

Teran Karst

the mysteries and wonders
of Karst's signature wine

Interreg
Italia-Slovenija



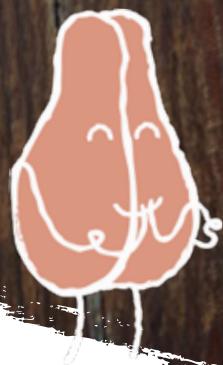
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CARSO KRAS
The logo for Carso Kras, featuring the word 'CARSO' above 'KRAS' with a stylized 'S' icon.

Unlocking Teran's Many Mysteries

a Karst wine without equal



*Unveil the 7 mysteries of
Teran, the deep ruby wine
of the Karst.*



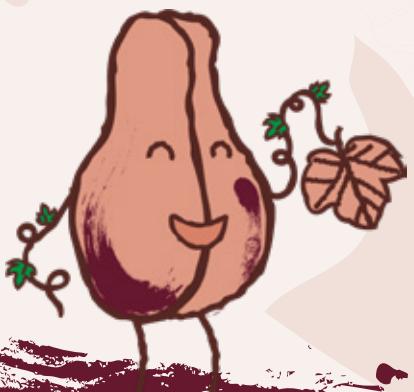
*Teran is one of Europe's most
singular and intriguing wines.*

With every drop, Teran invites you to discover its true character as you savour its distinctive aroma and let its inimitable flavour gently coat your palate. It all begins with the Refošk grape, known locally as Teranovka. The uniqueness of its fruit stems from the Karst's remarkable red soil. The climate on the Karst plateau is singular as well, underscoring Teran's bold character. Even the wine's production tradition, refined and perfected over thousands of years, remains surprisingly distinctive.

Teran is unique.

Before you taste it with relish and deep respect, be spellbound by its sophisticated mysteries. Some of them can be uncovered in old writings and legends preserved by local lore. More are being revealed through modern scientific research. And some are simply woven into everyday Karst life.

Teran is Karst's priceless gem.



Mystery 1

Teran's character is the product of distinct natural conditions and millennia of cultivation.



Teran

a globally unmatched wine

The Karst plateau is home to the Refošk grape, which births the Teran wine.

While the Refošk grape variety is not exclusive to the Karst, it's no stranger to neighbouring regions, where its final product is called Refošk. However, it is in the Karst that this variety finds truly exceptional conditions, making its wine singular in more ways than one. The large, ruby-red grape bunches ripen abundantly on both traditional high wooden vine arbours and in modern vineyards. Through careful tending and the gentle influence of the Karst climate, each berry captures the remarkable character of the region's rich red soil, *jerina*.

Teran, produced in the Karst according to time-honoured methods, is easy to recognize even for casual tasters, thanks

to its deep, dark-red hue, its distinctive berry-like aroma, and its pleasant acidity. With a bit of guidance during tasting, one can uncover even more subtle flavours and delicate nuances hidden within the wine.

Refošk or Teran?

For centuries, the Refošk variety has raised questions about why its wines vary so markedly across regions—Slovenia and Italy's Karst plateau, Slovenian and Croatian Istria, the Vipava Valley, Goriška Brda, and Italian Friuli—and whether they might even represent distinct varieties. With advances in knowledge, experts have gradually found the answer. The differences boil down to soil composition and climatic conditions.

Thus, Teran from the Karst stands out in many ways. Its unique composition, including a higher content of red pigments and total acidity, distinguishes it from other Refošk wines and red wines in general.

Thanks to these special characteristics and the traditional methods of production in the Karst Plateau winegrowing sub-district, **Teran in Slovenia is protected with the PTP label, i.e. a recognized traditional designation**. In Italy, Teran carries the DOC designation.

Teran Wine

Karst's iconic highlight

Teran's reputation — more than just on the grapevine?

Over the past centuries, the properties of Teran have been studied by numerous experts. Its essential characteristics and unique qualities are well known, while the aspects that are influenced by changing climatic conditions remain the subject of ongoing research. But what we know about Teran today is intriguing. Among the red wines produced in this part of Europe, Teran has an above-average content of red pigments, i.e. anthocyanins, which scientists associate with various positive effects on human health. Beyond its deep colour, Teran is also distinguished by its aroma of berries and forest fruits, rich mineral

character, moderate tannins, higher extract content, and pleasant acidity. The wine's refreshing acidity, which is said to stimulate the appetite, results from a favourable balance between tartaric and lactic acids. With an average alcohol content of around 12% by volume, Teran belongs to the category of lighter red wines.

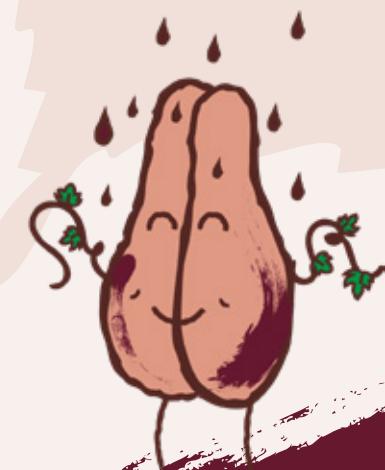
Teran's health benefits.

Rich in plant-based foods and traditionally accompanied by wine, the Mediterranean diet is celebrated for its protective effects on health. These foods are not only full of essential nutrients but also molecules called polyphenols, which support cellular vitality. Research¹ has shown that "dietary polyphenols help



protect the body against cancer, chronic cardiovascular and neurological diseases, inflammatory conditions, metabolic disorders, and obesity."

Wine, in particular, is a rich source of polyphenols, and Teran stands out for its high content of red pigments, or anthocyanins, a key subgroup of polyphenols. These somewhat mysterious molecules have been the focus of numerous scientific studies, which increasingly highlight their beneficial effects on brain function. Moderate consumption of Teran can help keep us healthy. But careful: this effect is seen when enjoying one to two deciliters² per day. Beyond that, the benefits diminish, as the body cannot absorb the compounds and simply eliminates them. And of course, excessive drinking is widely known to be detrimental to health.



Mystery 2

Teran's abundant red pigments can contribute to well-being when enjoyed responsibly.



Mystery 3

The red soils of Karst hold the key to Teran's singular character.



Karst

a unique wine terroir

It takes a remarkably diverse region to produce a wine this special.

From a geological perspective, the Karst is a world of its own. Located in southwestern Slovenia and extending partly across the border to the Gulf of Trieste in Italy, the Karst Plateau is referred to among geologists as the Classical Karst. The region is largely defined by water-soluble limestone. This led to the first systematic cave explorations, laid the foundations of karstology, and gave names to many of the peculiar karst phenomena. Their formation resulted from varying climatic conditions throughout geological history, while today the Karst is shaped by a mix of Mediterranean and continental climates: strong bora wind, cool nights, abundant sunshine and warmth, sufficient rainfall, yet frequent droughts due to the soil composition and the porosity of the rocks.

On this rocky plateau, forced to survive without surface water, the people of the Karst learned to live. From a seemingly harsh and barren landscape arose a unique cultural landscape, one of the oldest in Europe. Stone was used as the main construction material and the sparse patches of soil that nature had provided were carefully cultivated and protected. And long ago, man also started cultivating domesticated grapes.

The special red soil of the Karst.

A defining feature of the Karst plateau is its carbonate soils, specifically limestone on which, over millions of years, a red soil (known as terra rossa or jerina) formed. Scientists believe that this red soil is the result of long-transformed sediments of clay and silt, containing significant residues of insoluble limestone and dolomite, along with various impurities. Among these, the presence of quartz plays an important role, influencing the soil's chemical and physical properties, while iron oxide gives the soil its characteristic red colour. From limestone deposits of different geological ages, two primary types of karst soil developed, differing mainly in depth and quartz content.

Karst soils are heavy yet well-draining and airy. And in dry summer months they can become parched. Research shows that moderate drought stress increases the content of red pigments, a hallmark of Teran wine. Thanks to the unique structure of the Karst soils, vine roots can grow deep into cracks in the limestone, reaching water sources far below. Yet another remarkable feature of the Karst.





Teran's History *at least three millennia of cultivation*

*A surprising archaeological
discovery: prehistoric
grape seeds.*

Until recently, it was believed, based on written sources about the area, that grapes were cultivated over two thousand years ago. The latest archaeological excavations in the cellar of a prehistoric site, on the grounds of today's Štanjel Castle Wine Shop, uncovered surprising discoveries³, pushing back the timeline by at least five centuries. Researchers found charred seeds and fruits in the archaeological layers. Particularly intriguing were numerous charred grape seeds from domesticated vines, dating to the early 4th century BCE. Among the finds

were also fragments of a ceramic silo bearing a so-called Venetic inscription, currently the oldest known ceramic inscription in Slovenia. Archaeo-metric studies suggest that the vessel was locally made and, based on traces of alcohol and the abundance of seeds, was used for processing rather than storing wine. These valuable discoveries attest that winemaking existed in the Karst in prehistoric times, specifically at the end of the Early Iron Age.

*Teran's reputation through
the ages.*

Researchers of Teran's history continue to be intrigued by Roman author and scholar Pliny the Elder's (23–79 CE)

mention of the Pucino wine as "...the blackest of all wines... grown in the Gulf of the Adriatic Sea, not far from the stony hill of the source of Timavo..." He even noted that Livia, the wife of Emperor Augustus, credited this wine for her longevity. While the mystery remains, most historians today agree that Pliny was indeed describing Teran.

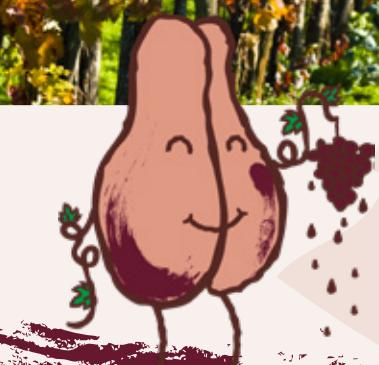
Throughout the centuries, Teran was highly appreciated and sought after. In the 13th century, farmers in the Trieste region could pay taxes to rulers and landlords with wine, Teran and Rebula specifically. By the 15th century, the origin of the name Teran was already being discussed, and from the 17th to the early 20th century, writers documenting viticulture in the region consistently mentioned Teran as an important and distinct wine. In the late 19th century phylloxera devastated vineyards across the region, and the slow recovery was disrupted by two world wars. Yet, Teran's reputation never faded. With vineyard restoration efforts at the close of the 20th century, Teran experienced a revival.

Mystery 4
The discovery of
charred grape
seeds from 2,400
years ago reveals
Karst's extraordinary
winemaking heritage.



Vineyards and Cellar Work

an exceptional heritage



Mystery 5

Teran's unique production method is a valued part of the region's heritage.

The wooden latnik as a hallmark of the Karst.

Carefully tended vineyards enhance the cultural landscape of the Karst. Until the second half of the last century, vines in the Karst were most commonly trained on vine arbours called *latnik*, a traditional Karst training system with wooden posts and crossbars, where the vine's stem could reach up to 1.6 meters in height. Today, these characteristic training systems represent only about one-tenth of Karst vineyards, yet they remain a cherished part of the region's heritage. The rest of the vineyards are planted using classic single- or double-Guyot system. Come autumn, as the vineyards glow in vibrant shades of red creating breathtaking winescapes, Karst's iconic landscape truly comes alive.

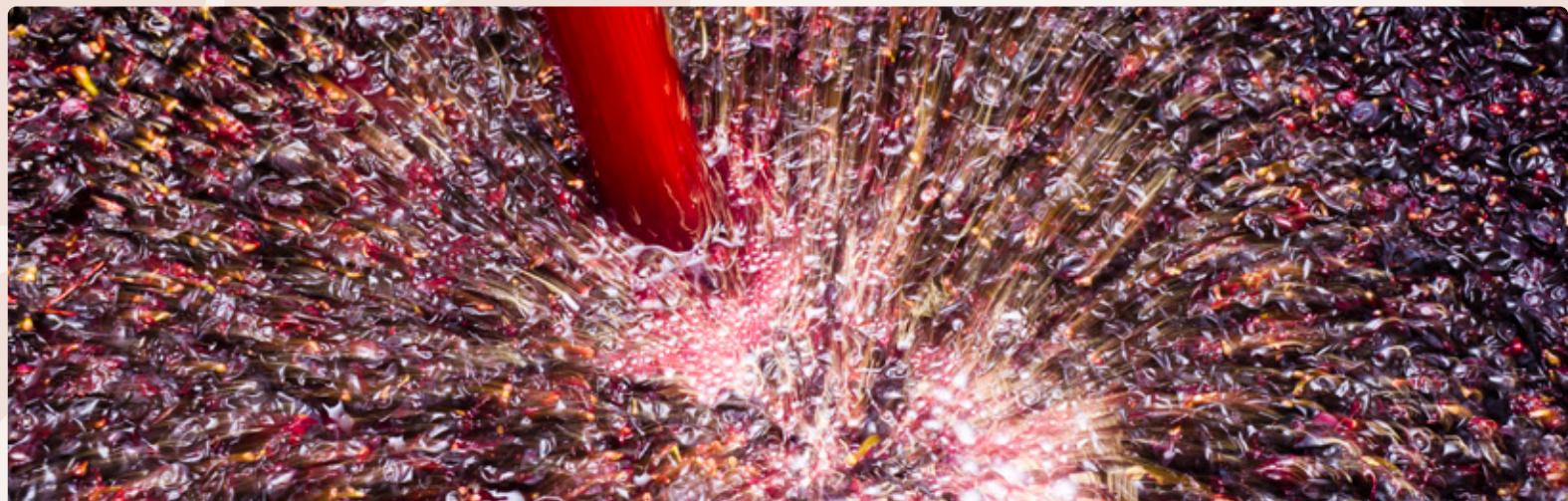
Old-school cellar traditions are key for crafting good Teran.

Grape processing and wine maturation have always been rooted in the personal experience of each winemaker and local Karst tradition. Over centuries, through good and bad harvests alike, and shaped by Teran's unique traits, a distinctive

winemaking tradition has emerged. After harvest, the grapes are crushed into a mash, followed by maceration. This is a natural process through which valuable red pigments are released from the grape skins, while tannins are extracted from the seeds. Teran is notable for its high total acidity, particularly malic acid, making the malolactic fermentation (the natural conversion of malic acid into lactic acid) a crucial step. This process reduces acidity in young wine and shapes its characteristic aroma and flavour. It is a particular kind of magic that Teran producers have long understood, though in the past, without modern knowledge, they simply allowed the process more time, often until spring.

Vitovska Grganja – Karst's signature white.

Another source of pride are the region's distinctive white wines. Especially prized is Vitovska Grganja, an ancient local white grape variety flourishing on both the Slovenian and Italian sides of the Karst Plateau. Its characteristic almond-like aroma adds depth to the wine selection and showcases Karst's remarkable diversity.



Teran Makers

keepers of a priceless tradition

The excellence of Karst wines reflects the very soul of this area.

Here, fertile soil is scarce, and every vineyard symbolizes the hard work of countless generations. Each harvest is precious. Out of respect for the land and the heritage of their forebears, Karst winemakers have crafted wines of exceptional quality that delight lovers of niche wines. The cellars are just as remarkable—mostly built from stone and set underground—some even extending into natural karst caves. Within these

hallowed cellars, local winemakers greet visitors warmly, offering tastings often accompanied by Karst prosciutto and other local delicacies. Teran, above all, reveals its full character when paired with the perfect flavours.

Visit the Karst winemakers, listen to their stories, and experience the magic of their cellars firsthand.



Follow the link
and browse the
winemakers.



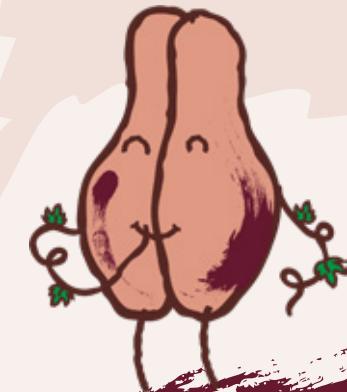
*Karst's captivating colours
and hospitality.*

Red runs through the Karst – it's in the soil, the wine, the prosciutto, and even the autumn foliage of the smoketree. Amid the mysterious shades of the Karst, with grey-white stone, the white Lipizzaner horses, green pine forests, and blooming karst meadows, the warmth of genuine hospitality is everywhere. The landscape itself tells stories without words, and ancient walls, villages, carefully tended gardens, and museum collections all bear witness to its rich history, making a longer stay more than worthwhile. Listen to the burja wind, smell the wild karst herbs, and savour Teran, an enriching experience found only in the Karst.

In rural accommodations, discover peace and indulgence, combined with traditional flavours. And a glass of Teran, of course.



Follow the link and
browse lodgings.



Mystery 6

Every winemaker uses their own secret methods, making every Teran unique.

Culinary Highlights

a fusion of Karst flavours

Karst is the best place for foodies.

The region's most typical flavours draw their essence from Karst's red soil, nurtured by the sun, tempered by the burja wind, and embraced by the salty breeze that drifts in from the sea. Sometimes pleasantly tart, sometimes seductively sweet, they are always authentic – cultivated to perfection according to ancient tradition. You can savour these flavours in wine cellars, where Teran and Vitovska Grganja reign supreme. Visit prosciutto curing facilities, where the famous Karst prosciutto—a gastronomic highlight with protected geographical indication—and other local delicacies slowly mature. Many farms add homemade cheeses to accompany the cured meats. Olive oil is another standout regional specialty, reaching exceptional quality on the Trieste Karst. Notably, Tergeste DOP is the only extra virgin olive oil from the area with a

protected designation of origin. And for the final touch, try Karst honey, every drop encapsulating the sweet essence of the karst meadows.

The real treat lies in pairing flavours.

The no-frills local cuisine is infused with just the right amount of inspiration from neighbouring culinary traditions. Starting with Karst prosciutto, don't miss out on the region's other signature dishes: Karst jota (a hearty stew), minestrone, fragrant herb omelettes, and the staple polenta. Trust the locals to serve the right wine with each dish. Only when you let your senses wander through these diverse yet perfectly balanced flavours can you truly understand how special Karst is. Visit the inns and restaurants, wine cellars and farm stays, prosciutto curing houses and cheese dairies, olive growers and beekeepers. And don't miss the traditional osmice — occasions that only occur twice a year when farms welcome guests, offering a rare chance to experience authentic Karst flavours at their source. In every encounter with the people behind Karst's delicacies, you'll be captivated by their profound connection to this rugged land and its tradition.

There's no place like the Karst. Let its flavours win you over.



Follow the link and browse the providers.



Mystery 7

Teran is known to whet the appetite. According to lore, it was even sold across Trieste pharmacies.



Teran as a Source of Inspiration

poems and colour embodying Karst's essence

Karst has long inspired artistic creation with its rugged beauty. Poets and writers, painters, sculptors, and architects have bequeathed the region a remarkable artistic legacy. Two figures stand out in particular—a poet and a painter, both Karst born and bred—who transformed the profound love for their region into powerful artistic expression.

Srečko Kosovel 1904–1926

Often called the lyricist of the Karst, Kosovel is one of Slovenia's greatest poets, known for exploring various artistic movements during his short but intense creative life. He reached his artistic peak as a Constructivist, yet he never abandoned the writing of traditional lyric poetry. In his verses, the Karst, its landscape, the grapevine, and wine intertwine in pursuit of unity with nature.

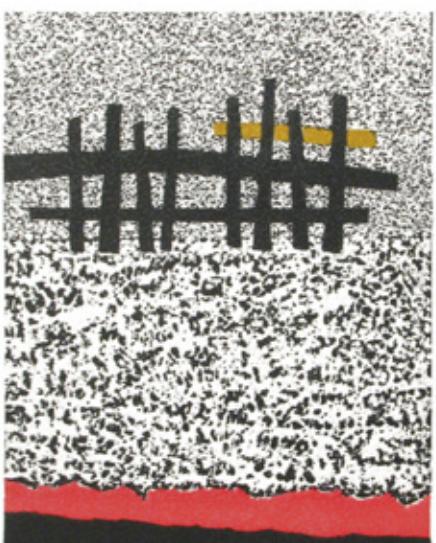
Dance in Red

If there are still cups, fill them with wine,
If there are still sparks, kindle the bonfire, ...

— *Srečko Kosovel*

Lojze Spacal 1907–2000

Born in Trieste, this Slovene painter and graphic artist is regarded as one of the most prominent and internationally recognized fine artists in the postwar Slovene and Italian territories. He reached his creative peak through graphic art, particularly in linocut and woodcut techniques. The motifs draw from his native landscape, which he transformed into his signature visual language. His prints often feature Karst vineyards.



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Experiencing Teran Country

traditional wine and food events

All that makes Karst special at the annual harvest celebrations.

As you explore Karst, you can feel the locals' deep connection to the land and their gratitude for its gifts at every step. The people of the Karst take great pride in upholding their traditions. As a tribute to nature's gifts, they organize happenings throughout the year, showcasing their finest local products. Most of these celebrations are dedicated to the region's distinctive wines and food, drawing throngs of visitors.

Events celebrating Karst's wine and food heritage

V osrčju dežele terana / In the Heart of Teran Country –
Tomaj, Dutovlje, Skopo, Križ; May

Praznik terana in pršuta / Teran and Prosciutto Festival –
Dutovlje and surrounding area; August

Martinovanje na Krasu / St Martin's Day Feast –
various venues; November

Festival Kraška gmajna / Karst Meadow Festival –
various venues; April–May and September–October

Teranum in rdeča vina Krasa / Teranum and Karst Red Wines Festival – Trieste; March

Morje in vitovska / The Sea and Vitovska Festival – Duino Castle; June

Malvazije v pristanu / Malvasia in the Harbor – Milje; August

Vitovska underground – Briškovska Cave; May



Follow the link to find out more.



Savour Teran

Where It Comes to Life

The best way to unlock the mysteries of this special wine is with a tour of Karst. In this way, you'll experience its distinctive terroir and meet the people who nurture it. You'll also get a sense of the inspiring border-melding culture of the Karst Plateau on which Teran holds a most special place.

Visit Karst

The official websites of the neighbouring regions on either side of the border offer comprehensive information about winemakers, attractions, accommodations, restaurants, guided experiences, and events. A digital copy of this publication is also available on the websites.

Visit Kras

<https://www.visitkras.info/en/>



GAL Carso – LAS Kras

<https://trieste.green/>



Colophon

Published by: Projekt Agrotur, on behalf of Območna razvojna agencija Krasa in Brkinov d.o.o. in cooperation with GAL Carso – LAS Kras · **CD and text:** Lučka Peljhan · **AD, design and illustrations:** Klemen Trupej · **Translation:** Contineo, Marko Ipavec s.p. · **Photos:** Marjan Močivnik, Jošt Gantar, Marko Pieterski and archives of: Pršutarna Kras, Komen Municipality

Sources and Notes

1 Sabina Passamonti, University of Trieste, in the journal *Trajnostni razvoj kmetijstva in turizma na čezmejnem Krasu*, Projekt Agrotur II

2 Ministry of Health: Alcohol consumption may be detrimental to health!

3 doc. dr. Manca Vinazza, University of Ljubljana, Faculty of Arts, Department of Archaeology



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Projekt Agrotur+ is co-financed by the European Union under the Interreg VI-A Italy-Slovenia 2021–2027 Programme.

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