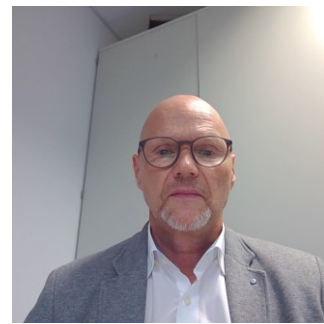


EU Wine Databank

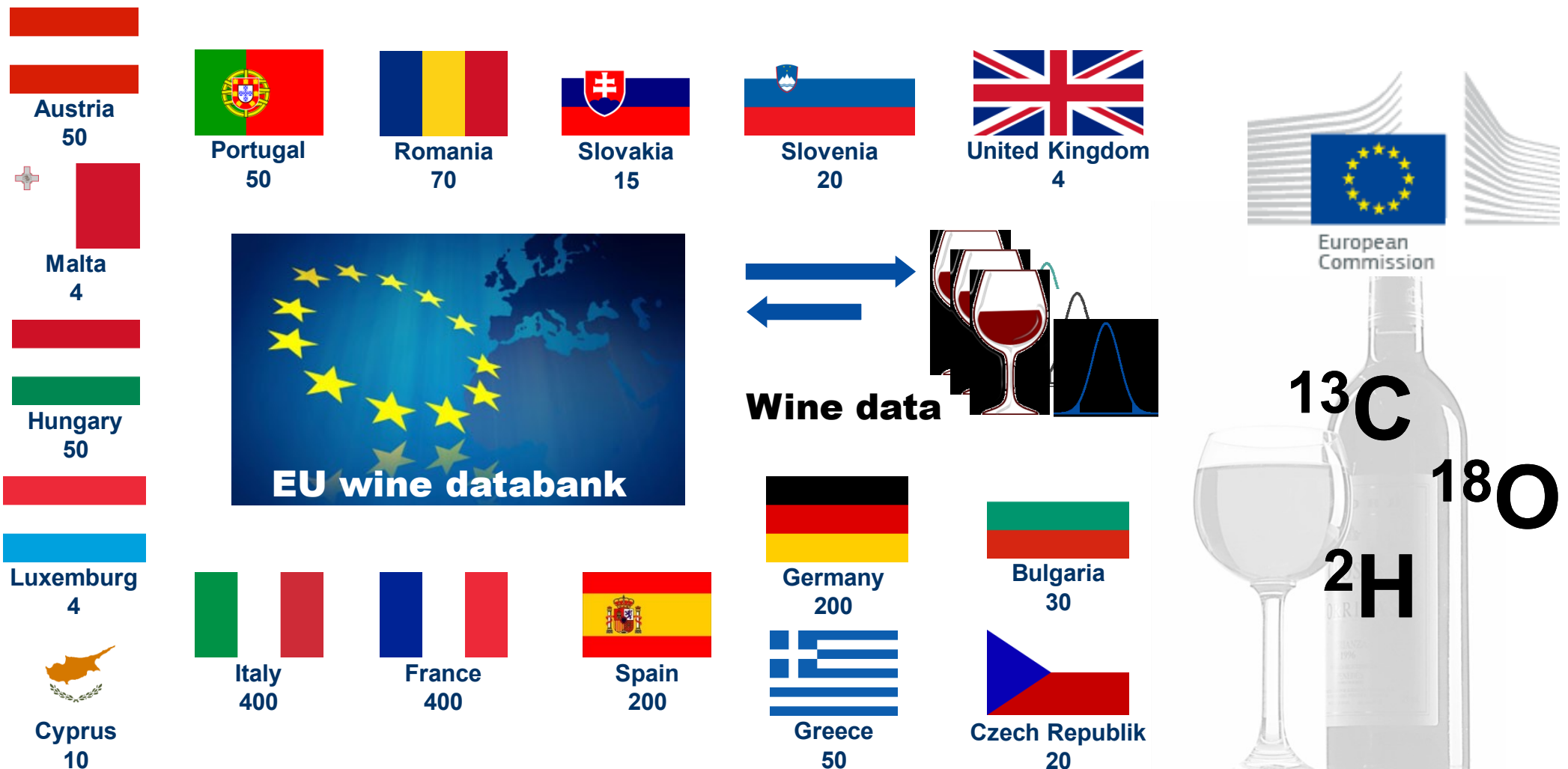
Carsten Fauhl-Hassek



EU Wine Databank



- Since 1991: more than 1,500 authentic wines per year → >40,000 samples
- Accessible to authorized users only



Legal Background



- Regulation (EC) No **555/2008**
 - Chapter III, Articles 87- 91
- Regulation (EU) No **1306/2013**
 - Art. 89 (5)(a): [...] the establishment of an **analytical databank of isotopic data** to help detect fraud to be constructed on the basis of samples collected by Member States
- Regulation (EU) No **2018/273**
 - Art. 39: The analytical databank of isotopic data has been established at and is managed by **ERC-CWS** set up within the Joint Research Centre [...]
- Regulation (EU) No **2018/274**
 - Art. 27: **Samples** for the analytical databank
 - Art. 28: **Communication** of information contained in the analytical databank



European Reference Centre for Control in the Wine Sector

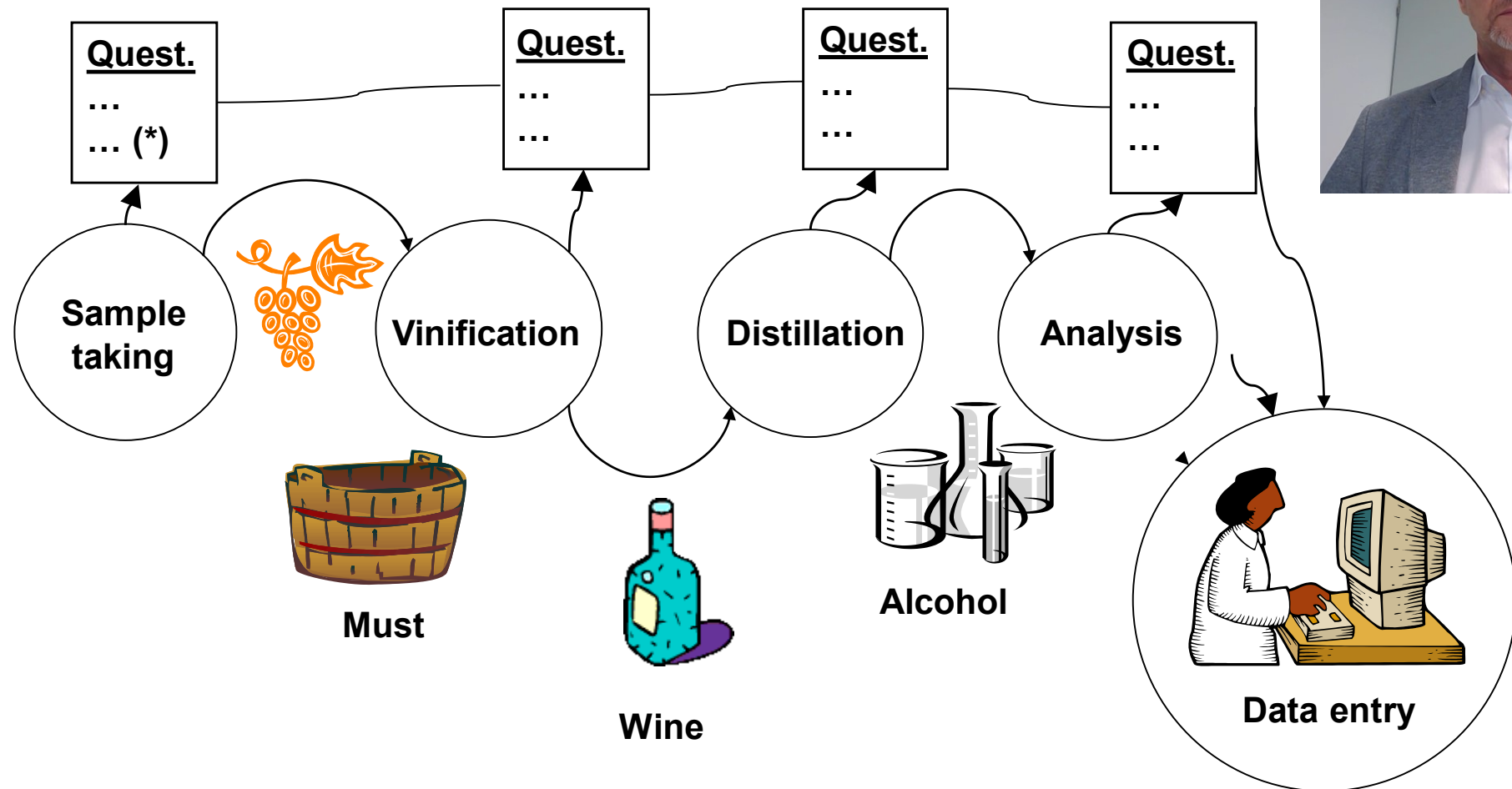
- Regulation (EU) 2018/273:
 - Recital 40 & Art. 39: The analytical databank of isotopic data has been established at and is managed by **ERC-CWS** set up within the **Joint Research Centre**

Further Tasks

- Managing a network of Member State Designated Laboratories to coordinate and harmonize contributions to the databank
- Checking the quality of isotopic analysis data submitted
- Providing information and technical assistance to MS and the Commission, especially in case of controversies
- Evaluating new analytical methods for detecting fraud related in particular to wine origin and variety (“cépage”)



Processes



- Data gathered by the agents is written in questionnaires and sent along the processing chain:

(*) Almost 50% of the data is produced during sample collection

Processes

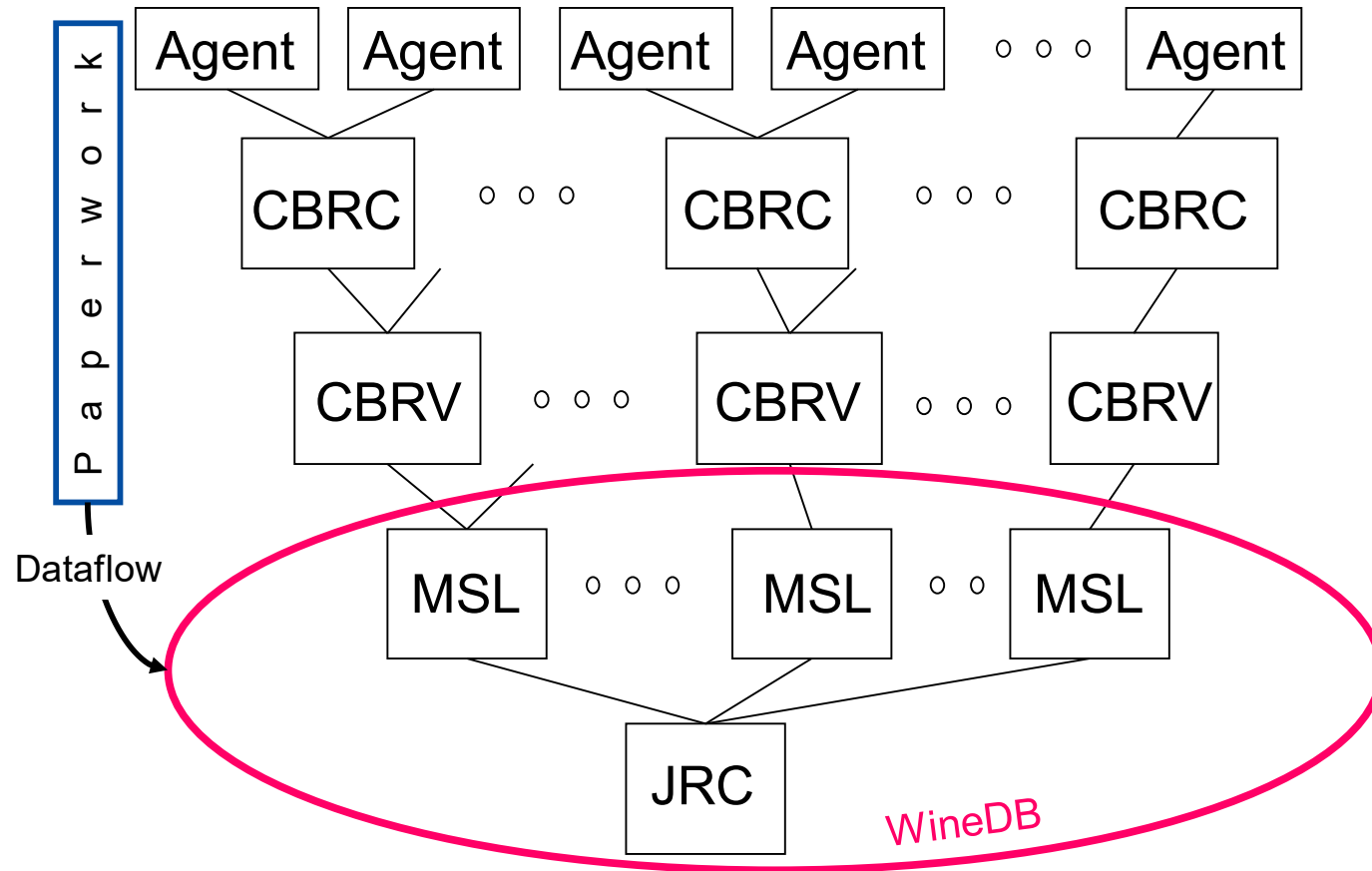


Agents of Regional
Departments of
Competent Bodies
Responsible for
Collection (CBRCs)

Competent Bodies
Responsible for
Vinification
(CBRVs)

Member State
Laboratories
(MSLs)

Joint Research
Centre (**JRC**)



Microvinification

- Every year a number of samples representative of the wine production officially collected by the relevant national authority
- BfR takes samples in Saxony-Anhalt (Saale-Unstrut)
- For each sample, at least **10 kg** of fresh grapes are harvested and vinified under controlled conditions



Microvinification



Questionnaire on the collection and vinification of samples

- Regulation (EC) No **555/2008** , *Annex XVIII*

PART I

1. General information

- 1.1. Sample number:
- 1.2. Name and function of the official or authorised person who t
- 1.3. Name and address of the competent body responsible for taki
- 1.4. Name and address of the competent body responsible for vinifi
body referred to at 1.3:

2. General description of the samples

- 2.1. Origin (country, region):
- 2.2. Year of harvest:
- 2.3. Vine variety:
- 2.4. Colour of the grapes:

3. Description of the vineyard

- 3.1. Name and address of person farming the plot:
- 3.2. Location of the plot
 - wine village:
 - locality:
 - cadastral reference:
 - latitude and longitude:
- 3.3. Soil type (e.g. limey, clayey, lime-clay, sandy):

PART II

1. Microvinification

- 1.1. Weight of the sample of grapes, in kg:
- 1.2. Method of pressing:
- 1.3. Volume of must obtained:
- 1.4. Characteristics of the must:
 - sugar concentration expressed in g/l by refractometry:
 - total acidity expressed in g/l of tartaric acid: (optional):
- 1.5. Method of treating the must (e.g. settling, centrifugation):
- 1.6. Yeasting (variety of yeast used). Indicate whether or not there was spontaneous fermentation:
- 1.7. Temperature during fermentation:
- 1.8. Method for determining end of fermentation:
- 1.9. Method of treating the wine (e.g. racking):
- 1.10. Addition of sulphur dioxide in mg/l:
- 1.11. Analysis of the wine obtained
 - actual alcoholic strength in % vol:



Questionnaire on the collection and vinification of samples

EU Wine Data Bank

Questionnaire on the collection of samples of grapes as stated in Regulation (EC) No 2120/2004, Annex II, Part I.

To be transmitted along with the grapes to the body responsible for vinification

1. General Information:

1.1 Sample number (at collection):

1.2 Official or authorised person who took the sample:

Name:

Function:

1.3 Competent body responsible for taking the sample:

Name:

Address:

2. General description of the sample:

2.3 Vine variety:

Name:
(use list 1)

Comments:

2.4 Colour of the grapes:

Red

White

Grey

3.2 Location of the plot:

Country:

3.2.1 - Wine village:
(use list 2)

2.1.1.1 - Latitude:

2.1.1.2 - Longitude:

3.2.2 - Locality:

3.2.3 - Cadastral reference:

Page 1 of 3

EU Wine Data Bank

Questionnaire on the collection of samples of grapes as stated in Regulation (EC) No 2120/2004, Annex II, Part I.

To be transmitted along with the grapes to the body responsible for vinification

3.1 Person farming the plot:

Name:

Address (1):

Address (2):

Address (3):

Zip code:

Town:

Country:

3.3 Soil type:

With loam With silt With pebbles
 Clayey With schist Other sedimentary soils
 Sandy/ with sandstone Granitic Other metamorphic soils
 Chalky Volcanic

Comments:

3.4 Situation:

Incline:

Plain (0-5%)
 Steep slope (>30%)
 Slight slope (6-15%)
 Terrace
 Moderate slope (16-30)
 Others

Exposition:

North
 North-West North-East
 West East
 South-West South-East
 South

Comments:

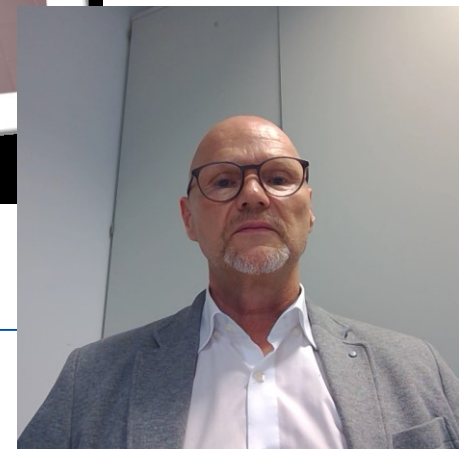
3.5 Number of vines per hectare: 0 - 1000 - 2000 - 3000 - 4000 - 5000 - 6000 - more
(circle a range)

3.6 Age of vineyard: 0 - 10 - 25 - more (years)
(circle a range)

3.7 Altitude (m): 0 - 50 - 150 - 200 - 250 - 300 - 400 - more
(circle a range)

Microvinification

- Grapes with stem and stalk are smushed in a **squeezing machine** („Quetschpresse“)
- Transfer to press back of the **wine press**



Microvinification

- Fermentation in **15 L fermenting balloons**, addition of **dry yeast** (0.3 g per 1L must)
- **7 - 10 days** at room temperature
- Determination of the sugar content (should be < 2 g/L), subsequent storage for 3 days in cold-storage room

- **Decantation** of wine from yeast rub
- Addition of **potassium disulphite** (200 mg per L)
- Cold storage for 10 - 14 days
- Filtration and bottling (layering over with N₂)



Member State Designated Laboratories



- Each year, they are responsible for **collecting samples**, **analysing** them using standard methods, **reporting the results** to the reference wine databank
- In Germany: BfR, LGL Bavaria and LUA Rhineland-Pfalz
- Accredited laboratories (ISO 17025)
- Participate at Proficiency testings organised by Eurofins

Proficiency Testing provides an objective means of assessing and documenting the reliability of the data produced by a laboratory, demonstrating competence to the customers and to the accreditation bodies.

- JRC is organising complementary proficiency testing for challenging samples (e.g. in 2017, sulphited grape must)

Analysis Report



ANNEX XIX

ANALYSIS REPORT

Wine and wine product samples analysed by an isotopic method referred to in Article 31 of Regulation (EC) No 479/2008, to be entered in the JRC isotope databank


I. GENERAL INFORMATION

1. Country:
2. Sample number:
3. Year:

- Regulation (EC) No **555/2008** , *Annex XIX*
 - **General Information:** Country, Year, Vine Variety, Type of Wine,...
 - **Methods and Results**
 - Wine: Alcoholic Strength (% vol), reducing sugars (g/l),...
 - Details of Distillation
 - $(D/H)_I$, $(D/H)_{II}$, R, $\delta^{18}O$ [‰], $\delta^{13}C$ [‰],...

Analysis Report



DEV  **WINE DB**

European Commission **Samples overview**

European Commission > Directorate-General for Informatics > Wine DB > Samples overview

Samples Labs

Sample Status Reference Vintage Search Clear More...

New Validate Delete Duplicate XLSX Export **Actions**

Sample	Status	Reference	Designation	Denomination	Variety	Collection date	NUTS
L11/B2015/S1	Pending	test0123456789 ejf0irjii	Vin doux naturel	demi doux	CVJTAAMC - Maccabeu	8/20/2015	BULGARIA, Severoiztochen, Dobrich, General Toshevo, Balkantsi
L11/B2015/S2	Pending	test dates	Appellation d'origine contrôlée	htrthr	CAT0001 - Korai piros veltelíni	8/11/2015	ESPAÑA, CANARIAS, Canarias, Las Palmas, Agüimes
L11/B2015/S3	Pending				-	8/12/2015	
L11/B2015/S4	Pending		Appellation d'origine	hahaaaaa	AVJTAAGN -	9/15/2015	FRANCE, MÉDITERRANÉE, Lanquedoc-

Language selection

Legal notice | Contact | Search English (en)

User account

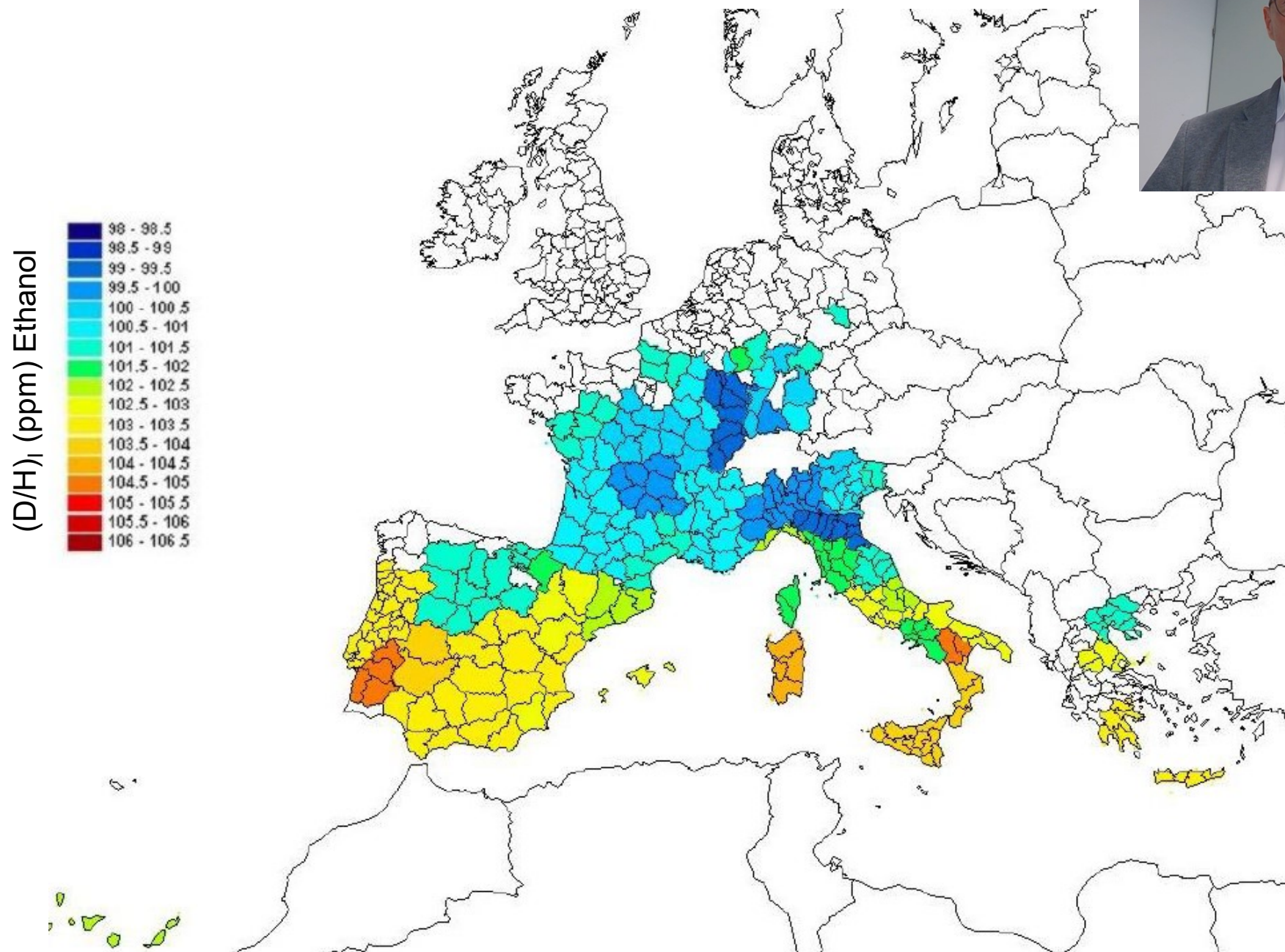
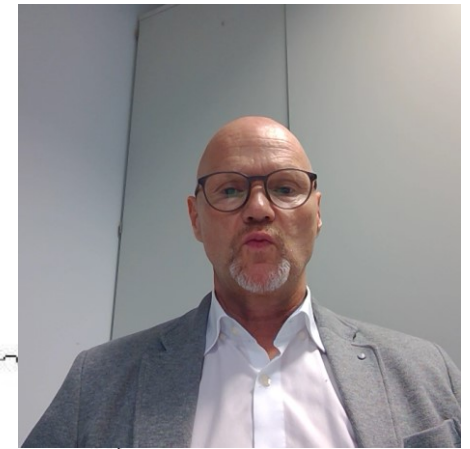
Wine DBTESTER (winedbtester)
Laboratoire SCL IDF-PARIS
France

Query fields

Actions

Results table

Database



Guidelines, Minimum Requirements for the Use of EU Wine Databank in Case of a Suspected Wine



1. Data from traceability: as much information as possible on the suspected wine sample
2. “Enough“ representative reference samples as close as possible to the wine sample
3. Computing of mean value, standard deviation, and confidence limit as a function of number of samples
4. If not “enough“ representative samples: selection of a set of samples with properties as close as possible
5. Meteorological data, discussion with other experts

Martin (OIV vert No. 985), Guillou & Reniero (2002)



Thank you for your attention

Carsten Fauhl-Hassek

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