



**Lien de la Vigne**

VINELINK INTERNATIONAL

*JOURNÉES ANNUELLES LIEN DE LA VIGNE*

*VINELINK ANNUAL DAYS*

PROGRAMME 2022

MAISON DES ARTS ET MÉTIERS 9BIS AVENUE D'IÉNA PARIS 16

1 AVRIL 2022 ASSEMBLÉE GÉNÉRALE DE L'ASSOCIATION

**COMMENT ESSAYER D'ATTÉNUER LES EFFETS DU  
CHANGEMENT CLIMATIQUE POUR LA PRODUCTION DE VIN  
MOUSSEUX TRENTO DOC**

*HOW TO TRY TO MITIGATE THE EFFECTS OF CLIMATE CHANGE  
FOR THE PRODUCTION OF TRENTO DOC SPARKLING WINE*

*CARLO DE BIASI — CANTINA TOBLINO SCA*





## Trentino Wine Region of the Year 2020

TRENTODOC



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- WINES FROM TRENTINO, THE MARK OF THE TERRITORY
- ABOUT 10,000 HECTARES IN TRENTINO ARE CULTIVATED WITH VINEYARDS (ABOUT 2% OF TOTAL VINEYARD AREA IN ITALY) , OF WHICH ABOUT 10% GROWN WITH GRAPES FOR SPARKLING WINES FOR THE PRODUCTION OF A TOTAL OF 9 MILLION BOTTLES PER YEAR OF TRENTODOC. THE SOILS AND CLIMATE MAKE TRENTINO A UNIQUE TERRITORY, ESPECIALLY SUITED FOR THE PRODUCTION OF CLASSIC METHOD SPARKLING WINES.
- THE MOUNTAINS, A PRIMARY RESOURCE FOR TRENTODOC
- TRENTODOC GRAPES COME FROM VINEYARDS GROWN BETWEEN 200 AND 900 METERS (656 TO 2952 FEET) ABOVE SEA LEVEL, IN AN ENVIRONMENT CHARACTERIZED BY SIGNIFICANT DIURNAL TEMPERATURE VARIATIONS, GIVING THE GRAPES AROMATIC COMPLEXITY, ELEGANCE, AND ACIDITY. IN ADDITION, THE SOILS HAVE AN EXCELLENT DRAINAGE AND AERATION, AS THEY ARE RICH IN LIMESTONE AND HAVE A HIGH AMOUNT OF SILICA. THIS LEADS TO A GREAT AROMA PROFILE. THE HIGH ALTITUDES AND MOUNTAINS ARE KEY FACTORS FOR TRENTODOC.

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“THE FACT THAT THERE IS A CHANGE TAKING PLACE IS UNDENIABLE, NOT ONLY IN STRICTLY CLIMATIC TERMS, BUT ALSO IN TERMS OF SPACE AND TIME. WHAT WE ARE TRYING TO DO, HERE IN TRENTINO, ESPECIALLY FOR CHARDONNAY, IS TO FOCUS ON CAREFUL MANAGEMENT OF THE VINEYARDS, WHICH MEANS THINKING AT 360 DEGREES: FROM THE RELATIONSHIP OF THE PLANT WITH THE SOILS AND WATER TO THAT WITH THE LIGHT AND HEAT, IN ORDER TO PRESERVE AS MUCH AS POSSIBLE THE IDEAL MIX FOR THE PRODUCTION OF HIGH QUALITY SPARKLING WINE BASES, EVEN IN A SHORTER PRODUCTION CYCLE ”.

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"WHAT IS HAPPENING IN RECENT YEARS WITH A CERTAIN REGULARITY IS AN ANTICIPATION OF THE VINE CYCLE, MORE OFTEN WE EXPERIENCE AN EARLY BUDDING, WHICH THEN TRANSLATES INTO HARVEST OPERATIONS TO BE CARRIED OUT EARLIER THAN EXPECTED".

IF WE ARE TALKING ABOUT CHARDONNAY, IN THE HOTTEST PARTS OF THE VALLEY, WE USUALLY START SOON AFTER AUGUST 15TH TO FINISH AT THE END OF SEPTEMBER-FIRST WEEK OF OCTOBER IN THE HILLY AND MOUNTAINOUS AREAS. IN THE PAST, WE USED TO FINISH EVEN AT THE END OF OCTOBER.

THE VINE CYCLE HAS NOT CHANGED AS THE TIME BETWEEN FLOWERING AND HARVEST TENDS TO REMAIN STABLE, WHAT HAS CHANGED IS THE PERIOD IN WHICH THE CYCLE TAKES PLACE, ON AVERAGE EARLIER THAN IN THE PAST. SINCE THE CHARDONNAY IS DESTINED FOR THE PRODUCTION OF QUALITY SPARKLING WINES, IT IS ESSENTIAL THAT THE VINE COMPLETES THE CYCLE CORRECTLY, OTHERWISE THE GRAPES MAY COME TO THE CELLAR WITH FAULTS ON THEIR ORGANOLEPTIC AND CHEMICAL CHARACTERISTICS.

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THE DOGMA MUST BE:

RIPE GRAPES ON A RIPE  
SHOOT.

THIS IDEAL SITUATION IS  
EASIER TO MAINTAIN AT HIGH  
ALTITUDES, WHERE COOLER  
WEATHER AND LONGER  
HOURS OF LIGHT NATURALLY  
PROLONG THE CYCLE OF  
THE VINE, WHILE AT THE  
BOTTOM OF THE VALLEY  
MORE PRECAUTIONS ARE  
REQUIRED.

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CARLO DE BIASI – CANTINA TOBLINO SCA

**Sigla:** LAGP0003

**Ricolligamento UTS:** LAG CLAZ

**Grado di ricollegamento:** osservazione tipica

**Località:** Campagna di Calavino

**Pendenza:** 2%

**Natura della forma:** piana di alluvionamento proglaciale (sandur) (dam)

**Elemento morfologico:** spalla (Parte alta del versante a linee di deflusso superficiale parallele a pendenza crescente) (dam)

**Materiale parentale:** depositi fluvio-glaciali: sabbiosi molto ghiaiosi di litologia mista carbonatica (70%) e di litologia mista silicatica (30%)

**Substrato:** depositi fluvio-glaciali sabbiosi molto ghiaiosi di litologia mista carbonatica (70%) e di litologia mista silicatica (30%)

**Pietrosità:** 1% ghiaia

**Falda:** assente

**Drenaggio:** buono

**Permeabilità:** moderatamente alta

**Uso del suolo:** vignato

**Data di descrizione:** 08/06/2012

**Classificazione**

**Soil Taxonomy (KEYS):**

**WRB (2006):** Haplic Cambisole (Calcic)

**Descrizione del profilo**

I colori sono stati descritti allo stato umido.

**Ap:** (0-32 cm), colore di massa bruno scuro (7.5YR4/2); umido; stima della tessitura franca; scheletro frequente; di litologia mista carbonatica e di litologia mista silicatica, isodiametrica arrotondata, poco alterata; struttura principale poliedrica subangolare molto fine, forte, struttura secondaria poliedrica subangolare media, moderata; resistente (umido), fragile (umido); pori fini abbondanti e medi abbondanti; poche radici molto fini e poche medie; effervescenza forte; limite chiaro lineare.

**Bw1:** (32-53 cm), colore di massa bruno (7.5YR4/3); umido; stima della tessitura franca; scheletro abbondante; di litologia mista carbonatica e di litologia mista silicatica, isodiametrica arrotondata, poco alterata; struttura principale poliedrica subangolare media, moderata; struttura secondaria poliedrica subangolare molto fine, moderata; resistente (umido), fragile (umido); pori medi abbondanti; poche radici molto fini e poche medie; effervescenza violenta; limite chiaro.

**BC:** (53-75 cm), colore di massa bruno chiaro (7.5YR6/4); umido; stima della tessitura sabbioso franca; scheletro abbondante; di litologia mista carbonatica e di litologia mista silicatica, isodiametrica arrotondata, mediamente alterata; struttura principale assente (orizzonte incoerente); sciolto (umido); frequenti concrezioni di carbonati di Ca e Mg; poche radici medie e poche molto fini; effervescenza violenta; limite graduale lineare.

**C:** (75-90 cm), colore di massa bruno tenue (10YR6/3); umido; stima della tessitura sabbioso franca; scheletro abbondante; di litologia mista carbonatica e di litologia mista silicatica, isodiametrica arrotondata, mediamente alterata; struttura principale assente (orizzonte incoerente); sciolto (umido); frequenti concrezioni di carbonati di Ca e Mg; effervescenza violenta; limite sconosciuto.

Code	Uso	Lat	Long	Alt	Decl	Anglo	pH	Temperatura	Hum	Cond	WEC	EC	Conc	Org	Nit	Phos	K	Ca	Mg
Ap	0	11	44	22	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Bw1	32	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
BC	53	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
C	75	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90

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SO WHAT ARE THE CORRECTIVE MEASURES TO PRESERVE ACIDITY AND SUGARS?

THERE ARE MANY FACTORS TO KEEP AN EYE ON.  
A FUNDAMENTAL ONE IS **WATER MANAGEMENT**, HENCE THE IRRIGATION OF THE VINEYARD. IRRIGATION IS A CRUCIAL FACTOR TODAY, AS IF THE VINE UNDERGOES WATER STRESS OR HEAT STROKE, LYMPHATIC FLOW BREAKS OCCUR, LEADING TO QUALITATIVE DETERIORATION AND APOPLEXY.





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**WHAT ABOUT THE MANAGEMENT OF THE FOLIAR SYSTEM?**

ANOTHER DETERMINING FACTOR, ESPECIALLY ON THE ESPALIER TRAINING SYSTEMS: LEAF STRIPPING, INTENSITY, SIDES, EXPOSURE, VINE HEAD MANAGEMENT, SHADE AND LIGHT AREAS. EVERYTHING MUST BE REINTERPRETED IN ORDER NOT TO LEAVE THE GRAPES EXPOSED TO THE SUN FOR TOO LONG, AS EXCESSIVE INSOLATION LEADS TO EARLY RIPENING WITH TOO HIGH TEMPERATURES ON THE BUNCHES THAT LEAD TO A CONSEQUENT QUALITATIVE DECAY.

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WHAT ABOUT THE MANAGEMENT OF THE FOLIAR SYSTEM?

LUCKILY IN TRENTINO WE USE THE **PERGOLA** QUITE OFTEN, SO THE PROBLEM OF THE SUN IS LESS FELT ...

THE PERGOLA IS MAINLY USED AT THE BOTTOM OF THE VALLEY, WHILE AS YOU GO UP IN ALTITUDE - WE START FROM THE 400 METERS UP TO 800 METERS - WE FIND ESPALIER PLANTS, BECAUSE THE HIGHER YOU GO, THE MORE YOU NEED GRAPE RIPENESS, THEREFORE MORE HOURS / DAY OF EXPOSURE TO SUNLIGHT AND HEAT.

TODAY IN TRENTINO WE HAVE VINEYARDS WHERE, ONLY 30 YEARS AGO, WE WOULD HAVE NEVER IMAGINED THEY COULD BE PLANTED. THIS IS ANOTHER EVIDENCE OF THE CLIMATE CHANGE.

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SPRING FROSTS AND HAIL: THE NEW DISEASES?



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## THE VINE MOVES UP IN ALTITUDE

### HOW TO IDENTIFY NEW POTENTIAL VINEYARDS WITH THE USE OF TECHNOLOGY

THE IDEA OF USING DSS, SUCH AS ENOGIS, PICA OR OTHERS, WAS BORN TO ENHANCE THE POTENTIAL OF LOCAL WINEMAKING THROUGH THE RESEARCH AND STUDY OF THE LOCAL CONTEXT, WITH THE FOLLOWING OBJECTIVES:

- 1 - QUALIFY THE PRODUCTIONS (SEGMENTATION OF THE OFFER) THROUGH THE CREATION OF ADVANCED SYSTEMS OF CONNECTION BETWEEN THE BASIC COMPONENTS OF THE WINE PRODUCTION SYSTEM, THE "PLANT - CLIMATE - SOIL" COMPLEX.
- 2 - TO QUALIFY THE MANAGEMENT SYSTEMS OF THE "ENVIRONMENT-LANDSCAPE-TERRITORY" COMPONENT, WITH A VIEW TO TOTAL SUSTAINABILITY THAT TAKES INTO CONSIDERATION THE 3 MAIN SPHERES: ECOLOGICAL, SOCIAL AND ECONOMIC

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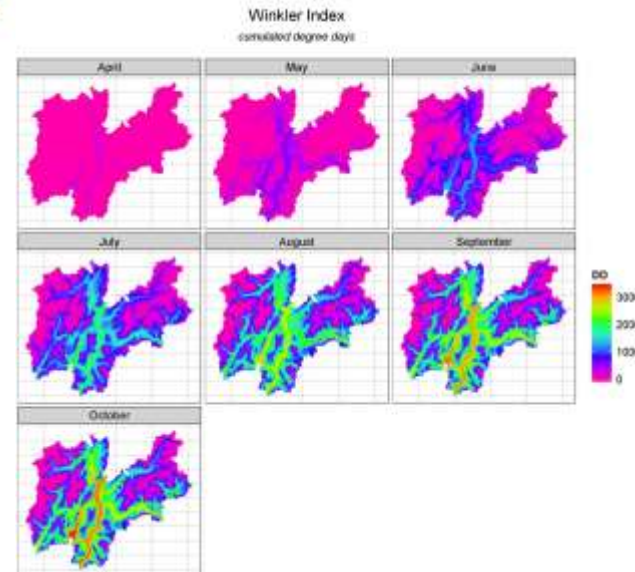
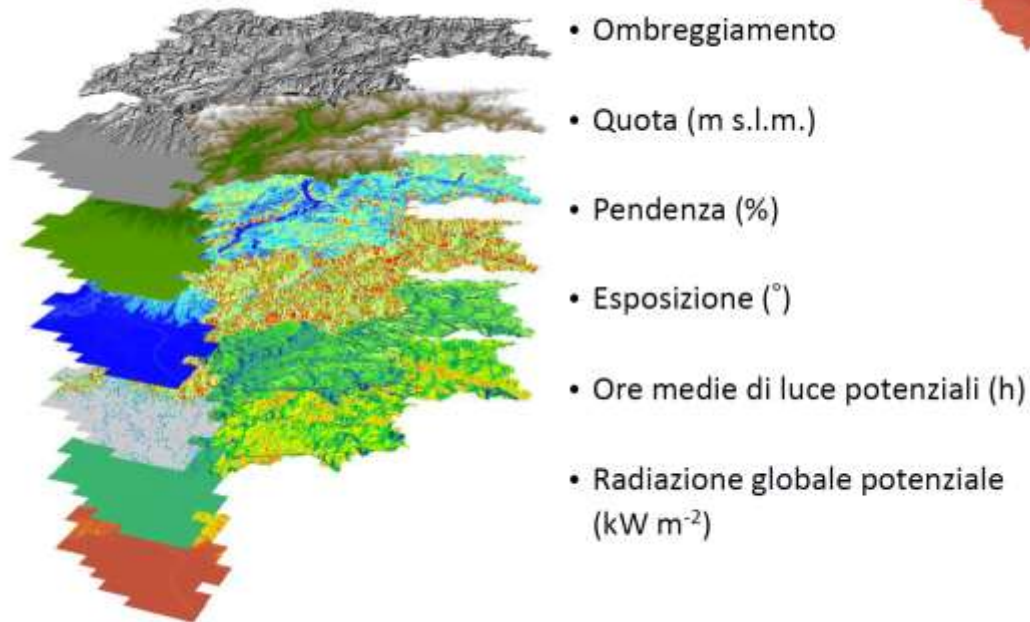
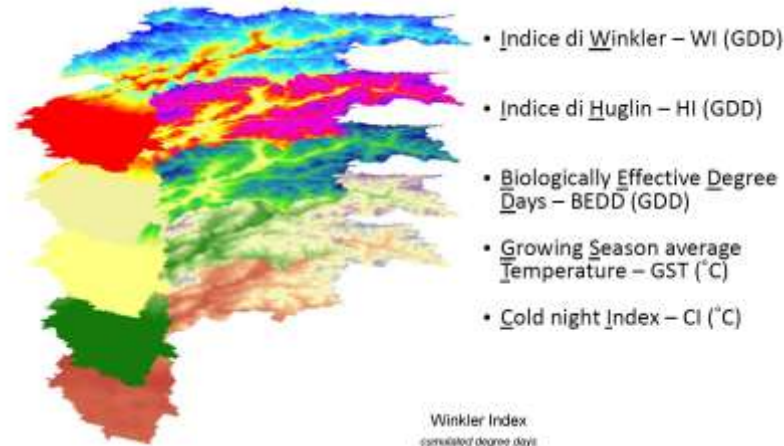


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## INVESTIGATIONS TO IDENTIFY:

- 1 - VINEYARDS TO BE CONVERTED
- 2 - NEW AREAS TO PLANT VINEYARDS



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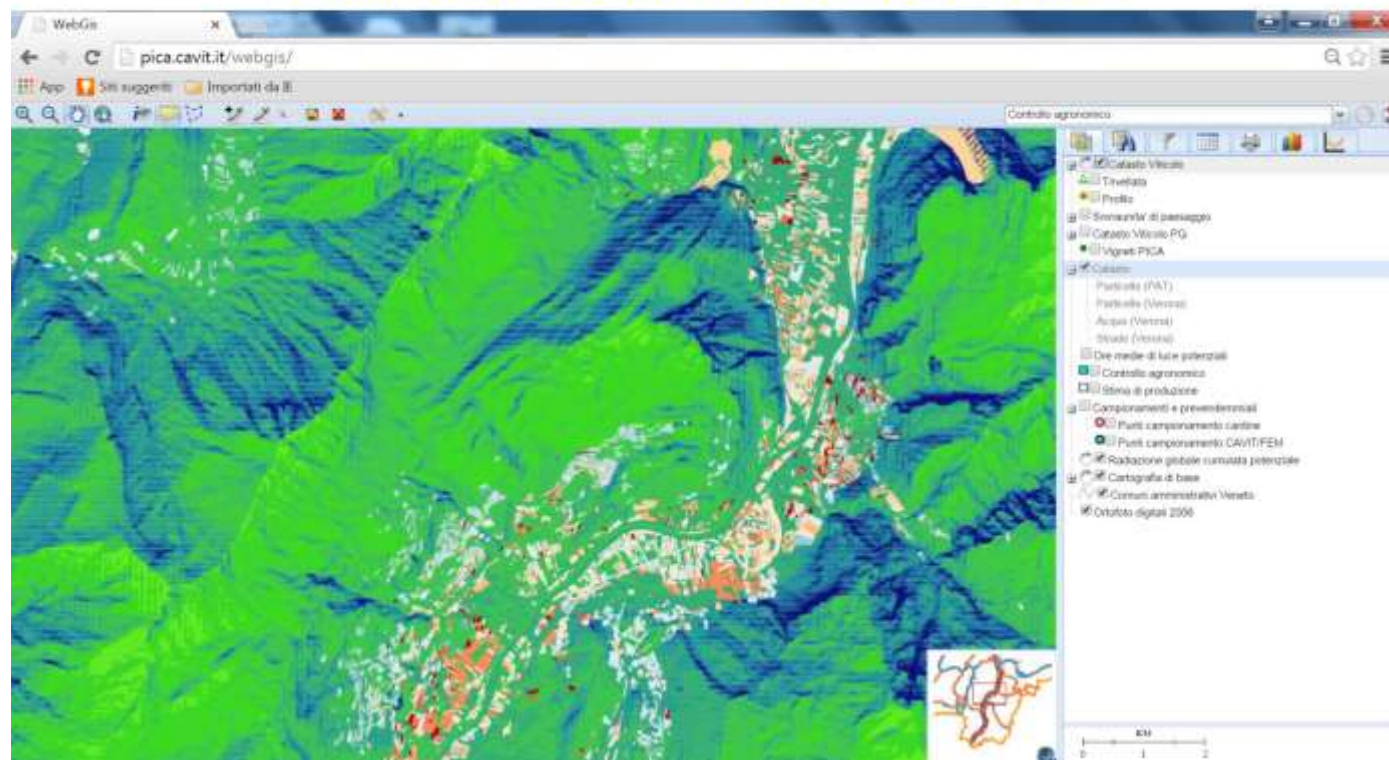




## COMMENT ESSAYER D'ATTÉNUER LES EFFETS DU CHANGEMENT CLIMATIQUE POUR LA PRODUCTION DE VIN MOUSSEUX TRENTO DOC *How to try to mitigate the effects of climate change for the production of Trento DOC sparkling wine*

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### ATLANTE GEO-METEOCLIMATICO RADIAZIONE SOLARE GLOBALE POTENZIALE



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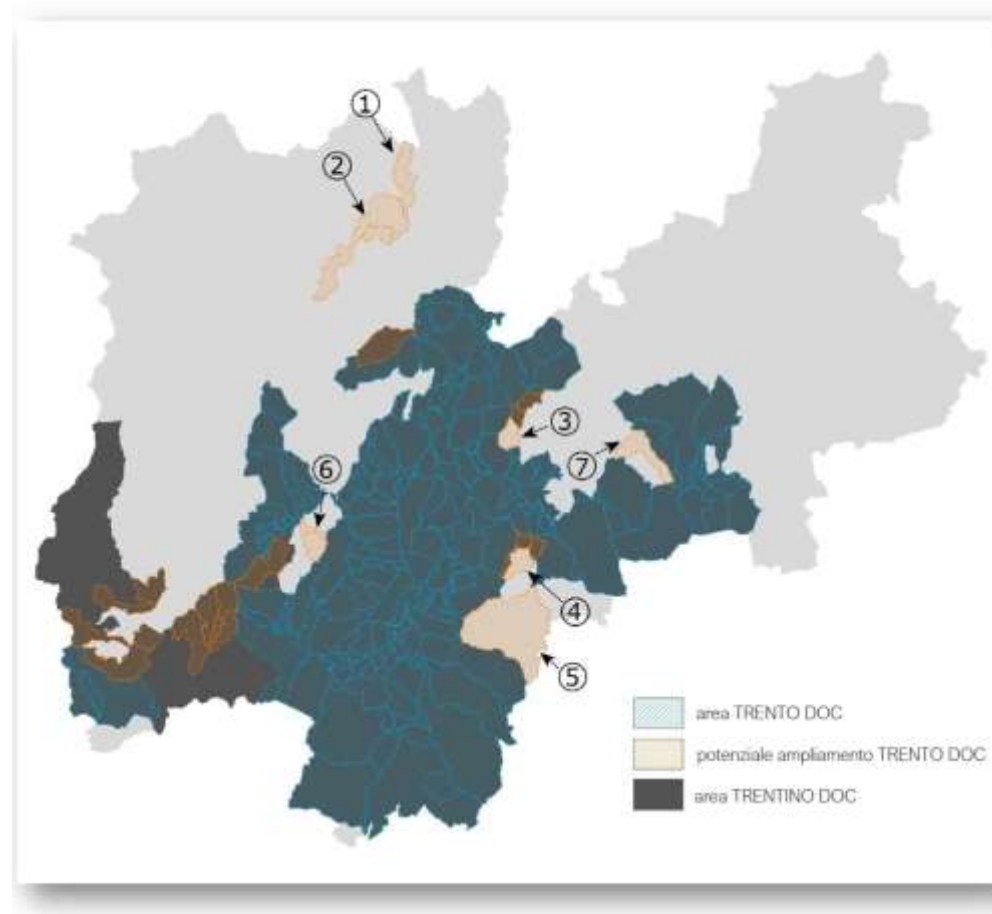
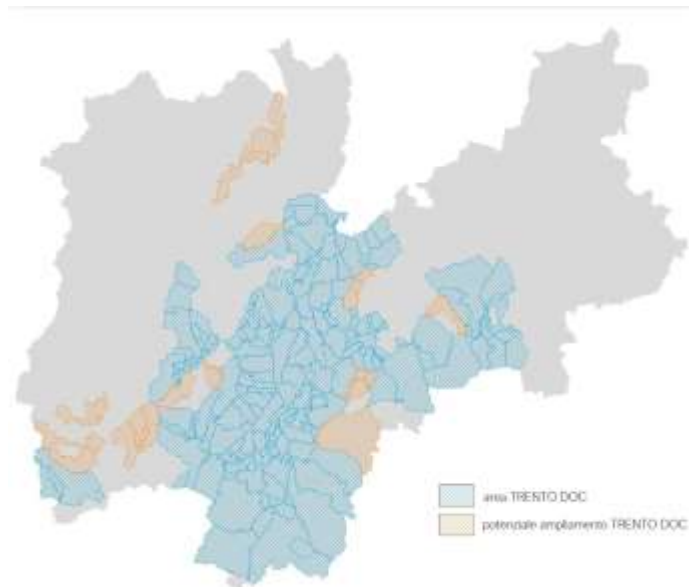
GENERALE			SUPERFICIE RECUPERABILE (ha)							SUPERFICIE NON RECUPERABILE (ha)	
VARIETA'	SUPERFICIE TOTALE (ha)	VARIETA' COLTIVATE IN SITUAZIONI NON OTIMALI (ha)	CHARDONNAY BS	HARDONNAY BV	PINOT BIANCO	SAUVIGNON	TRAMINER	LAGREIN	PINOT NERO	SUOLI ALLUVIONALI	FUORI ZONA
PINOT GRIGIO	1.684,9	169,4	33,2	34,7	1,5	43,4	38,7	8,2	9,7	0,0	0,0
CHARDONNAY	1.599,4	52,7	0,0	0,0	0,0	19,9	26,6	0,0	6,2	0,0	0,0
MULLER THURGAU	641,0	116,7	78,3	1,0	4,2	1,5	4,1	0,0	27,6	0,0	0,0
MOSCATO GIALLO	79,1	15,0	2,1	2,4	0,0	2,5	0,7	0,5	2,8	0,0	3,9
MERLOT	376,2	167,8	19,3	3,8	2,3	10,3	10,5	0,1	4,9	113,4	3,3
TEROLDGO	222,5	31,5	1,5	10,0	0,3	9,6	7,6	1,4	1,6	0,0	0,0
MARZEMINO	187,3	33,3	0,2	11,7	0,0	1,8	0,0	0,0	0,5	0,0	19,1
SCHIAVA	142,5	39,4	25,0	4,7	0,0	3,6	2,0	0,2	2,3	0,0	1,7
CABERNET	120,4	8,0	4,1	2,1	0,0	0,7	0,7	0,0	0,3	0,0	0,0
LAGREIN	116,4	19,7	6,3	2,7	0,0	1,7	1,8	0,0	2,2	4,4	0,0
REBO	21,8	13,7	7,2	3,3	0,0	2,5	0,7	0,0	0,0	0,0	0,0
ALTRE VARIETA'	636,4	7,5	1,7	5,0	0,0	0,2	0,0	0,3	0,8	0,0	0,0
TOTALE	5.827,8	674,7	178,8	81,3	8,3	97,6	93,3	10,7	59,0	117,7	28,1
Note:			11 %	5 %	21 %	145 %	36 %	9 %	29 %	-	-
Escluse le provincia di VR e BZ			528,9 (+9%)							145,8	
* = dati Trento 2018			674,7 ha								



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## HOW TO TRY TO MITIGATE THE EFFECTS OF CLIMATE CHANGE FOR THE PRODUCTION OF TRENTO DOC SPARKLING WINE

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LEGGENDA:

- ① NOVELLA (C.C. REVO)
- ② CLES
- ③ FORNACE

- ④ ALTOPIANO DELLA VIGOLANA (C.C. VATTARO)
- ⑤ FOLGARIA
- ⑥ COMANO TERME (C.C. LUNDO e POIA)
- ⑦ TORCEGNO

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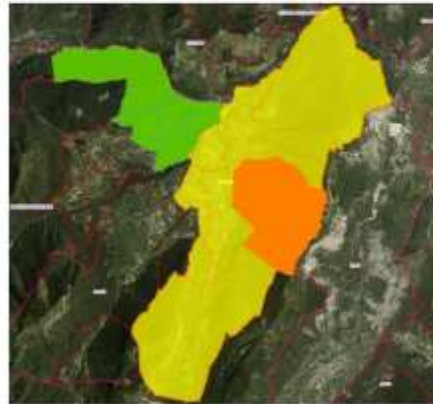
In giallo il comune amministrativo di Comano Terme, in verde l'ex comune catastale Bleggio inferiore già presente nella Trento Doc e in arancione i comuni catastali di Lundo e Poia, aree di interesse per una possibile espansione della Trento Doc.

Denominazione ampliamento: Comano Terme, limitatamente ai comuni catastali di Lundo e Poia.

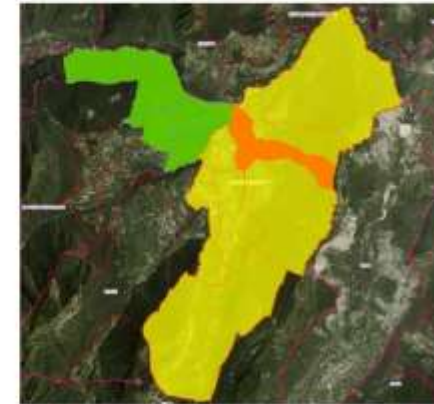
Comano Terme: LUNDO, POIA

Comune amministrativo: Comano Terme  
Comuni catastali: Lundo e Poia

C.C. LUNDO



C.C. POIA



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THE MAP SHOWS:  
CADASTRAL MUNICIPALITY COMANO AND BLEGGIO  
AREA OF WINE INTEREST FOR TRENTODOC



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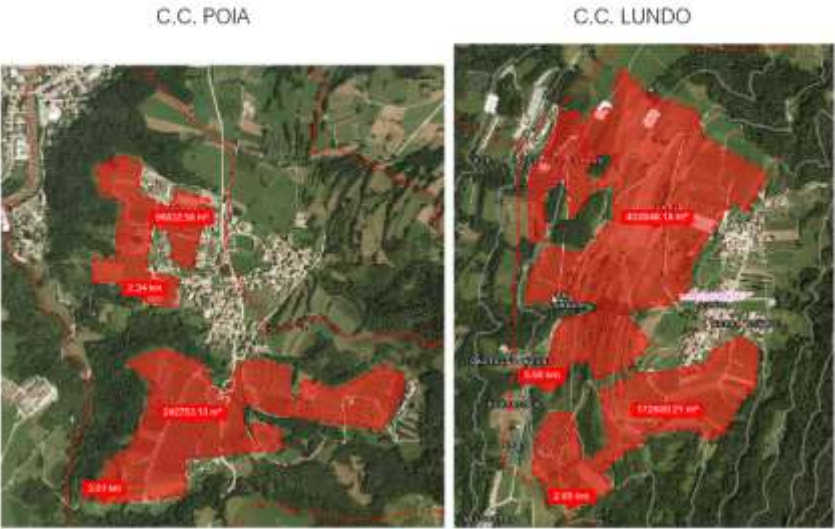
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IMMAGINE SATELLITARE 3D CON IN EVIDENZA L'AREA DI INTERESSE:



IMMAGINE 2D IN DETTAGLIO:



Zona interessata	Fascia altimetrica	Esposizione	HA coltivabili	TOT HA COLTIVABILI
LUNDO SOPRA PAESE	550 - 750	SUD, SUD-OVEST	43	95
LUNDO SOTTO PAESE	550 - 750	OVEST, NORD-OVEST	17	
POIA	500 - 650	NORD-OVEST	34	

IN QUESTO AREALE LA VITICOLTURA È GIA' INSEDIATA:

VARIETA'	FORMA DI ALLEVAMENTO	POIA
PINOT NERO	Guyot	0.9
CHARDONNAY	Guyot	0.3
TOT SUP VITATA [ha]		1,2

\*Dati tabelle: elaborazione da fonte PAT 2017 e cantina Toblino 2021

NOTE: esposizione buona, consorzio irriguo presente, coltivazione prevalente a seminativo e in parte melo.



THE DATA PROCESSED BY THE  
DSS ARE COMPARED WITH THE  
EXPERIMENTAL VINEYARDS  
ALREADY PRESENT IN THE AREAS  
IDENTIFIED



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CLIMATE IMPETUS PROJECT



TRENTO DOC



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