# SEMINAR ON THE ENFORCEMENT OF PBR UNDER THE UPOV CONVENTION



# THE LEGAL AND INSTITUTIONAL REQUIREMENTS FOR EFFECTIVE PVP ENFORCEMENT: AIB'S EXPERIENCE

**Casper van Kempen Managing Director** 

Hanoi, 7 September 2016



- 1. WHAT IS AIB?
- 2. THREE SALIENT FEATURES TO KEEP IN MIND
- 3. WHAT ARE THE MAIN PIRACY ISSUES IN VEGETABLE SEEDS?
- 4. BEST PRACTICES: ENFORCEMENT EXPERIENCE IN SPAIN AND ITALY
- 5. WHAT LESSONS HAVE WE LEARNT SO FAR?



### BEFORE WE START, THE DEFINITIONS USED:

### IP INFRINGEMENT = THE NON - RESPECT OF IP RIGHTS HELD BY THE RIGHT HOLDER

Can be: - accidental

- ignorance

- to legally challenge existing IP rights

### **IP PIRACY** = UNAUTHORIZED COPYING, DISTRIBUTION AND SELLING OF IP PROTECTED PRODUCTS

- for a significant period of time,
- intentionally committed
- to financial gain,
- on a commercial basis

# BEFORE WE START, THE FOCUS OF MY PRESENTATION IS ON 'VERTICAL' PVP ENFORCEMENT BREEDING COMPANY 1 OTHER BREEDING COMPANIES YOUNG PLANT RAISERS GROWERS TRADERS/WHOLESALERS RETAILERS CONSUMERS

### MY CONCLUSION UPFRONT:



- 'HORIZONTAL' ENFORCEMENT (LEGAL DISPUTES BETWEEN BREEDERS) OF BREEDERS RIGHTS, WHERE TIME AND EVIDENCE-GATHERING CONSTRAINTS ARE LESS CRITICAL, HAS PROVEN TO BE FEASIBLE AND EFFECTIVE;
- <u>'VERTICAL ENFORCEMENT'</u> OF PBR TO COMBAT PIRACY DOWNSTREAM IN THE VEGETABLE BUSINESS CHAIN PROVES TO BE MORE DIFFICULT AS IT REQUIRES A SUPPORTING LEGAL AND INSTITUTIONAL FRAMEWORK:
  - evidence of infringement cannot be obtained by the right holder himself as inspections of the growers are difficult / impossible
  - without active help from authorities, breeders' enforcement efforts are unsuccesful
  - PBR enforcement is often hindered by the lack of effective enforcement of the national seed marketing regulations.
- CONSEQUENTLY, SOME WELL ORGANISED PIRATES HAVE SUCCESFULLY ESTABLISHED PROFITABLE BUSINESS MODELS.



- 1. WHAT IS AIB?
- 2. THREE SALIENT FEATURES TO KEEP IN MIND
- 3. WHAT ARE THE MAIN PIRACY ISSUES IN VEGETABLE SEEDS?
- 4. BEST PRACTICES: ENFORCEMENT EXPERIENCE IN SPAIN AND ITALY
- 5. WHAT LESSONS HAVE WE LEARNT SO FAR?

### WHAT IS AIB?



- AIB = ANTI-INFRINGEMENT BUREAU FOR IP RIGHTS ON PLANT MATERIAL
- START 1 APRIL 2010
- OFFICE: BRUSSELS (BELGIUM)
- Members are <u>integrated vegetable seed companies</u>: Bejo, Enza, Fito, Gautier, Limagrain, Monsanto, Nunhems, Sakata, Syngenta, Takii, Pop Vriend, Rijk Zwaan

Membership is open to other integrated vegetable seed companies.

### WHAT IS AIB'S MAIN MISSION?





ENSURE LEVEL PLAYING FIELD FOR ALL PLAYERS IN THE VEGETABLE BUSINESS CHAIN

### **AIB'S MAIN OBJECTIVES**



- 1. AWARENESS, PUBLICITY & DETERRENCE
- 2. CENTRE OF EXPERTISE AND RELATED NETWORK
- 3. WATCHTOWER
  - infringements : where & how many & scope ?
- 4. ASSIST MEMBERS TO FIGHT SUSPECTED PIRATES
- WORLDWIDE BUT STARTED WITH "GREATER EUROPE" (EU, TURKEY, N-AFRICA)

NOTE: - ENFORCEMENT OF IP RIGHTS REMAINS RESPONSIBILITY OF IP RIGHTS HOLDERS

- CLOSE COLLABORATION WITH NATIONAL ENFORCEMENT AGENCIES (POLICE AND ANTI-FRAUDE AGENCIES).



- 1. WHAT IS AIB?
- 2. THREE SALIENT FEATURES TO KEEP IN MIND
- 3. WHAT ARE THE MAIN PIRACY ISSUES IN VEGETABLE SEEDS?
- 4. BEST PRACTICES: ENFORCEMENT EXPERIENCE IN SPAIN AND ITALY
- 5. WHAT LESSONS HAVE WE LEARNT SO FAR?

### **OUR SECTOR FACES SPECIFIC CHALLENGES**



### THE VEGETABLE SEED BUSINESS CHAIN

						_ `
SEED CO	PLANT	GROWER	TRADER	RETAILER	CONSUMER	
	RAISER					
					_	

- lacktriangledown nature is a perfect copying machine
- ☐ copying is cheap, requiring little capital investment
- no distinction between legally and illegally produced harvested product
- ☐ illegality does not bother consumer
- often no perceived health hazards (like pharma, pesticides or car parts)
- □ vegetable seeds are often small volume:
  - in weight worth much more than gold!
  - easy to transport

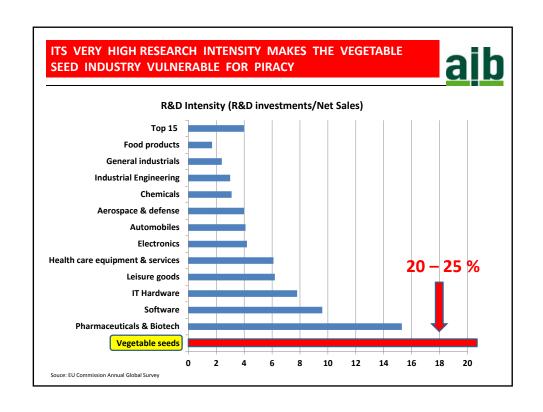
# SELLING VEGETABLE SEEDS IS GENERALLY REGULATED BY NATIONAL SEED MARKETING REGULATIONS



- REGISTRATION IN THE NATIONAL VARIETY CATALOGUE IS REQUIRED
- SEED PRODUCER HAS TO BE CERTIFIED
- ADHERENCE TO QUALITY STANDARDS
- ORIGINAL VARIETY NAME HAS TO BE USED

NON-PVP PROTECTED VARIETIES CAN FREELY BE REPRODUCED AS LONG AS

- ORIGINAL VARIETY NAME IS USED
- CERTIFIED SEED PRODUCER
- CONFORMITY TO QUALITY STANDARDS
- NAME OF THE "ORIGINAL" SEED COMPANY IS NOT USED





- 1. WHAT IS AIB?
- 2. THREE SALIENT FEATURES TO KEEP IN MIND
- 3. WHAT ARE THE MAIN PIRACY ISSUES IN VEGETABLE SEEDS?
- 4. BEST PRACTICES ENFORCEMENT EXPERIENCE IN SPAIN AND ITALY
- 5. WHAT LESSONS HAVE WE LEARNT SO FAR?

### WHAT ARE THE MAIN ISSUES IN THE VEGETABLE SECTOR\*?



### 1) VEGETATIVE PROPAGATION OF GRAFTED CROPS

- TOMATO, WATER MELON, MELON, EGGPLANT
- SUBSTANTIAL VEGETATIVE PROPAGATION IN TOMATO IN MEDITERRANEAN BASIN (20 % IN SPAIN AND ITALY; IN CHERRY TOMATOES IN ITALIAN REGIONS UP TO 40%.

### 2) REPRODUCTION OF SEEDS OF OPEN-POLLINATED CROPS (LETTUCE, BEANS)

- PRODUCED OUTSIDE OF NATIONAL REGULATED SYSTEMS
- VARIETIES ARE OFTEN MIS-LABELLED (FRAUDE)
- PRODUCERS ARE OFTEN NOT CERTIFIED
- PRODUCTION OUTSIDE OF QUALITY CHECKS BY AUTHORITIES
- SIGNIFICANT ILLEGAL NETWORK

\* source: annual AIB infringement surveys 2010-14

### WHAT ARE THE MAIN ISSUES IN THE VEGETABLE SECTOR\* ? (2)



### 3) F2 PRODUCTION OF ONION HYBRIDS

- EASTERN EUROPE, TURKEY, FORMER RUSSIAN STATES, SPAIN
- physical detection is often very difficult (hardly any differentiation)

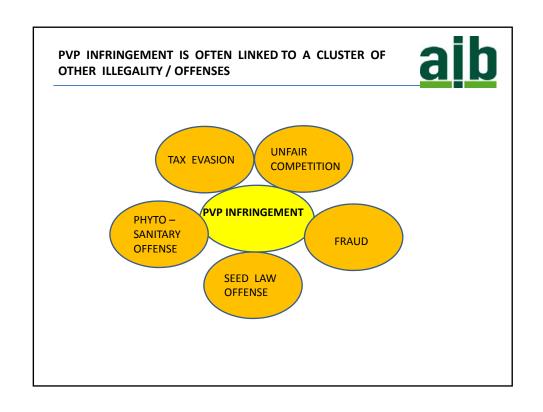
### 4) UNAUTHORISED SALE OF UNPROTECTED (NO PVP) HYBRIDS

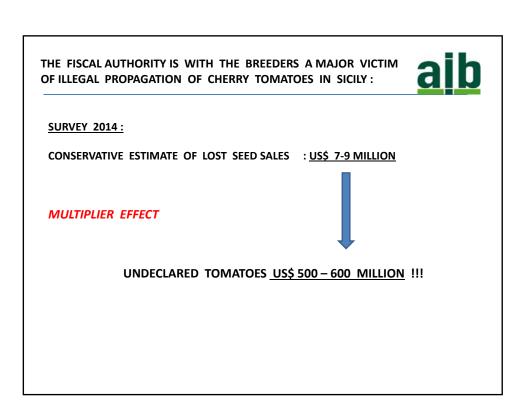
- TOMATO, SQUASH, EGGPLANT, BRASSICA, ETC.
- MANY COUNTRIES, SEVERAL CONTINENTS
- CAUSE: THEFT / UNAUTHORISED USE OF PROPRIETARY PARENT LINES (IN LEGAL TERMS: TRADE SECRET THEFT)
- LEADING TO SUBSTANTIAL (FINANCIAL) IMPACT ON RIGHT HOLDER
- MARKET DISRUPTION REPORTED IN SOME CASES

### 5) SALE OF COUNTERFEIT SEED PACKAGES

- EASTERN EUROPE, MIDDLE EAST, ASIA, AFRICA
- FOUND IN MANY CROPS

<sup>\*</sup> source: annual AIB infringement surveys 2010-14





LETTUCE SEED PIRACY: INTERNATIONAL NETWORKS ARE MAKING BIG PROFITS, SO DO USERS OF THE ILLEGAL SEEDS



### PRODUCTION OF ONE SEED LOT (TO COVER 2000 HECTARES)

- SEEDS PRODUCED IN CHILE
- SEEDS PELLETED IN SPAIN

• TOTAL COSTS 61,000 US\$

### **SALES**

SOLD IN ITALY AND ABROAD

• SALES REVENUE 522,000 US\$

• PROFIT FOR PIRATE 461,000 US\$

REAL VALUE
 2,500,000 US\$

• PROFIT TO GROWERS 1,044,000 US\$ (US\$ 1017/HA)

(=US\$ 400/ACRE)

THIS GIVES BREEDERS FRIENDS / ALLIES TO HELP THEM TAKING ACTION AGAINST INFRINGERS



- PHYTO SANITARY SERVICES
- SEED INSPECTION AGENCIES
- AGRICULTURAL INSPECTION AGENCIES
- ANTI-FRAUD AGENCIES
- TAX AUTHORITIES
- POLICE

# IT IS IMPOSSIBLE FOR AIB TO PROVE PVP INFRINGEMENT WITHOUT HELP FROM AUTHORITIES



- VEGETATIVE PROPAGATION OF TOMATOES / MELONS
  - HOW TO PROVE?
  - ACCESS TO GREENHOUSE AND DOCUMENTS REQUIRED (INVOICES /PLANT PASSPORTS)
- REPRODUCTION OF LETTUCE SEED
  - OFTEN 'WHITE BAGGED' (NO PROPER LABELS)
  - ACCESS TO GREENHOUSE / FIELDS AND DOCUMENTS REQUIRED (FOR INSPECTION OF INVOICES / PLANT PASSPORTS)







### HOW TO FIND EVIDENCE OF ILLEGAL TOMATO REPRODUCTION?



- LEGAL AND ILLEGAL PLANTS CANNOT BE DIFFERENTIATED (STUBS!)
- ILLEGALLY GROWN TOMATOES HAVE IDENTICAL DNA

  INSPECTIONS OF TOMATO / LETTUCE AT RETAILERS IS OF NO USE
- PRODUCTION IN CLOSED GREENHOUSES --→ NOT ACCESSIBLE

COMPARISON BETWEEN INVOICES AND NO. OF PLANTS REQUIRED

**BUT HOW?** 

RIGHT HOLDERS ARE IN NO POSITION TO DEMAND THIS (PREVALENCE OF PRIVACY PROTECTION ABOVE SALES CONDITIONS)

# CLOSE COOPERATION BETWEEN PRIVATE SECTOR AND PUBLIC SECTOR HAS BEEN KEY FOR OUR SUCCESS



### THE STEPS WE NORMALLY FOLLOW:

- 1. Intelligence reports on illegal reproduction received by AIB
  - Growers using a PVP variety are unknown to seed company
  - Persistent rumours in the market
  - Complaints from other growers on unfair competition
  - Observations from seed company sales representatives / technicians: "this grower uses our genetics, but we have not sold to him"
- 2. Verification of the intelligence by AIB
- 3. If intelligence found credible, denouncement is made to authorities:
  - Name of suspect
  - Address and GPS coordinates of greenhouse/plot
  - Supporting evidence like pictures, labels, etc.
- 4. Authorities to inspect the growers /plant raisers

# WITHOUT ACTIVE HELP FROM AUTHORITIES OUR ENFORCEMENT EFFORTS ARE UNSUCCESFUL



- IMPOSSIBLE TO OBTAIN SOLID EVIDENCE OF VEGETATIVE REPRODUCTION
- IMPOSSIBLE TO OBTAIN SOLID EVIDENCE OF USE OF ILLEGALLY REPRODUCED SEED

### THIS IS HOW IT WORKS IN ITALY AND SPAIN:

- AIB PROVIDES VERIFIED INTELLIGENCE TO INSPECTION AGENCIES
- INSPECTION AGENCIES WILL CARRY OUT INSPECTIONS
- AIB RECEIVES (CONFIDENTIAL) REPORT ON THE RESULTS OF THE INSPECTIONS

# **VEGETATIVE RE-PRODUCTION OF TOMATO: HOW DOES IT WORK?**

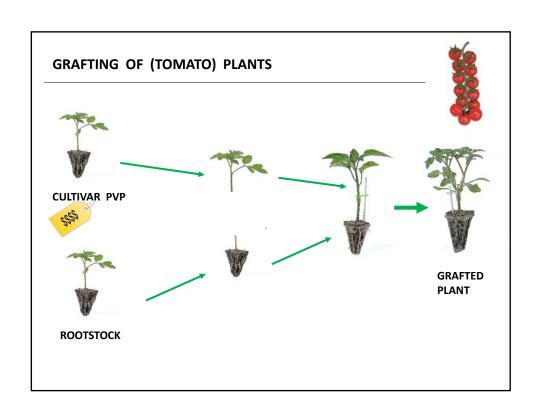


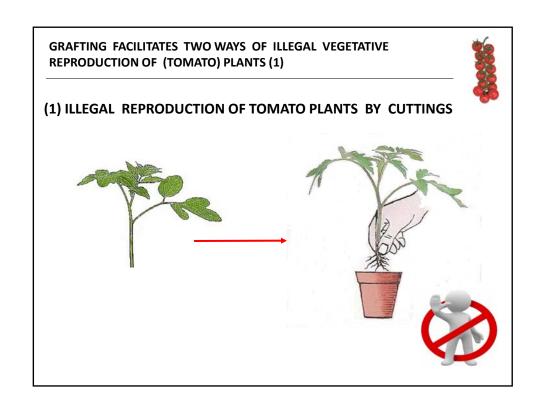
### TOMATO PRODUCTION IN SOUTHERN EUROPE

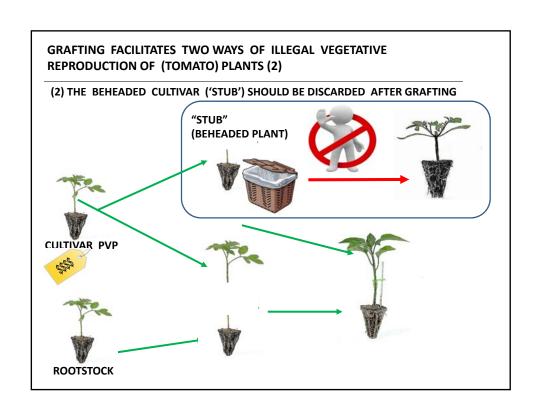
- MOSTLY GROWN WITH TWO STEMS PER PLANT
- · SEASON: SOWN AND TRANSPLANTED IN SEPTEMBER, AND GROWN UNTIL MAY





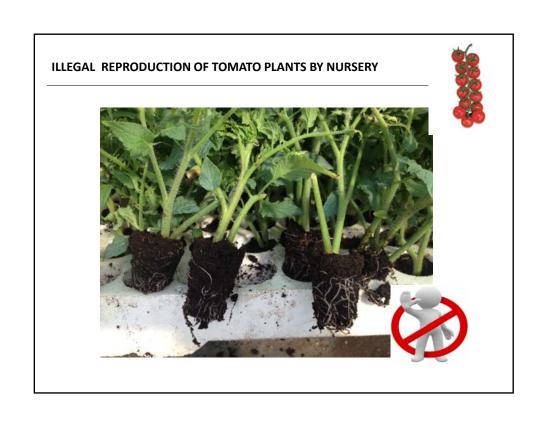




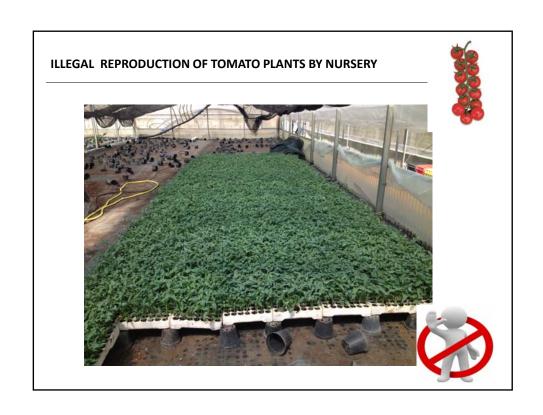


















### MY AGENDA FOR THIS AFTERNOON



- 1. WHAT IS AIB?
- 2. THREE SALIENT FEATURES TO KEEP IN MIND
- 3. WHAT ARE THE MAIN PIRACY ISSUES IN THE VEGETABLE SEEDS
- 4. BEST PRACTICES: ENFORCEMENT EXPERIENCE IN SPAIN AND ITALY
- 5. WHAT LESSONS HAVE WE LEARNT SO FAR?

### WE FACE TWO MAIN TYPES OF INFRINGEMENTS



- 1. INFRINGEMENTS OF PLANT VARIETY PROTECTION (PVP)
  - a) Vegetative reproduction
  - b) Reproduction of open pollinated varieties
- 2. INFRINGEMENT OF THE SEED LAWS OR OTHER LAWS (EG. COMPETITION LAW)
  - a competitor markets a variety not listed (variety catalogue)
  - a competitor markets a variety under a different, listed, name (fraud)
  - a competitor uses a variety's name to market a different variety (fraud)
  - a competitor lists a variety under a different name in the national catalogue (defaults in registration procedure)

# IN ITALY AND SPAIN PVP INFRINGEMENT IS CONSIDERED AS A CRIMINAL ACT



This gives the right holder two options in case of facing a PVP infringement:

	ADVANTAGE	DISADVANTAGE	
1. CIVIL ACTION:	Right holder in command Claim for damages	High costs (lawyer)	
2. PENAL ACTION	cheap (often free)	Dependency on authorities for action	
	often claim for damages can be filed later		



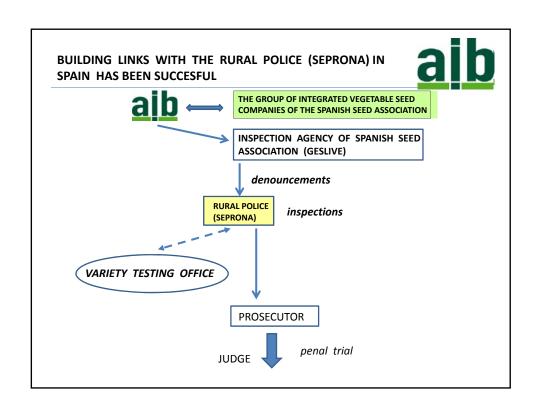
IN MOST CASES AIB OPTS FOR PENAL ACTION

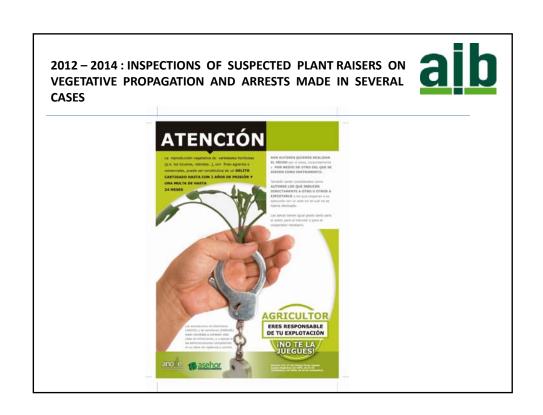
### **SPAIN**





- TOMATO: AT LEAST 20% OF ACREAGE IS PROPAGATED BY VEGETATIVE METHODS
- MELONS: FIRST VEGETATIVE REPRODUCTION FOUND
- OVERALL TENDENCY: VEGETATIVE REPRODUCTION IS EMERGING IN ALL GRAFTED CROPS WITH A HIGH SEEDPRICE
- LETTUCE: SEED REPRODUCTION IN NORTH (PARTLY PVP VARIETIES)





HOWEVER, IN 2015 NO INSPECTIONS WERE CARRIED OUT DUE TO LACK OF BURDEN OF PROOF



 ALMERIA POLICE REFUSED TO ACT EX OFFICIO AGAINST SUSPECTED PLANT RAISERS, CLAIMING THEY REQUIRED PRIMA FACIE EVIDENCE FIRST

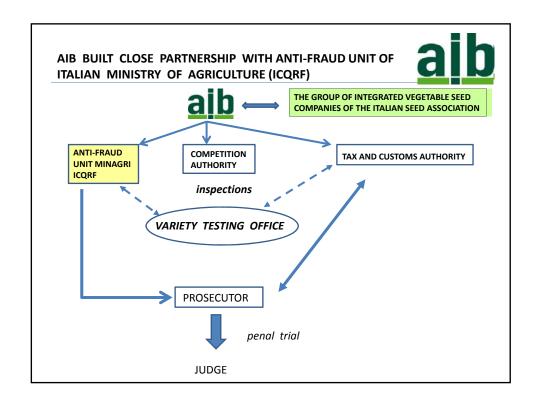


# ITALY



- IN CORN SALAD 25-30 % OF PRODUCTION IS BASED ON ILLEGALLY REPRODUCED SEED !!!
- IN OTHER LETTUCE SEGMENTS ALSO VERY SUBSTANTIAL % INFRINGEMENTS
- STRONG PIRACY IN BABYLEAF (SEED COST IS 50% OF PRODUCTION COSTS)
- THE PIRATE COMPANIES ARE WELL ORGANISED





# SO FAR, 20 PVP INFRINGEMENTS HAVE BEEN PROVEN BY THE ANTI – FRAUD UNIT OF THE MINISTRY OF AGRICULTURE (ICQRF)



- AIB made 12 denouncements made on vegetative propagation of PVP tomato
- AIB made 15 denouncements on PVP lettuce piracy

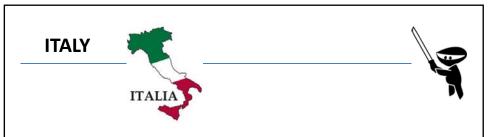
### Result:

- ALL denouncements have been followed by inspections by ICQRF.
- Seized seed and plant samples went for official variety identity testing
- First results confirmed 20 PVP infringements:
  - 7 PIRATE SEED COMPANIES
  - 2 MAJOR NURSERIES USING PIRATED LETTUCE SEED
- PENAL INVESTIGATIONS STARTED BY PUBLIC PROSECUTORS
- ORGANISED CRIME SUSPECTED IN SEVERAL CASES

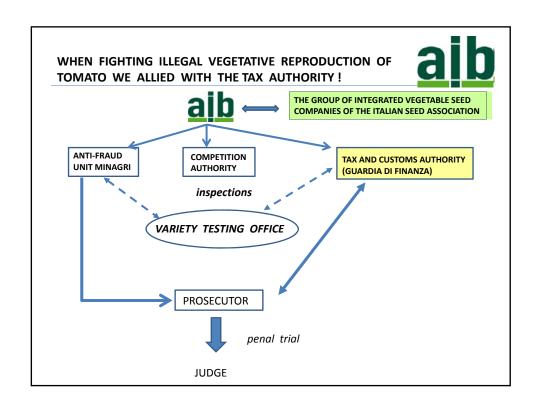
AIB HAS REGULAR REVIEW MEETINGS WITH THE ANTI-FRAUD UNIT OF THE MINISTRY OF AGRICULTURE (ICQRF)



- Very open exchange on situation
- · Good feedback on actions taken
- ICQRF is also doing inspections now on its own initiative (not only based on denouncements by AIB).



- TOMATOES: SIGNIFICANT VEGETATIVE REPRODUCTION (20%), WITH PEAKS OF 40 % IN CHERRY TOMATOES GROWING FAST
- INFRINGEMENTS REPORTED IN OTHER CROPS AS WELL (MELON, EGGPLANT)



# PENAL ACTIONS (DENOUNCEMENTS) ON VEGETATIVE PROPAGATION OF PVP TOMATO VARIETIES BY TAX AUTHORITY



- AFTER MAKING OUR FIRST TWO DENOUNCEMENTS IN OCTOBER 2014 TO THE TAX AUTHORITY:
  - INSPECTION OF THE DENOUNCED GROWERS
  - 43 INSPECTIONS OF GROWERS AND NURSERIES
    - PLANT MATERIAL SAMPLED FOR DNA ANALYSIS
    - ACCOUNTING DATA SEIZED AND ANALYSED



- 1. WHAT IS AIB?
- 2. THREE SALIENT FEATURES TO KEEP IN MIND
- 3. WHAT ARE THE MAIN PIRACY ISSUES IN VEGETABLE SEEDS?
- 4. BEST PRACTICES: ENFORCEMENT EXPERIENCE IN SPAIN AND ITALY
- 5. WHAT LESSONS HAVE WE LEARNT SO FAR?

### WHAT LESSONS HAVE WE LEARNT SO FAR ? (1)



- 1. PVP PROTECTION PROVIDES THE STRONGEST LEGAL GROUND TO DEFEND OUR IP AGAINST ILLEGAL REPRODUCTION
- 2. PUBLIC AND PRIVATE SECTOR COOPERATION IS KEY IN ENFORCEMENT OF PVP WITHIN THE VEGETABLE SEED CHAIN

EVIDENCE OF INFRINGEMENT CANNOT BE OBTAINED BY THE RIGHT HOLDER HIMSELF AS INSPECTIONS OF THE GROWERS ARE DIFFICULT / IMPOSSIBLE

### WHAT LESSONS HAVE WE LEARNT SO FAR? (2)



### THE BASICS WHEN FIGHTING PIRACY IN THE VEGETABLE SEED CHAIN:

- MASS BALANCE ANALYSIS (COMPARING SEED INVOICE WITH NUMBER OF PLANTS GROWN) IS OFTEN (THE ONLY) WAY TO OBTAIN LEGAL EVIDENCE OF PIRACY
- **2. TIME TO ACT AGAINST PIRACY IS SHORT**. (Growing cycles are short, summer lettuce 3-4 weeks!)
- THEREFORE <u>SHORT CYCLE TIMES</u> TO PRODUCE (DNA-BASED) VARIETY IDENTIFICATION TEST RESULTS ARE VITAL
- 4. <u>DNA IDENTITY TEST RESULTS</u> SHOULD BE ACCEPTED BY THE AUTHORITIES / COURTS FOR TAKING <u>FIRST STAGE</u> LEGAL ACTION

### WHAT LESSONS HAVE WE LEARNT SO FAR ? (3)



### IN GENERAL, AT LEGISLATOR LEVEL

- 1. IT GREATLY HELPS IF IP/PVP INFRINGEMENT IS CONSIDERED A CRIMINAL ACT IN YOUR COUNTRY'S LEGISLATION
- IT IS IMPORTANT TO <u>ASSIGN A NATIONAL AGENCY FOR THE ENFORCEMENT</u> <u>OF PVP RIGHTS</u> (OUR ADVICE : THIS SHOULD BE A TECHNICALLY QUALIFIED AGENCY).
- 3. <u>TESTING LABORATORY</u> THE LAW MAKER SHOULD APPOINT THE LAB(S) TO BE USED BY THE COURTS FOR THE OFFICIAL TESTING.
- 4. ONE **SPECIALISED PVP COURT** IS BETTER THAN 10 NON-SPECIALISED ONES!

### WHAT LESSONS HAVE WE LEARNT SO FAR ? (4)



### **FOR THE BREEDERS:**

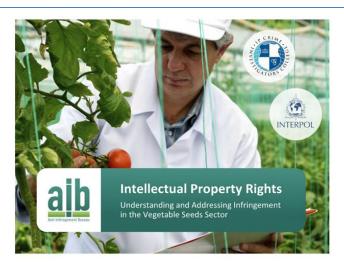
- 1. THE PRESENCE OF A SUPPORTING (SUB-) <u>SECTOR PLATFORM OF RIGHTHOLDERS</u>
  IS A IMPORTANT (PLATFORM TO DISCUSS ISSUES, LOBBYING, DECIDE ON
  COMMON ACTIONS, LIAISON AND SUPPORT FOR ENFORCEMENT AGENCIES).
- IN CASE OF INFRINGEMENT BREEDERS SHOULD ASK THEMSELVES <u>WHO ELSE</u> WILL BE AFFECTED BY THE PIRACY (TAX OFFICE, HEALTH AUTHORITY, POLICE (IN ITS FIGHT AGAINST ORGANISED CRIME), ETC. THESE AGENCIES SHOULD BE ASKED FOR HELP!
- 3. TRAIN BREEDERS' FIELD STAFF TO REPORT SUSPICIONS OF PVP INFRINGEMENTS

  Train the sales people what facts to collect (the 1st time right!): photographs, lot
  numbers, labels, (closed) packages, address, GPS co-ordinates
- 4. BREEDERS SHOULD HAVE INTERNAL PROCEDURE HOW TO REPORT SUSPICIONS OF INFRINGEMENTS:

Important to have one-single internal contact point to report suspicions to:

- 100% safe
- Discrete
- AND PUTS THE SAFETY OF THE REPORTING PERSON FIRST WHEN CONSIDERING ACTION AGAINST INFRINGERS

AIB AND INTERPOL MADE A TOOL FOR BREEDERS TO MOBILISE THEIR STAFF: THE E-LEARNING MODULE "IPR IN THE VEGETABLE SEED SECTOR"



\* In English / French / Italian / Spanish / Turkish language versions

### MY CONCLUSION:



- 'HORIZONTAL' ENFORCEMENT OF BREEDERS RIGHTS (LEGAL DISPUTES BETWEEN BREEDERS), WHERE TIME AND EVIDENCE-GATHERING CONSTRAINTS ARE LESS CRITICAL, HAS PROVEN TO BE FEASIBLE AND EFFECTIVE;
- <u>'VERTICAL ENFORCEMENT'</u> OF PBR TO COMBAT PIRACY DOWNSTREAM IN THE VEGETABLE BUSINESS CHAIN PROVES TO BE MORE DIFFICULT AS IT REQUIRES A SUPPORTING LEGAL AND INSTITUTIONAL FRAMEWORK:
  - evidence of infringement cannot be obtained by the right holder himself as inspections of the growers are difficult / impossible
  - without active help from authorities, breeders' enforcement efforts are unsuccesful
  - PBR enforcement is often hindered by the lack of effective enforcement of the national seed marketing regulations.
- CONSEQUENTLY, SOME WELL ORGANISED PIRATES HAVE SUCCESFULLY ESTABLISHED PROFITABLE BUSINESS MODELS.

