plant health problems.*

Specialized scientists in the plant health



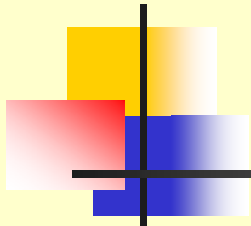
- *I do believe in the contribution of the **Specialized scientists in solving plant health problems** .*
- *Those, who will be able to **visit** the fields, the orchards and the glass houses to **examine** the plant health problems, to **attend** symptom expression, to **diagnose** the causes and **identify** pests and weeds and **suggest** the necessary measures.*
- *Those, who will communicate with the Research Institutes or Stations and **inform to whom it may concern***
- *Those, who will **transfer** the new research results through an **extension service***
- *Those, who will **detect** the new problems.*

*Simply because diagnosis is not so easy as
Botrytis cinerea or Taphrina deformans to be easily
identified.....*



Pepper

***Downy mildew or powdery mildew?
need different chemicals to be treated***



Melon field cultivation

Verticillium dahliae, *Fusarium oxysporum* f.sp. *niveum* or *Olpidium bornovanus*?

A specialized institute is needed, not always available



Insect damage... toxicity?
Experience is needed

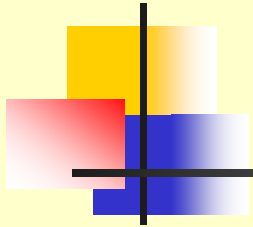


*Tangerines not speaking for themselves
not disclosing their pains.....*



Peach

Unknown problem

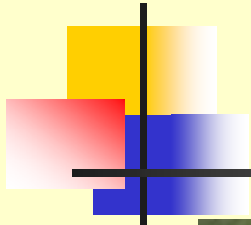


Nectarines

Low temperature damage, virus or viroid
?



What about this??
Chimeratoxicity ?



Virus or chimera ?



Sour rot or Botrytis bunch rot
Grape berry moth (eudemis) or Stem and
bunch breakdown (Ca Deficiency)



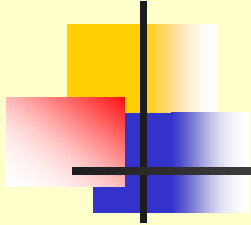
Grapevine cane

Herbicide injury or *Agrobacterium vitis*?



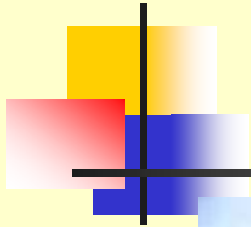
ALMOND TREES

***Phytophthora? Verticillium? Armillaria? Rosellinia?
Capnodis (syn. Bupestris)? or
water logging?***



Potato

Verticillium dahliae,
***Phytophthora infestans* or**
***Dickeya solani*.....?**



A Striking example

*I really doubt it if very few experienced diagnosticians could differentiate these very **similar symptoms** and diagnose each cause*

Diouron toxicity



Simazine and paraquat toxicity

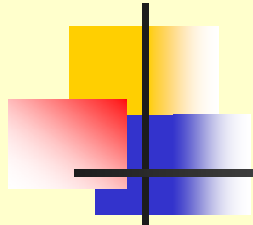


Grapevine degeneration

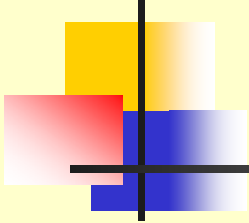


Grapevine yellow fleck viroid Magnesium deficiency Grapevine variegation

The problem of diagnosis in the great majority of cases



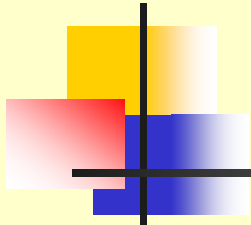
- Obviously most of these cases could be indentified in well equipped Plant clinics or modern institutes with the help of experienced and specifically educated plant doctors.
- However, I am afraid that almost 90% of plant disease and pest diagnosis is carried out **by inexperienced so called “diagnosticians” all over the world**



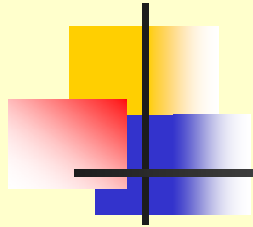
Origin of plant health specialists

- ***Plant health specialists today originate mainly from those obtaining a University Bachelor's degree from Agronomy, Horticulture, Crop sciences, Biology, Botany, Life sciences etc.***

Because of the origin of their first University studies



- *These scientists, working for governmental institutions, are not always scientifically equipped to prevent entrance of pathogens or pests through.....*
- *Dispersal of phytoquarantine plant pathogens and pests*
- *Movement of Propagative plant material*



- *Just to mention some of the most current alarming cases*

Examples of International threats

1. **Karnal (Partial) Bunt**
Tilletia indica



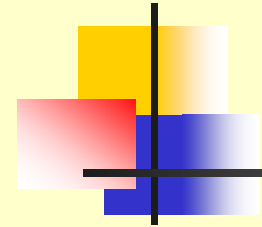
2. **Ug99 the emerging virulent stem rust race of**
Puccinia graminis* f.sp. *tritici



Citrus greening
Liberibacter asiaticus* / *Asian citrus psyllid



Candidatus Liberibacter sp –

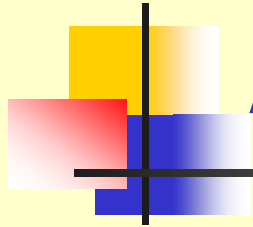


- 2008
- A new bacterial species '**Candidatus *Liberibacter* psyllaurous**' has been found in association with serious diseases of tomatoes, *potatoes*
- In some *potato* and tomato production areas of North America ...



Pepino mosaic virus (PepMV)
*infects **mainly** solanaceous plants,*





Plant Doctors and Specialization

- Illegal importation (smuggling) of noncertified plant material can not be excluded.
- So, we do need very well educated specialists in Plant Medicine, to be able to cope with a problem even after the entrance otherwise diseases such as tristeza and many others already shown in the EPP0 lists might be spread in a country

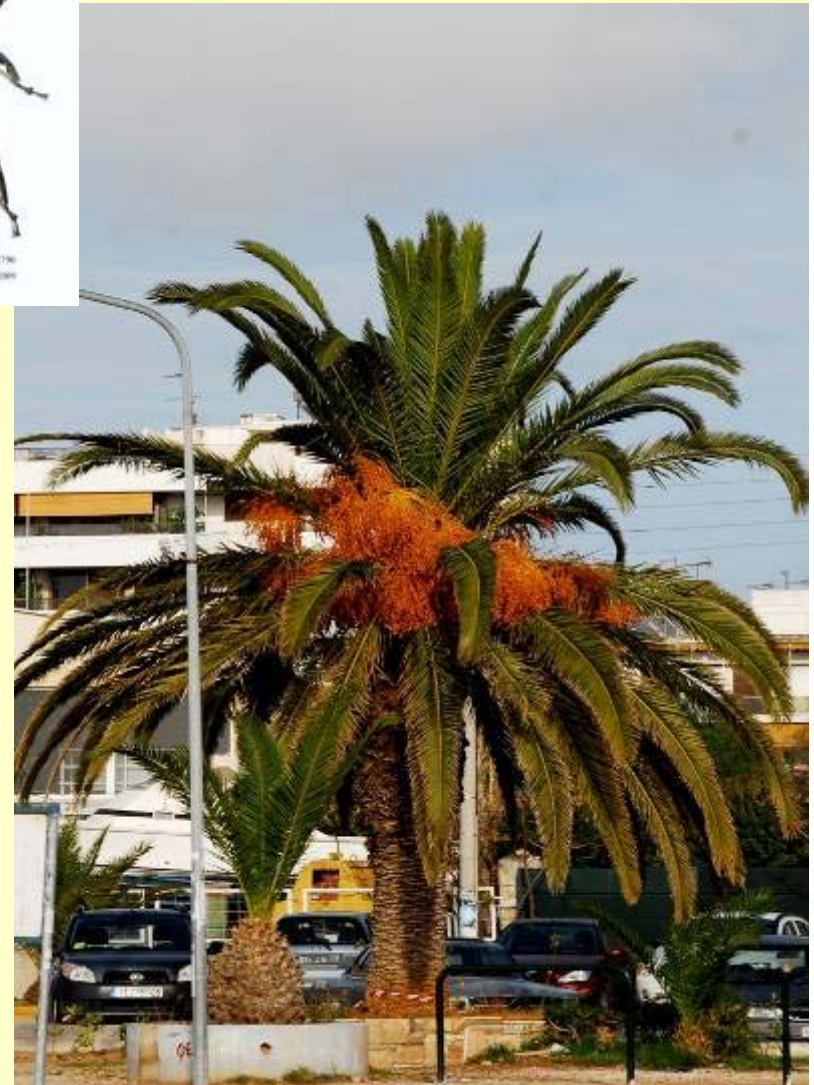
*I visited **Valencia** 15 years ago and I came in close contact with the tragedy of tristeza*



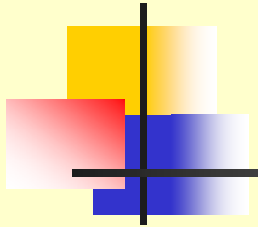
***Recently the disease appeared in Athens,
Greece through smuggling of plant
material***



Rhynchophorus ferrugineus



The current pest menace



or Tuta absoluta



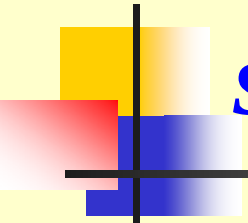
Furthermore,

Problems due to ignorance of the scientific topic

- *I am focusing on a group of difficulties in applying **Phytiatry** in the everyday practice*
- *This is just to prove that the **lack of specialized practitioners results to lack of competency** in solving serious phytiatric problems in several countries.*

Ignorance of the source of the inoculum
How Verticillium wilt is becoming a real menace
Selected impressive cases

- ***1. The Aetolia and Livanates cases in Greece***
- ***2. The Spanish case***
- ***3. The Bakersfield case in California***
- ***4. Potatoes and Watermelons/Helia Case in Greece***



Reduction in EU financial subsidies to farmers

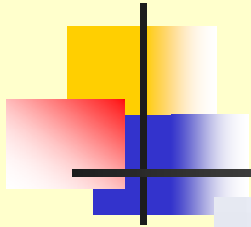
- *Restricts cotton cultivation*
- *Farmers are seeking for alternatives*

AELONIA Greece

***Verticillium dahliae*- Olive after
cotton**

- *Establishment of olive orchards in fields previously cultivated to cotton*
- *Ignorance of the hosts range and the biology of *Verticillium dahliae**

***Extensive symptoms in almost 80% of
the olive trees***



Who is going to compensate the farmers for the loss.....

Livanates, Greece

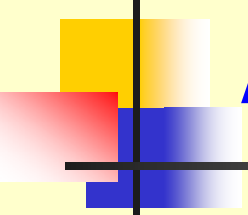
Verticillium dahliae- Olives after cotton

*A real
disaster*



Andalucía Spain -olives and cotton
Same problem with the defoliating race of V. dahliae





Bakersfield case in California

- ***olives after safflower/cotton***



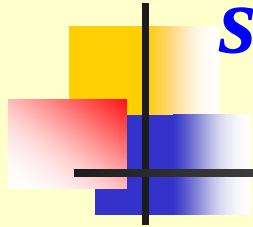
Helia case

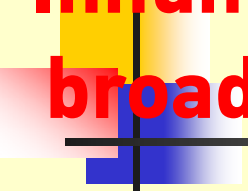
Potatoes and watermelons

*Potato field infested with *Verticillium dahliae**



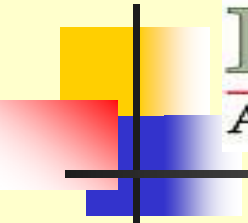
Watermelons after Potatoes showing Verticillium wilt symptoms





Innumerable cases need plant doctors with a broad phytiatric *background* and experience

- Dutch elm disease/ Fungi and insects
- Vectors/ of viruses and phytoplasmas
- The Fun leaf virus /nematodes /Glyphosate
- Symptom complexity among diseases caused by Viroids/ toxicities /and deficiencies
- Bacterial diseases and insects
- Ants/ aphids /and viruses
- *Rhizomania and Polymyxa betae and so on*



Doctor of Plant Health

A new professional program for plant practitioners

*And cases of **therapy** and **not plant protection** only*

- ***Mineral Deficiencies***
- ***Phytophthora crown rot***
- ***Downy mildews, Powdery mildews***
- ***Recovery from Verticillium Wilt***
- ***Thermotherapy for viruses, viroids***

Plant Health Alternatives, LLC

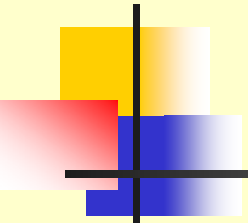
Alternative Health Care for Trees and All Plants



Stressed catalpa



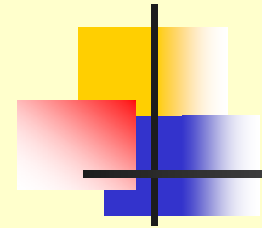
Cured catalpa



Plant Doctors

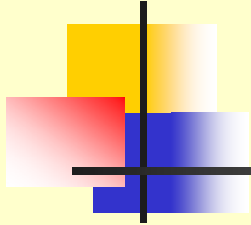
- *Obviously all cases are not just plant protection.*
- *Offered Master degrees to become Plant Doctor are erroneously called by several Universities as Masters in **Plant** or **Crop** protection .*
- *Indeed, these terms are inadequate to cover all scientific disciplines involved in **post graduate programmes** of **Phytiatry/Plant medicine**.*
- *So, I believe it is appropriate to call them Master's or PhD degrees in **Plant Medicine** for **Plant Medicine** researchers or practitioners.*

Post graduate studies in Phytiatry



- *Plant medicine in post graduate level is a growing field that started in the University of Florida and has expanded in Nebraska and from USA to Japan, South Korea, Thailand and Egypt.*
- ***These PhD degrees in Plant Medicine are an excellent initiative and significant departure towards the correct direction.***

Plant medicine/Phytiatry around the globe



Plant Medicine Program University of Florida



- **Providing leadership in crop and plant health education since 1999**



Future Plant Doctors!

For additional information contact
Dr. Robert J. McGovern, 352-392-3631
rjm@ifas.ufl.edu or visit: <http://dpm.ifas.ufl.edu>

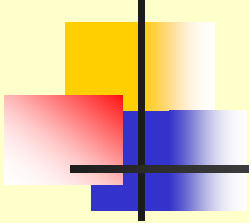


Doctorate in Plant Health

The University of Nebraska



- *The Professional Program in Plant Health has started in 2009.*
- ***“It's comparable to the doctor of veterinary medicine program for animals and doctor of public health for humans, only it's for plants,”***
“
- *The program is designed to train practitioners rather than researchers in entomology, agronomy, plant pathology and soil science.*



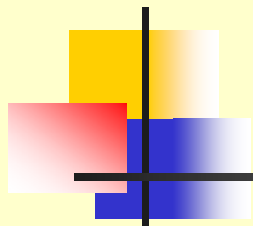
In Europe Masters' degree in Plant Medicine

- **Corso di Laurea Specialistica in
Medicina delle Piante
(Facoltà di Agraria Università di Bari)**



UNIVERSITÀ
DEGLI STUDI DI BARI
ALDO MORO

Common Master's in Phytiatry in EU countries



- ***The University of Bari the Agricultural University of Athens and Plodvil University of Bulgaria have created a TEMPUS INTERNATIONAL JOINT MASTER DEGREE IN PLANT MEDICINE in cooperation with the Universities of Tirana and Korce Albania, Novisad and Belgrade in Serbia, Zagreb in Kroatia, Tetovo and Scopia in FYROM and Pristina in Kosovo.***

***TEMPUS PROJECT IN MASTER OF
SCIENCE
IN PLANT MEDICINE***

International joint Master degree in
Plant **M**edicine (acronym: **IPM**)

**158875-TEMPUS-IT-JPCR
Joint Project – Curricular Reform**

EAC/01/2009

Consortium



Zagreb

Osijek

Novi Sad

Belgrade

Prishtina

Tetovo

Skopje

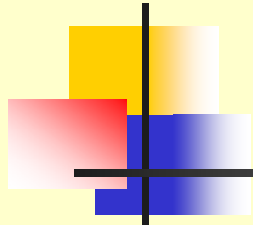
Plovdiv

Bari

Tirana

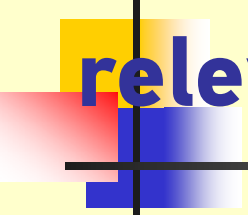
Korce

Athens



Concluding remarks

- However, modern Agriculture in Mediterranean basin and world wide necessitates a revolution in educating students in various plant medicine disciplines at an **undergraduate level**.
- Establishing **Phytiatry** as a University science will open a broad spectrum of carriers for a **new profession of plant doctors**.



Terms relative to Plant medicine used by relevant international scientific societies

- Regardless of the existence of hundreds of **international scientific societies** devoted to the plant health sciences, currently new societies use the term Phytiatry or Plant Medicine such as in Switzerland and Germany.
- The Swiss Society for Phytiatry
- The German Phytomedical Society (DPG)

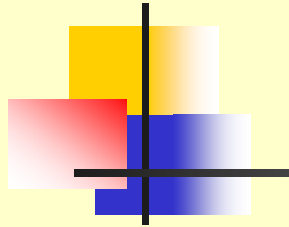
Swiss Society for

● Phytiatry (SSP)

Schweizerische Gesellschaft für Phytomedizin
Società svizzera di fitoiatria
Swiss society for phytiatry



The German Phytomedical Society (DPG)



- *The German Phytomedical Society (DPG) is the largest scientific association in plant production in Germany*
- *The Society is membership-based 1200 members, are professionals within the entire field of phytomedicine*
Science for Practice
- ***Phytomedicine** is the science of plant disorders (whether biotic or abiotic), their diagnosis, management and control.*



Hellenic Society of Phytiatry

- **The Hellenic Society of Phytiatry** was established in Greece in 2009
- As current President of the Hellenic Society of Phytiatry, I send a letter to the Editor of Phytopathology News published by APS,
- With many enthusiastic and positive comments from scientists all around the globe

TJAMOS Phytopathology News

May 2010

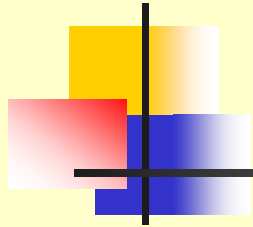


- Letter to the Editor
- Establishing a New Science in Universities
- It is evident that the vast science of agriculture desperately needs the establishment of a separate field of plant health sciences called “**plant medicine,**” known as ***Phytiatry*** in Greek and analogous to “veterinary science.” Indeed, the apparent lack of inspiration and interest of candidate students to study plant pathology, due to the uncertainty in obtaining future jobs (only research centers and university departments offer limited job opportunities) and the lack of attractiveness of our important discipline, necessitate a revolution in educating students in various plant health disciplines. Thus, I strongly support the idea of educating scientists in the field of plant medicine since several scattered sciences dealing with plant health will come closer and create undergraduate programs for plant doctors of preferably a four- to five-year duration. This will also fill the enormous gap of missing specialists in the private sector.

Concluding remarks

Plant medicine doctors through undergraduate and postgraduate studies

- *Although plant doctor programs at a postgraduate level in the USA and Europe are a breakthrough, there are differences in the scientific backgrounds among those entering the programs.*
- *I personally believe that the postgraduate studies should come as a step next to undergraduate studies in Phytiatry.*
- *Till then Doctors in Plant medicine will be a fine but **transitional** solution.*

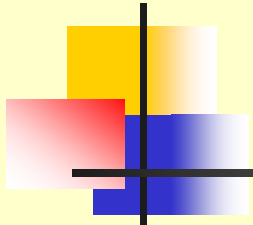


PHYTIATRY:

- *The establishment of this distinct and independent science, in parallel with agricultural sciences*
- *would establish a new very attractive science*
- *and would gradually create the basis for obtaining general or specialized plant doctors.*
- *Plant Doctors* able to offer specific qualitative and secured service either in the private sector to the state or in the university, in research centres, in world agriculture.

Concluding remarks

Time for Action



- I feel that the University community, ISPP, APS, MPU and societies of other related disciplines have to exercise their pioneered role and go ahead with such an initiative to formalize and establish **Phytiatry** as a new University science for the benefit of world agriculture, the environment and the humanity.



Today I am very pleased
sharing with you my dream



- I managed to stay young at heart, mind and soul throughout 40 years of
- phytopathological research,
- university education,
- communication and interactions with my colleagues around the globe but also being
- in close contact with the farmers .
- **Just because I am feeling and acting according** to the signs of the times and trying to live in a **provocative, innovative and groundbreaking way.**
- **Signs which say that we ought to establish Phytiatry as a University science for the generations to come**

GRAZIE

