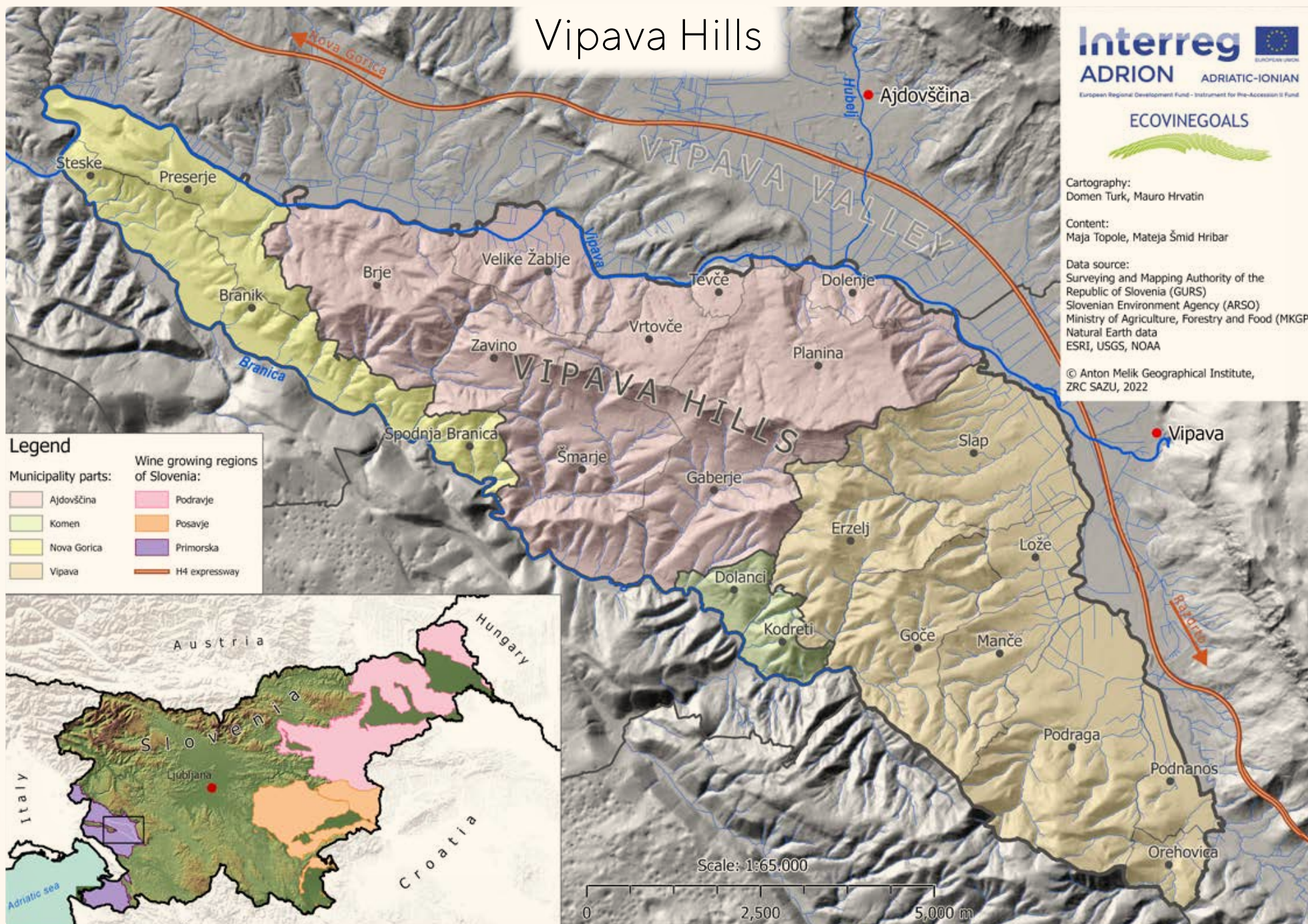


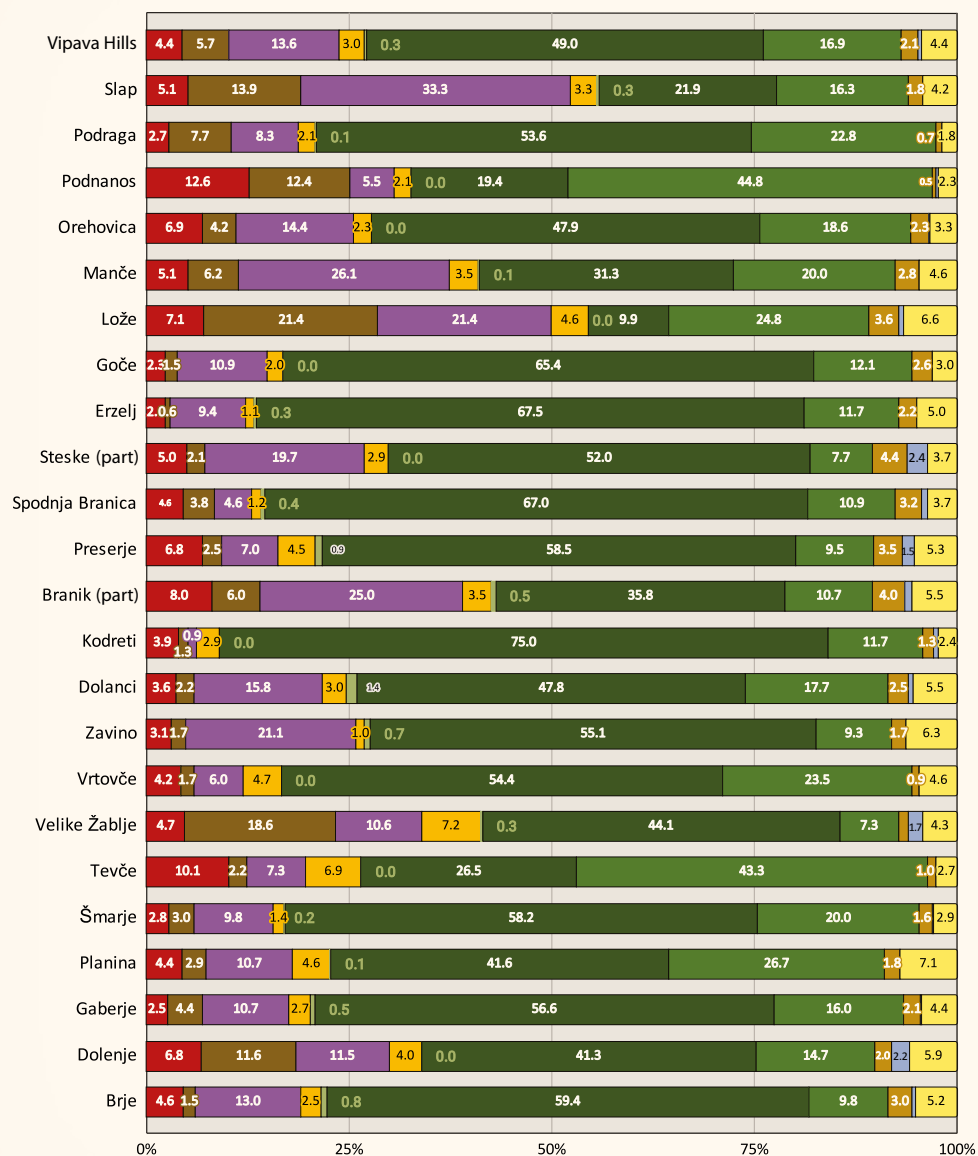


Viticulture in the Vipava Hills

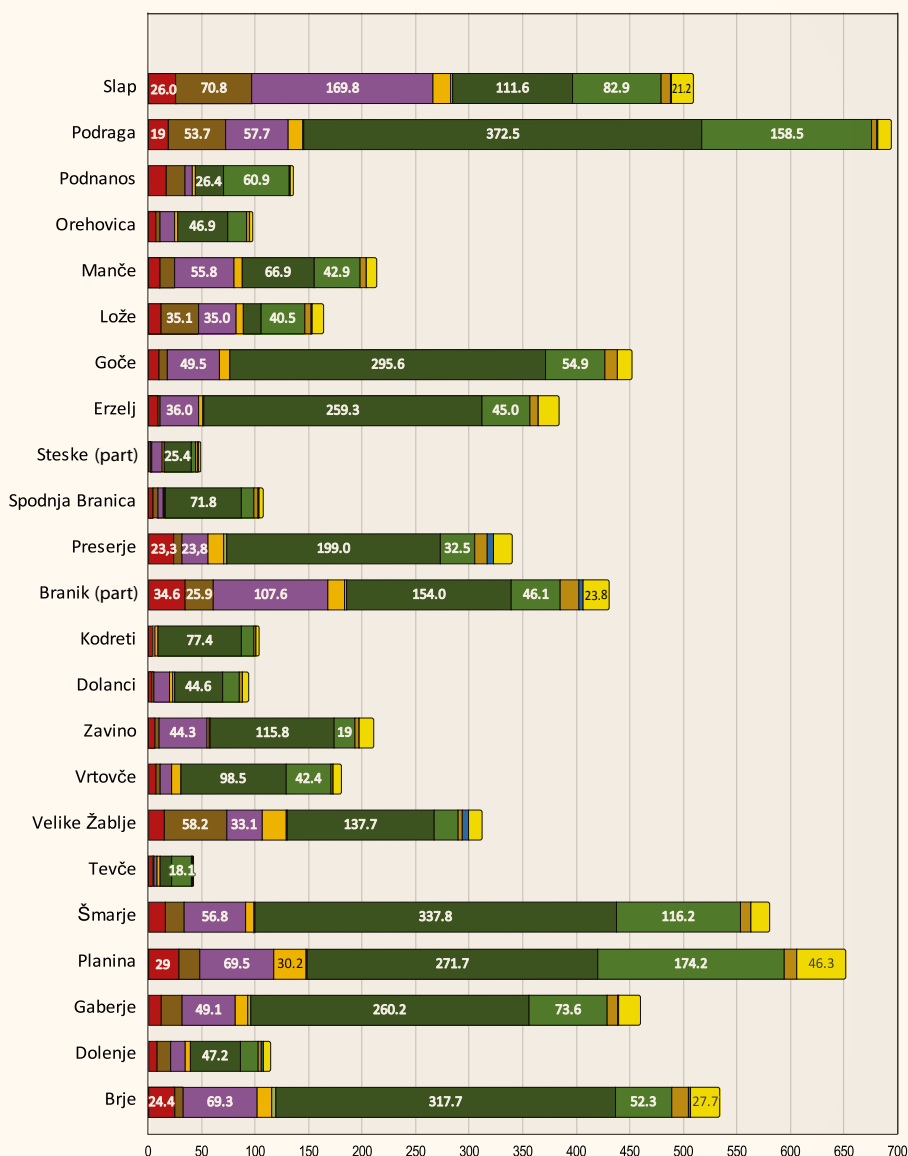
Vipava Hills



Vipava Hills: Land use structure in 2020 by settlement
(numerical display on pages 26, 27)



Vipava Hills: Land use types in 2020 – areas in ha by settlement
(numerical display on pages 26, 27)



continuous urban fabric/built up land arable land vineyards fruit trees and berry plantations olive groves forest natural grassland / extensive meadows transitional woodland/shrub inland waters other

Vipava Hills

With 13.6% of its vineyards, the Vipava Hills are one of Slovenia's most important wine-growing regions. It lies in the southwest Slovenia and is part of the Vipava Valley wine-growing area. Vipava Valley belongs to one of Slovenia's three wine-growing regions – the Primorska region. The other wine-growing areas of the Primorska region are Goriška Brda, Slovene Istria, and the Karst.

Among land-use types, Slovenia only has 1% of vineyards. The highest percentage, 6.4% on average, is found in Slovenia's Mediterranean low hills. Slovenian wine-growing regions belonging to Eastern Slovenia, the Pannonian low hills or the wine-growing regions of Podravje and Posavje, have much less, on average only 3% of vineyards.

The Mediterranean Vipava Hills is one of Slovenia's wine-growing regions with the oldest tradition. It is known that, following the Celts, wine-growing here was reinforced and expanded by the Romans around the beginning of AD. After the fall of the Roman Empire, it temporarily declined, but with the Christianisation of the newly settled peoples, it picked up again, since wine was also used as a ceremonial drink. In the Middle Ages, wine from Vipava was sold as far afield as German and Bohemian provinces. For example, the export of the famous Vipava wines was reported by the Carniola nobleman and polyhistor J. V. Valvasor in 1689, and it was also mentioned by the Baroque preacher and writer Janez Svetokriški. In the middle of the 19th century, in 1844, the local priest and expert in various fields, Matija Vertovec, published *Vinoreja*, the first Slovenian wine-growing manual, and declared the Vipava Valley to be the paradise of the Carniola region, created for vines and wine. Vipava also has the advantage of a long tradition of agricultural education; one of the first Slovenian agricultural schools was in operation here between 1873 and 1886. The Vipava winegrowers' cooperative (1894) and the cooperative wine cellar (1903) were also among the first in Slovenia. The establishment of the grapevine nursery in Vrhpolje near Vipava also dates back to the beginning of the 20th century. It is still an important supplier of grafted vines to Slovenian winegrowers and their exporter. The importance

of the local wine-growing industry is also reflected in the fact that today Vipava is home to the only Slovenian faculty for viticulture, wine-making and wine marketing (School for Viticulture and Enology).

The Vipava Hills cover around 70 km² and are part of the Vipava Valley. The valley is sandwiched between the high karst plateaus of Trnovski gozd (1495 m) and Nanos (1313 m) in the northeast, and the Karst plateau in the southwest (average 334 m). The specific natural conditions of the Vipava Hills are determined by their location at the junction of three European macro-regions – the Alpine, the Mediterranean, and the Dinaric – and their position at the meeting point of continental and Mediterranean air masses. The hills are only 15 km air distance from the Adriatic Sea. From the Gulf of Trieste to the Vipava region, the influence of the sea spreads up the Soča valley through the Friulian Plain. A tributary of the Soča is the Vipava River, which drains all the water of the Vipava Hills.

The hills have a sub-Mediterranean climate with a high degree of insolation (the average annual quasiglobal irradiation energy of 4276 MJ/m² is 6.6% higher than the Slovenian average), mild winters and dry, hot summers. The average annual temperature is 12 °C, 21.2 °C in July and 3.1 °C in January. In addition, the hills have a favourable relief, rock and soil conditions, and water conditions are relatively good. Altitudes range from 60 to 550 m, the average height of the Vipava Hills being 206 m and the average inclination 31%.

The landform, sunny slopes, altitudes, and inclination of the Vipava Hills are more suitable for vines than arable land. In 2020, vineyards covered 936.4 ha, or 13.6% of the total land area, while arable land accounted for only 5.7%. As many as two-thirds of the vineyards are at altitudes of 100–250 m. The average altitude of the vineyards is 187 m and the average inclination is 20.3%. There is 1.6 ha of vineyards per winegrower and the average size of each vineyard is 0.5 ha. As much as 84.6 ha or 9% of the vineyards are under organic cultivation (5.1% in Slovenia). When the wine is made with the help of indigenous yeasts only, the 'terroir' – the bedrock, which is mainly Eocene flysch, i.e.

marl and sandstone – is particularly pronounced. 14.65 km² or 21.3% of the Vipava Hills are terraced. 39.1% of the total area of the terraces is allocated to vines; 61.2% of all vineyards are on terraces. According to the data provided by the Institute of Agriculture and Forestry Nova Gorica, an average of 6,200 tonnes of grapes and 4,000,000 litres of wine are produced annually in the Vipava Hills.

Vipava wines are comparable to the world's finest wines. According to the data from the Institute of Agriculture and Forestry Nova Gorica, the most widespread grape varieties are Merlot (12.3%), Sauvignon (12.2%), Malvasia (10.6%), and Ribolla Gialla (10.6%), while the following are also recommended: Welschriesling, Pinot Blanc, Pinot Gris, Chardonnay, Barbera, and Cabernet Sauvignon. Grape varieties also allowed are: Sauvignon Blanc, Yellow Muscat, Picolit, Vitovska Grganja, Pinot Noir, Cabernet Franc, Refosco, Syrah, Glera, Klarnica, Pergolin, Poljšakica, Viognier, Fleurta, Soreli, Pokalca (Ribolla Nera), Gamay, Marselan, Merlot Kanthus. The old indigenous varieties Zelen and Pinela are relatively important but account for only 7% and 5.8% respectively. The Vipava winegrowers are also trying to preserve other old indigenous grape varieties, such as Klarnica, Poljšakica, Pergolin, Čedajc, Ošip, and Glera. Some of them are almost extinct. According to the Institute of Agriculture and Forestry Nova Gorica, local varieties account for 23% in the Vipava Hills.

But the Vipava Hills also face problems. One of the causes is natural conditions. Although the annual rainfall of around 1,500 mm is sufficiently high, it is not distributed most favourably. There is too much during the flowering and ripening period and not enough during the grape-growing stage. With climate change or climate warming, the number of extreme events such as severe bora winds, drought, hail, frost, wind and water erosion is increasing.

Other causes of problems lie in social conditions. The population has shrunk by a third in the last 100 years, however, it has been growing minimally for the past 20 years. The age structure is not favourable; there are few young people aged between 10 and 30. Young people are leaving farms for better-paid jobs outside agriculture. Vineyard land in less favourable locations, which is fragmented, too steep, remote from settlements and inaccessible, is being abandoned. In 2020, 146 ha, or 2.1% of all land, was in the process of

becoming overgrown. Between 2002 and 2020, the surface of vineyards in the Vipava Hills decreased by 14%, the surface of arable land by 40%, and meadows by 11%. On the other hand, it was difficult to buy a vineyard, especially a larger area of land, or to change the use of the land. If the land has become overgrown and has been converted to a forest area, the process of conversion back to farmland is very time-consuming and costly, and sometimes not even possible due to European or Natura 2000 restrictions. Ownership of vineyards is a major problem. Elderly owners are reluctant to sell or leave them to young people, and in the case of co-ownership, the problems are compounded.

To promote the sale of wine and encourage wine-growing activities, wine roads were established across the Vipava Hills towards the end of the 20th century, linking not only wine and food producers but also the natural and cultural attractions of the hills. Tourists, hikers, and cyclists can explore a landscape that boasts being mosaic, with great biodiversity and a high degree of naturalness. Forests cover 49% of the area, extensive meadows and pastures 17%, and overgrown land 2.1%, which together make up two-thirds of the Vipava Hills with a high degree of naturalness. Only 21% of the land is intensively farmed, including arable land, conventional vineyards, orchards, and berry plantations. The rest is built-up land (4.4%) and other uses (4.4%). 46.1% of the Vipava Hills are part of Natura 2000. The region enjoys a favourable traffic position directly on the expressway, which branches off the Ljubljana – Koper motorway at Razdrto and heads towards Nova Gorica or Italy.

The region is enriched by picturesque Mediterranean villages and hamlets with centuries-old wine cellars and churches on the hilltops with a view, and throughout the year one can visit osmica events (eight days of open doors on farms) and on special occasions learn about the many preserved customs and traditions linked to vine and wine.

There is also a poem related to this theme called Zdravljica (A Toast), the first version of which was written by France Prešeren in 1844. It is a so-called art poem, as the written stanzas resemble the shape of a wine cup. It was set to music in 1905 by the priest and composer Stanko Premrl, born in Podnanos in the Vipava Valley, and in 1989 the 7th stanza of Zdravljica became the Slovenian anthem. In 2020, the EU awarded the European Heritage Label to Zdravljica for being a European value.



Uneven terrain, higher sunny positions, windswept landscape, and mosaic land use are the advantages that allow the introduction of agro-ecological viticulture.

Land use 2020

Cartography:
 Žiga Maroh

Content:
 Mateja Šmid Hribar, Maja Topole

Data source:
 Surveying and Mapping
 Authority of the Republic of
 Slovenia (GURS),
 Ministry of Agriculture, Forestry
 and Food (MKGP)

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Legend:

-  water stream
-  built up
-  arable
-  vineyard
-  orchard
-  olive grove
-  forest
-  natural grassland/extensive meadow
-  transitional woodland/shrub
-  inland water
-  other

Scale: 1:65.000

0 2.500 5.000 m

Esri, Intermap, NASA, NGA, USGS



In the Vipava Hills, 84.6 ha or 9% of vineyards are under organic cultivation (5.1% in Slovenia). Grazing small livestock in the vineyard is one of the good agro-ecological practices of viticulture.

Vineyards 2020






Cartography:
Žiga Maroh

Content:
Mateja Šmid Hribar, Maja Topole

Data source:
Surveying and Mapping
Authority of the Republic of
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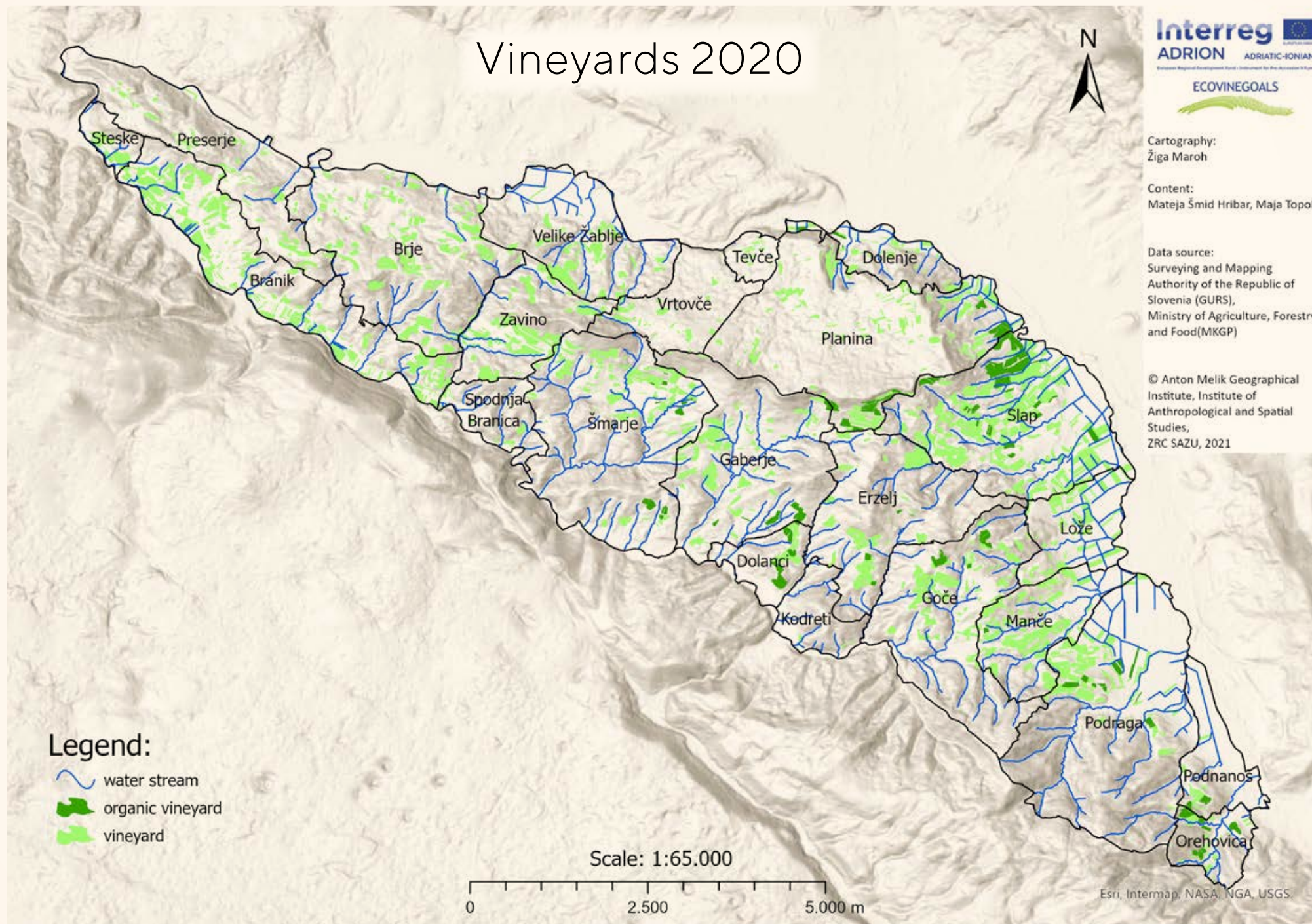
Legend:

-  water stream
-  organic vineyard
-  vineyard

Scale: 1:65.000

0 2.500 5.000 m

Esri, Intermap, NASA, NGA, USGS





As much as 57.2 ha or 5.2% of the 2002 vineyard land was in the process of becoming overgrown in 2020, and 28.9 ha or 2.6% were already overgrown by the forest.

Land use 2020 on vineyards 2002

Cartography:
Žiga Maroh

Content:
Mateja Šmid Hribar, Maja Topole

Data source:
Surveying and Mapping
Authority of the Republic of
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Ministry of Agriculture, Forestry
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Legend:

-  water stream
-  built up
-  arable
-  orchard
-  olive grove
-  forest
-  natural grassland/extensive meadow
-  transitional woodland/shrub
-  inland water
-  other

Scale: 1:65.000

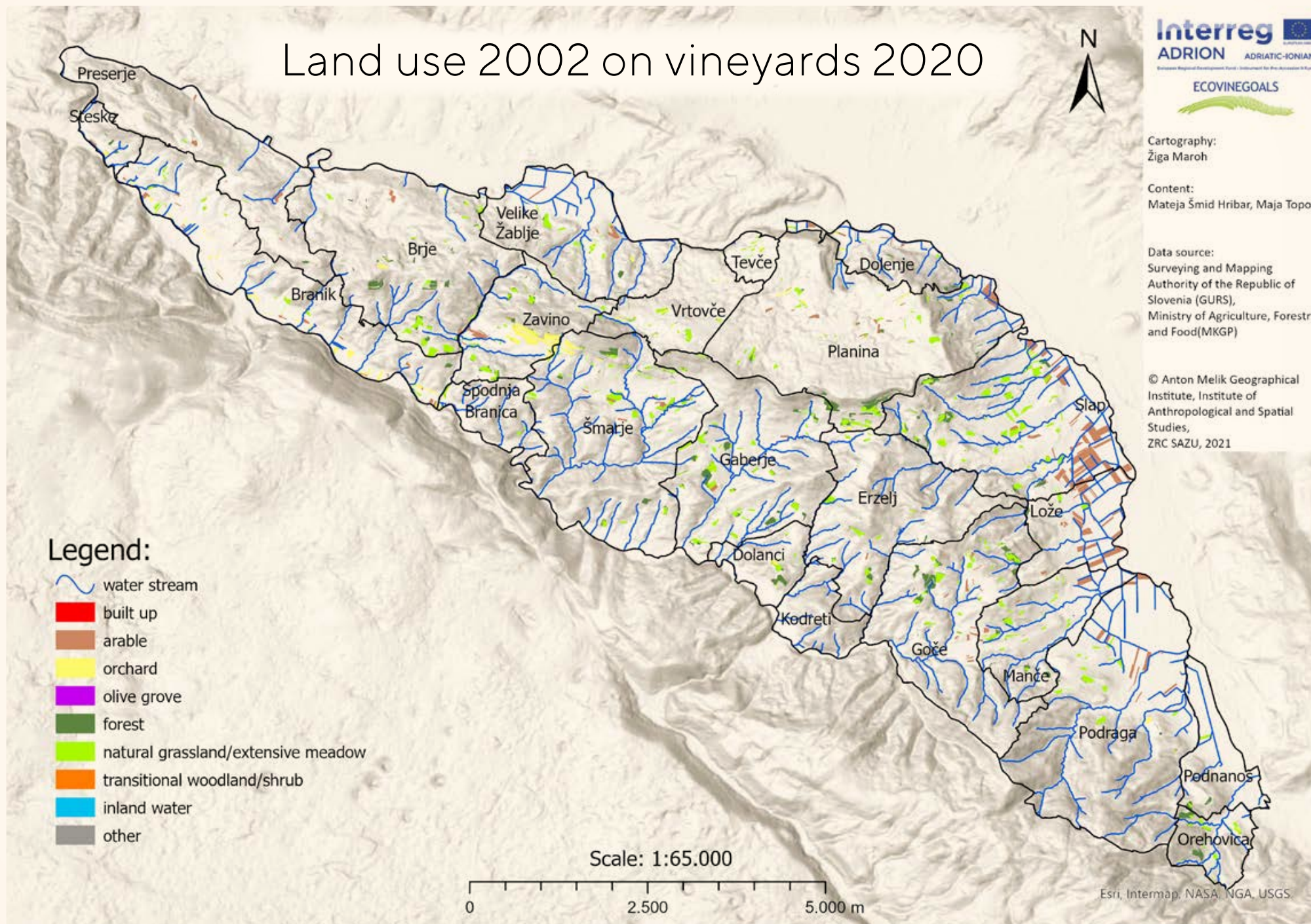
0 2.500 5.000 m

Esri, Intermap, NASA, NGA, USGS

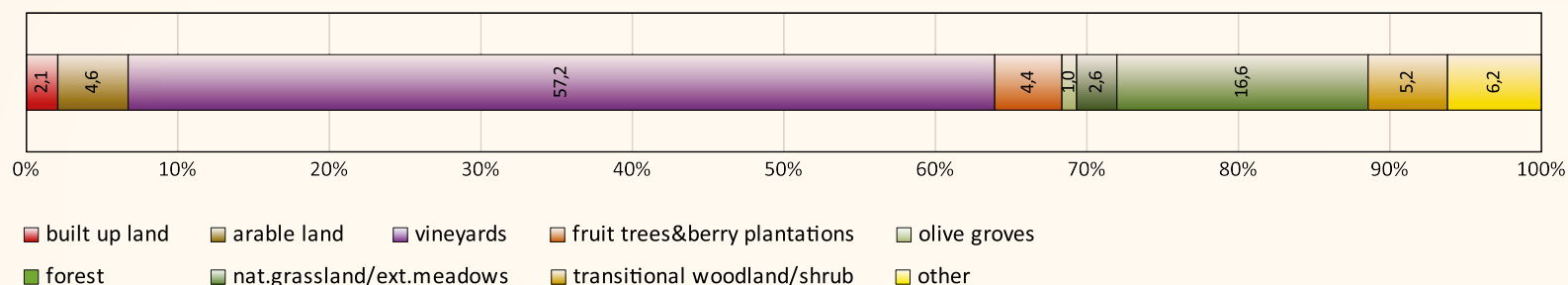


The period 2002-2020 is characterised by migration of vineyards from the higher parts of the Vipava Hills towards the bottom of the Vipava Valley. In 2020, 85.7 ha or 9.2% of the vineyards occupied land that was still arable in 2002. This is favourable from the point of view of easier use of agricultural machinery but less so from the point of view of suitability for organic cultivation.

Land use 2002 on vineyards 2020

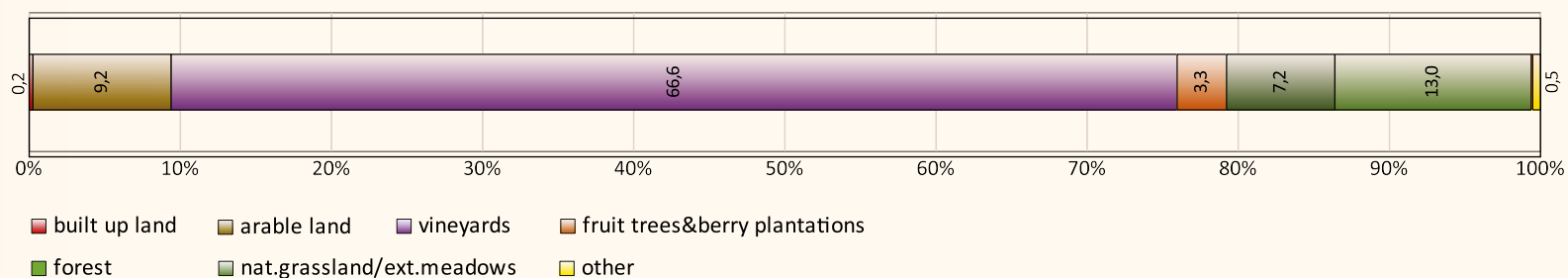


Vipava Hills: Land use types in 2020, resulting from vineyards 2002



Only 57.2% of the vineyards that existed in 2002 (1089.7 ha) had been preserved by 2020. Most of them, 181 ha (16.6%), had been converted into meadows, 57 ha (5.2%) were in the process of becoming overgrown, 29 ha (2.6%) had already become forests. 50 ha (4.6%) of the vineyards from 2002 were converted into arable land, 48 ha (4.4%) were converted into orchards or berry plantations, 23 ha (2.1%) of former vineyards were built on, and 11 ha (1%) were converted into olive groves. 68 ha (6.2%) have been converted to various other uses.

Vipava Hills: Land use types in 2002 from which vineyards were created in 2020



623.2 ha or 66.6% of the current 936.4 ha of vineyards were already in existence before 2002. Thus, 466.5 ha or 42.8% of the vineyards from 2002 were transformed into other land use types by 2020. 313.2 ha or 33.5% of all 2020 vineyards had been planted entirely anew since 2002. 121 ha (13%) were created on former meadows, 86 ha (9.2%) were planted on former arable land, 67 ha (7.2%) were acquired through deforestation, and 31 ha (3.3%) were planted on former orchards or berry plantations. The area of vineyards thus decreased from 1089.7 ha to 936.4 ha between 2002 and 2020, i.e. by 153.3 ha or 14%.

Vineyards changes 2002-2020







Cartography:
Žiga Maroh

Content:
Mateja Šmid Hribar, Maja Topole

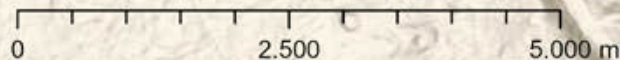
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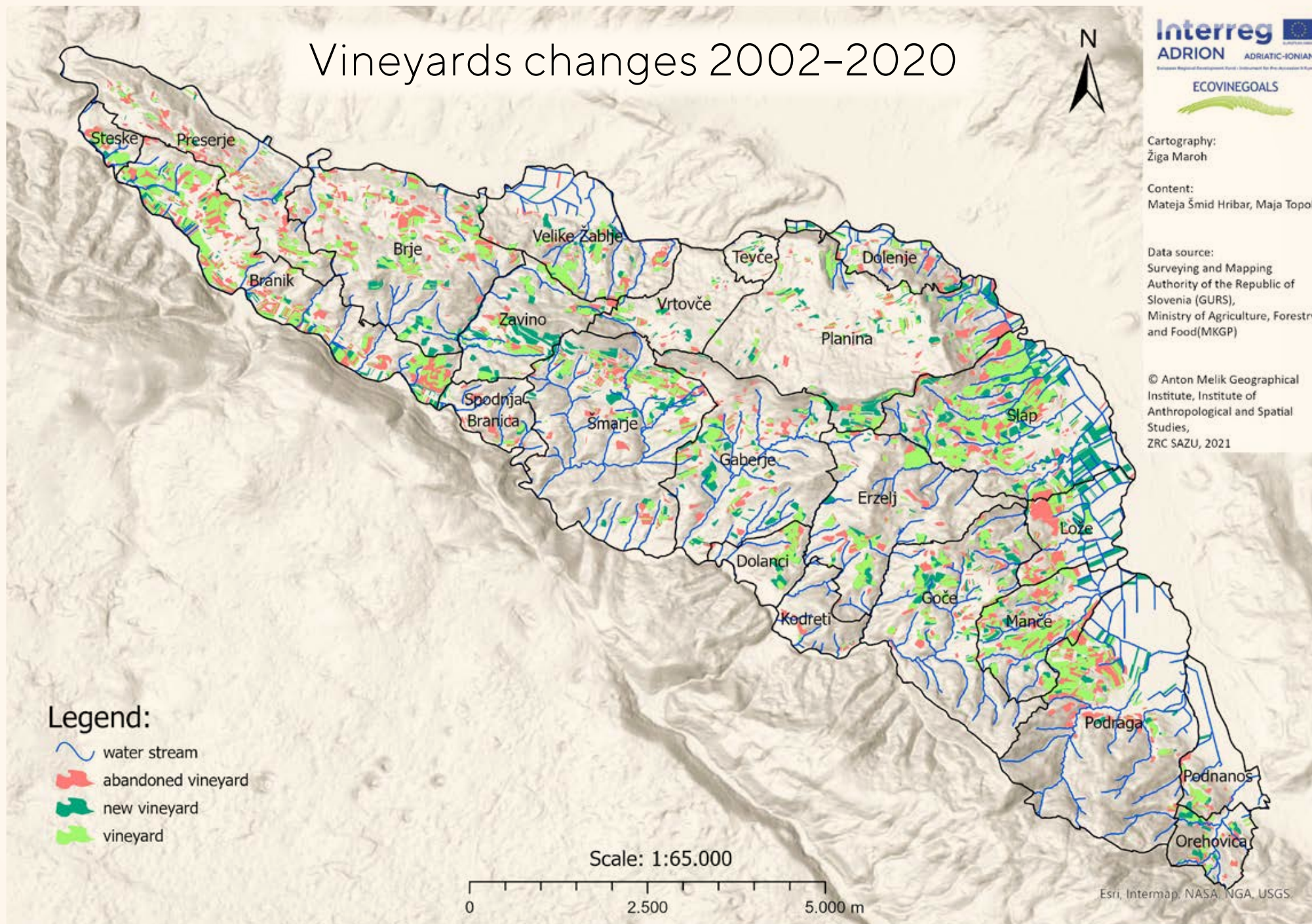
Legend:


-  water stream
-  abandoned vineyard
-  new vineyard
-  vineyard

Scale: 1:65.000



Esri, Intermap, NASA, NGA, USGS





14.65 km² or 21.3% of the Vipava Hills are terraced.
39.1% of the total terraces are allocated to vines;
572,7 ha or 61,2% of all vineyards grow on terraces.

Land use 2020 on terraces



Cartography:
Žiga Maroh

Content:
Mateja Šmid Hribar, Maja Topole

Data source:
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Legend:

-  water stream
-  built up
-  arable
-  vineyard
-  orchard
-  olive grove
-  forest
-  natural grassland/extensive meadow
-  transitional woodland/shrub
-  inland water
-  other

Scale: 1:65.000

0 2.500 5.000 m

Esri, Intermap, NASA, NGA, USGS



The average altitude of the Vipava Hills is 206 m, and the difference between the minimum and maximum altitudes is almost 500 m (the Branica River flows into the Vipava River in the northwest at 59 m, St. Socerb in the southeast is at 556 m). 67% of all vineyards are found at altitudes of 100–250 m, and the average altitude of vineyard land is 187 m.

Altitude




Cartography:
Žiga Maroh

Content:
Mateja Šmid Hribar, Maja Topole

Data source:
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Legend:

 water stream

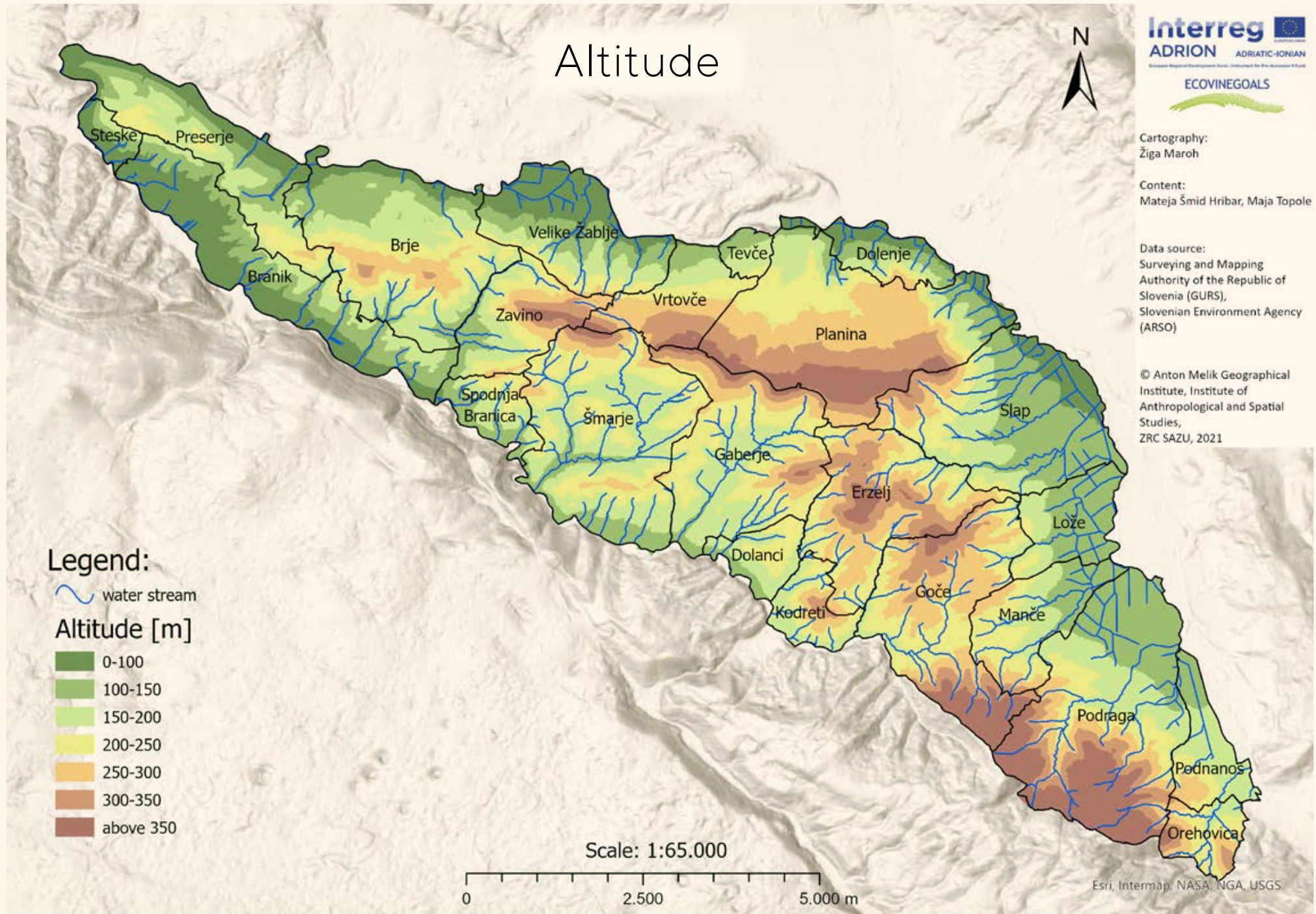
Altitude [m]

-  0-100
-  100-150
-  150-200
-  200-250
-  250-300
-  300-350
-  above 350

Scale: 1:65.000

0 2.500 5.000 m

Esri, Intermap, NASA, NGA, USGS





The Vipava Hills have a sub-Mediterranean climate with a high degree of insolation. The average annual quasiglobal irradiation energy of 4276 MJ/m^2 is 6.6% higher than the Slovenian average. The southern slopes of the watershed ridge between the rivers Vipava and Branica are among the sunniest areas of the Vipava Hills.

Solar radiation


Cartography:
Žiga Maroh

Content:
Mateja Šmid Hribar, Maja Topole

Data source:
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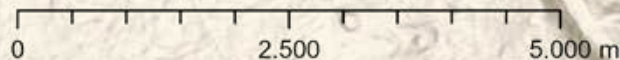
Legend:

 water stream

Solar radiation [WH/m2]



Scale: 1:65.000



Esri, Intermap, NASA, NGA, USGS



In the Vipava Hills, forest covers 49% of the area, extensive meadows and pastures 17%, and land under overgrowth 2.1%. This means that as much as 68% of the land has a very high degree of naturalness. 46.1% of the Vipava Hills are part of Natura 2000, protecting species on the one hand and habitats on the other.

Vineyards 2020 and Natura 2000











Cartography:
Žiga Maroh

Content:
Mateja Šmid Hribar, Maja Topole

Data source:
Surveying and Mapping
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Legend:

-  water stream
-  organic vineyard
-  vineyard
-  Illyrian oak-hornbeam forests (*Erythronio-carpinion*)
-  *Juniperus communis* formations on heaths or calcareous grasslands
-  Rupicolous calcareous or basophilic grasslands of the *Alysso-Sedion albi*
-  Eastern sub-mediterranean dry grasslands (*Scorzoneralia villosae*)
-  habitats of animal species

Scale: 1:65.000

0 2.500 5.000 m

Esri, Intermap, NASA, NGA, USGS



The vineyards in higher parts are spread out amidst unspoilt nature, with no disturbing land uses in the neighbourhood.

Level of naturalness and vineyards






Cartography:
Žiga Maroh

Content:
Mateja Šmid Hribar, Maja Topole







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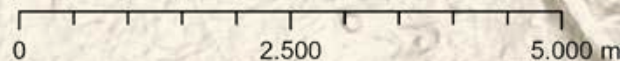
Legend:

-  water stream
-  organic vineyard
-  vineyard

Level of naturalness

-  natural area
-  semi natural area
-  low intensified agricultural area
-  high intensified agricultural area
-  built up area
-  other

Scale: 1:65.000



Esri, Intermap, NASA, NGA, USGS

Municipality	Settlement	Area (in ha)	Share (%) in the Vipava Hills	Built up land				Arable land				Vineyards				Fruit trees and berry plantations				Olive groves				Forest				Natural grassland / extensive meadows			
				Area (in ha)	Share (%) inside the settlement	Share (%) in the Vipava Hills	Concent ration index	Area (in ha)	Share (%) inside the settlement	Share (%) in the Vipava Hills	Concent ration index	Area (in ha)	Share (%) inside the settlement	Share (%) in the Vipava Hills	Concent ration index	Area (in ha)	Share (%) inside the settlement	Share (%) in the Vipava Hills	Concent ration index	Area (in ha)	Share (%) inside the settlement	Share (%) in the Vipava Hills	Concent ration index	Area (in ha)	Share (%) inside the settlement	Share (%) in the Vipava Hills	Concent ration index	Area (in ha)	Share (%) inside the settlement	Share (%) in the Vipava Hills	Concent ration index
Ajdovščina	Brje	534.5	7.8	24.4	4.6	8.0	103	7.8	1.5	2.0	26	69.3	13.0	7.4	95	13.4	2.5	6.5	83	4.0	0.8	18.9	243	317.7	59.4	9.4	121	52.3	9.8	4.5	58
	Dolenje	114.3	1.7	7.8	6.8	2.5	153	13.2	11.6	3.4	204	13.2	11.5	1.4	85	4.6	4.0	2.2	132	0.0	0.0	0.0	0	47.2	41.3	1.4	84	16.9	14.7	1.4	87
	Gaberje	459.6	6.7	11.7	2.5	3.8	57	20.0	4.4	5.1	77	49.1	10.7	5.2	78	12.2	2.7	5.9	88	2.3	0.5	11.0	164	260.2	56.6	7.7	115	73.6	16.0	6.3	95
	Planina	652.4	9.5	29.0	4.4	9.5	100	18.9	2.9	4.9	51	69.5	10.7	7.4	78	30.2	4.6	14.6	153	0.7	0.1	3.3	35	271.7	41.6	8.1	85	174.2	26.7	15.0	158
	Šmarje	580.5	8.5	16.0	2.8	5.2	62	17.7	3.0	4.5	54	56.8	9.8	6.1	72	7.9	1.4	3.8	45	1.1	0.2	5.3	62	337.8	58.2	10.0	119	116.2	20.0	10.0	118
	Tevče	41.8	0.6	4.2	10.1	1.4	228	0.9	2.2	0.2	39	3.0	7.3	0.3	53	2.9	6.9	1.4	228	0.0	0.0	0.0	0	11.1	26.5	0.3	54	18.1	43.3	1.6	256
	Velike Žabljice	312.4	4.6	14.7	4.7	4.8	106	58.2	18.6	15.0	328	33.1	10.6	3.5	78	22.6	7.2	10.9	239	0.8	0.3	3.9	85	137.7	44.1	4.1	90	22.7	7.3	2.0	43
	Vrtovče	180.9	2.6	7.6	4.2	2.5	94	3.0	1.7	0.8	30	10.9	6.0	1.2	44	8.6	4.7	4.1	157	0.0	0.0	0.0	0	98.5	54.4	2.9	111	42.4	23.5	3.7	138
	Zavino	210.3	3.1	6.6	3.1	2.1	70	3.5	1.7	0.9	29	44.3	21.1	4.7	155	2.1	1.0	1.0	0	1.5	0.7	7.0	228	115.8	55.1	3.4	112	19.6	9.3	1.7	55
Komen	Dolanci	93.4	1.4	3.4	3.6	1.1	82	2.1	2.2	0.5	39	14.8	15.8	1.6	116	2.8	3.0	1.4	100	1.3	1.4	6.0	441	44.6	47.8	1.3	97	16.5	17.7	1.4	104
	Kodreti	103.1	1.5	4.0	3.9	1.3	87	1.3	1.3	0.3	23	0.9	0.9	0.1	7	3.0	2.9	1.5	97	0.0	0.0	0.0	0	77.4	75.0	2.3	153	12.1	11.7	1.0	69
Nova Gorica	Branik (part)	430.6	6.3	34.6	8.0	11.3	181	25.9	6.0	6.7	106	107.6	25.0	11.5	183	15.1	3.5	7.3	116	2.1	0.5	10.0	160	154.0	35.8	4.6	73	46.1	10.7	4.0	63
	Preserje	340.2	5.0	23.3	6.8	7.6	154	8.3	2.5	2.1	43	23.8	7.0	2.5	51	15.2	4.5	7.3	148	3.1	0.9	14.6	296	199.0	58.5	5.9	119	32.5	9.5	2.8	56
	Sp. Branica	107.2	1.6	4.9	4.6	1.6	103	4.1	3.8	1.0	67	4.9	4.6	0.5	34	1.2	1.2	0.6	38	0.4	0.4	1.9	121	71.8	67.0	2.1	137	11.7	10.9	1.0	64
	Steske (part)	48.9	0.7	2.5	5.0	0.8	113	1.0	2.1	0.3	38	9.6	19.7	1.0	144	1.4	2.9	0.7	97	0.0	0.0	0.0	5	25.4	52.0	0.8	106	3.7	7.7	0.3	45
Vipava	Erzelj	384.2	5.6	8.7	2.3	2.8	51	2.3	0.6	0.6	10	36.0	9.4	3.8	69	4.2	1.1	2.0	36	1.1	0.3	5.3	94	259.3	67.5	7.7	138	45.0	11.7	3.9	69
	Goče	452.0	6.6	10.5	2.3	3.4	52	7.0	1.5	1.8	27	49.5	10.9	5.3	80	9.1	2.0	4.4	66	0.2	0.0	0.9	13	295.6	65.4	8.8	133	54.9	12.1	4.7	72
	Lože	163.7	2.4	11.6	7.1	3.8	160	35.1	21.4	9.0	378	35.0	21.4	3.7	157	7.5	4.6	3.6	151	0.0	0.0	0.0	0	16.2	9.9	0.5	20	40.5	24.8	3.5	146
	Manče	213.8	3.1	10.9	5.1	3.6	115	13.3	6.2	3.4	110	55.8	26.1	6.0	191	7.5	3.5	3.6	116	0.3	0.1	1.3	42	66.9	31.3	2.0	64	42.9	20.0	3.7	118
	Orehovica	97.9	1.4	6.7	6.9	2.2	155	4.1	4.2	1.1	75	14.1	14.4	1.5	105	2.2	2.3	1.1	75	0.0	0.0	0.0	0	46.9	47.9	1.4	98	18.2	18.6	1.6	110
	Podnanos	135.9	2.0	17.1	12.6	5.6	283	16.9	12.4	4.3	219	7.5	5.5	0.8	41	2.8	2.1	1.4	69	0.0	0.0	0.0	0	26.4	19.4	0.8	40	60.9	44.8	5.2	265
	Podraga	694.7	10.1	19.0	2.7	6.2	61	53.7	7.7	13.8	136	57.7	8.3	6.2	61	14.3	2.1	6.9	68	0.8	0.1	3.7	36	372.5	53.6	11.1	109	158.5	22.8	13.6	135
	Slap	510.1	7.4	26.0	5.1	8.5	115	70.8	13.9	18.2	245	169.8	33.3	18.1	244	16.7	3.3	8.0	108	1.5	0.3	7.0	93	111.6	21.9	3.3	45	82.9	16.3	7.1	96
VIPAVA HILLS		6862.5	100.0	305.3	4.4	100.0	100	389.2	5.7	100.0	100	936.4	13.6	100.0	100	207.6	3.0	100.0	100	21.2	0.3	100.0	100	3365.3	49.0	100.0	100	1162.6	16.9	100.0	100

Land use by settlement and in the Vipava Hills pilot area in 2020 (graphics on page 3)

Spontaneous fermentation allows the wine to express the specificity of the micro-location. We are referring here to the bedrock, which in the Vipava Hills is predominantly Eocene flysch, i.e. marl and sandstone, and the soil with micro-organisms that can only be preserved by sustainable farming.

Transitional woodland/shrub				Inland waters				Other				Settlement
Area (in ha)	Share (%) inside the settlement	Share (%) in the Vipava Hills	Concentration index	Area (in ha)	Share (%) inside the settlement	Share (%) in the Vipava Hills	Concentration index	Area (in ha)	Share (%) inside the settlement	Share (%) in the Vipava Hills	Concentration index	
15.8	3.0	10.8	139	2.1	0.4	8.1	104	27.7	5.2	9.1	117	Brje
2.3	2.0	1.6	96	2.5	2.2	9.6	574	6.7	5.9	2.2	133	Dolenje
9.7	2.1	6.6	99	0.2	0.1	0.9	14	20.4	4.4	6.7	101	Gaberje
11.8	1.8	8.1	85	0.1	0.0	0.4	4	46.3	7.1	15.3	161	Planina
9.4	1.6	6.5	76	0.6	0.1	2.4	29	16.9	2.9	5.6	66	Šmarje
0.4	1.0	0.3	47	0.0	0.0	0.0	0	1.1	2.7	0.4	61	Tevče
3.8	1.2	2.6	58	5.4	1.7	20.9	459	13.3	4.3	4.4	96	Velike Žabljice
1.6	0.9	1.1	42	0.0	0.0	0.0	0	8.3	4.6	2.7	104	Vrtovče
3.6	1.7	2.4	80	0.1	0.1	0.5	16	13.3	6.3	4.4	143	Zavino
2.3	2.5	1.6	117	0.5	0.5	1.9	140	5.1	5.5	1.7	124	Dolanci
1.4	1.3	0.9	63	0.5	0.5	2.1	138	2.5	2.4	0.8	54	Kodreti
17.2	4.0	11.8	188	4.1	0.9	15.7	251	23.8	5.5	7.9	125	Branik (part)
11.9	3.5	8.2	165	5.2	1.5	20.3	409	18.0	5.3	5.9	119	Preserje
3.4	3.2	2.4	151	0.7	0.6	2.6	170	4.0	3.7	1.3	84	Sp. Branica
2.1	4.4	1.5	206	1.2	2.4	4.6	640	1.8	3.7	0.6	84	Steske (part)
8.3	2.2	5.7	101	0.0	0.0	0.0	0	19.3	5.0	6.4	114	Erzelj
11.6	2.6	7.9	120	0.1	0.0	0.2	3	13.7	3.0	4.5	69	Goče
6.0	3.6	4.1	171	0.9	0.6	3.6	151	10.9	6.6	3.6	150	Lože
6.0	2.8	4.1	133	0.3	0.1	1.2	37	9.8	4.6	3.2	104	Manče
2.2	2.3	1.5	108	0.1	0.1	0.4	27	3.3	3.3	1.1	75	Orehovica
0.7	0.5	0.5	26	0.3	0.2	1.2	60	3.2	2.3	1.1	53	Podnanos
5.1	0.7	3.5	35	0.4	0.1	1.7	16	12.6	1.8	4.2	41	Podraga
9.1	1.8	6.3	84	0.5	0.1	1.8	24	21.2	4.2	7.0	94	Slap
146.0	2.1	100.0	100	25.7	0.4	100.0	100	303.3	4.4	100.0	100	

Viticulture in the Vipava Hills
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Front cover image: The Vipava wine-growing hills boast a high degree of naturalness, a wealth of cultural monuments and attractive views.

Back cover image: Local grape varieties make up an estimated 23% of the Vipava Hills.

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