

## INVESTIGATION ON VALBELLUNA AREA AND ITS OENOLOGICAL POTENTIALITY: CASE STUDY ON PROSECCO DOC

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### Abstract:

**Context and purpose of the study** - Valbelluna valley is an area located in the northeastern Italy. It is extended from the East-West between Feltre and Belluno, along the Piave waterway and enclosed between Cansiglio valley on the South and the Dolomites in the North. Here, the villages of Limana and Trichiana are present, which are considered for decades potentially interesting areas to aim a niche production with own particular properties. The position of this area, its sun exposition, its soil composition and the microclimate, are ideal factors to obtain vines and consequently wines with unique features especially regarding the diversity and complexity aroma. The viticulture is not new in Valbelluna valley, but nowadays the situation is deeply different. Up to the '60s the grape production was widely extended and it led 5,000/6,000 tons. The grape varieties produced were in particular hybrid such as Baco, Clinton and Isabella grapes. Viticulture and agriculture in Valbelluna suffered the countryside depopulation in particular after the Vajont disaster, that cancelled the majority of existent vines and in the postwar period, instead, there was an industrial increasing.

The aim of this study is test and develop Glera vine in a different area it used to be, always an area presents in the Prosecco DOC area: Valbelluna.

**Material and methods** - Some preliminary evaluations showed peculiar characteristics of Prosecco produced in this area such as marked acidity, coming from malic acid, savoury, well balanced, with a high expression and an important presence of floral aromas. Nowadays, this area is developing also the aromatic grapes production like Sauvignon, aromatic Traminer and Riesling. To have an objective evaluation about Valbelluna valley, place in which the Prosecco production is new, a study on sensorial features has carried out. It was led a comparison between Prosecco produced in Valbelluna and Prosecco coming from known DOC area in Veneto and Friuli Venezia Giulia. The sensory analysis was carried out to evaluate the Prosecco DOC position (from Valbelluna) respect the traditional one produced in DOC Veneto Friuli area and if some particular differences would have been between them.

**Results** - The samples analyzed were statistically significant and they were tasted from a group of expert panel. The testing sections needed to define an organoleptic profile and compare the different samples. Data were analyzed with One-way Anova and Tuckey test. The results showed differences between Prosecco DOC from Valbelluna and traditional Prosecco DOC. In particular the Prosecco DOC sensory profile (from Valbelluna) differs from the other ones because of the floral wisteria taste, the olfactory intensity and pleasantness.

The interesting results and differences in the organoleptic profile would allow next studies about the terroir potentiality in viticulture. Future investigations would have been regarding also viticultural aspects and, more in general, social aspects of Valbelluna area to define real potentiality in oenological production to promote a niche product as Prosecco DOC.

**Keywords:** Valbelluna, Prosecco DOC, Glera, terroir, viticulture

### 1. Introduction.



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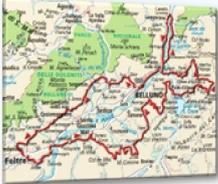
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### CONTEXT & PURPOSE OF THE STUDY



Valbelluna valley is an area located in the northeastern Italy. It is extended from the East-West between Feltre and Belluno, along the Piave waterway and enclosed between Cansiglio valley on the South and the Dolomites in the North.

Valbelluna valley's viticulture tradition changed over times:

- Up to 1960s Valbelluna valley's grape production was widely extended and it led 5,000/6,000 tons. The grape varieties produced were in particular hybrid such as Baco, Clinton and Isabella grapes.
- The valley was disrupted by Vajont Dam disaster (1963) and the majority of existent vines were cancelled.
- Valbelluna valley was inserted as DOC area for Prosecco production, thanks to its ideal sun exposition, soil composition and microclimate present.

The aim of this study was test, characterize and develop Glera vine and its final product (Prosecco sparkling wine) produced in a different area it used to be: Valbelluna.

### MATERIAL & METHODS

The research was lead with the support of CE.Vi.V company and samples were provided by local wineries.

- 1** Preliminary sensory taste analysis was carried out regarding Prosecco already produced in Valbelluna valley
- 2** An expert panel group has taken part to sections of sensory aroma and flavour evaluation to compare Prosecco produced in Valbelluna and Prosecco coming from known DOC area in Veneto and Friuli Venezia Giulia (Italy)
- 3** Elaboration of data was performed using One-way ANOVA analysis and Tuckey test

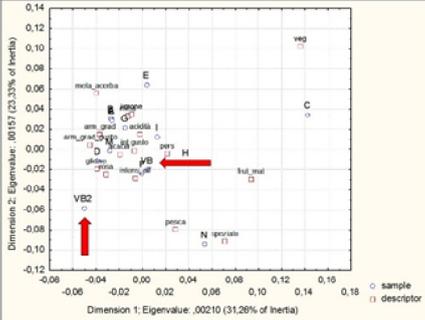


Definizione Prosecco DOC												
Deputazione	Data											
Completone												
PERLAGE												
Dimensione	1	2	3	4	5	6	7	8	9	10	11	12
Persepolonia												
OLIVATO												
Olivone	1	2	3	4	5	6	7	8	9	10	11	12
Alvina	1	2	3	4	5	6	7	8	9	10	11	12
Mela	1	2	3	4	5	6	7	8	9	10	11	12
Pesca	1	2	3	4	5	6	7	8	9	10	11	12
Fruttia matura	1	2	3	4	5	6	7	8	9	10	11	12
Rosa	1	2	3	4	5	6	7	8	9	10	11	12
Mela acerba	1	2	3	4	5	6	7	8	9	10	11	12
Vegetale fresco	1	2	3	4	5	6	7	8	9	10	11	12
Limone	1	2	3	4	5	6	7	8	9	10	11	12
Speziato	1	2	3	4	5	6	7	8	9	10	11	12
Armonia/gradualità	1	2	3	4	5	6	7	8	9	10	11	12
Intensità	1	2	3	4	5	6	7	8	9	10	11	12
GUSTO												
Acidità	1	2	3	4	5	6	7	8	9	10	11	12
Armonia/gradualità	1	2	3	4	5	6	7	8	9	10	11	12
Intensità	1	2	3	4	5	6	7	8	9	10	11	12
Persepolonia	1	2	3	4	5	6	7	8	9	10	11	12

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### RESULTS

AROMA	F	p
glicine	1,871722	<b>0,036747</b>
acacia	1,032826	0,422495
mela	1,467782	0,134343
pesca	1,205924	0,279482
frut_mat	0,407738	0,965577
rosa	1,552489	0,104912
mela_acerba	1,043289	0,413160
veg	1,040625	0,415340
limone	1,066154	0,391883
speziato	0,533998	0,900553
arm_grad	1,698094	0,065312
intens_of	2,112466	<b>0,015855</b>
acidità	1,069860	0,388524
arm_grad_gusto	2,493394	<b>0,003872</b>
int.gusto	0,969821	0,483160
pers	0,552410	0,888269

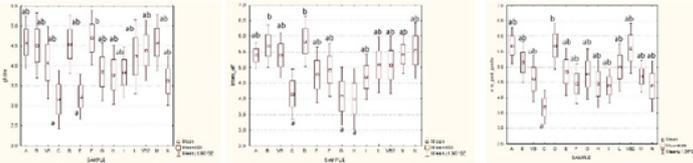



Dimension 1: Eigenvalue: .00210 (31,28% of Inertia)  
Dimension 2: Eigenvalue: .00151 (23,33% of Inertia)

Sensory analysis' results have shown how the majority of studied sensory descriptors do not present a significant difference between samples.

- Both Prosecco DOC produced in traditional areas and Valbelluna content common aromas and flavours with some distinctive differences.
- Prosecco DOC from Valbelluna (VB) resulted well integrate with typical descriptors of Prosecco produced in the historical and well known area in Veneto and Friuli.

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### CONCLUSIONS

The results showed differences between Prosecco DOC from Valbelluna and traditional Prosecco DOC. In particular the Prosecco DOC sensory profile (from Valbelluna) differs from the other ones because of the floral wisteria taste, the olfactory intensity and pleasantness.

The interesting results and differences in the organoleptic profile would allow next studies about the terroir potentiality in viticulture. Future investigations would have been regarding also viticultural aspects and, more in general, social aspects of Valbelluna area to define real potentiality in oenological production to promote a niche product as Prosecco DOC.

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