## Istarska Bjelica





#### **DENOMINATIONS AND SYNONYMS:**

(I. Trujillo, D. Barranco, P. Morello)

Belica, Bellizza, Bianca, Biancara, Bianca Istriana, Bianchera, Bijelica, Cepljena Belica, Grande, Grossura, Piccola, Plemenita Belica, Sempreverde, Žlahtna Belica, Belica, Bellizza, Bianca, Biancara, Bianca Istriana, Bianchera, Bijelica, Cepljena Belica, Grande, Grossura, Piccola, Plemenita Belica, Sempreverde, Žlahtna Belica.

#### **ORIGIN AND DIFFUSION:**

'Istrska belica' is the most widely spread olive variety in the Slovenian olive orchards. After the frost in 1956, this variety was well known for numerous positive properties, which contributed to a fast expansion. According to oral tradition, the 'Istrska belica' (Istrian white olive) is autochthonous variety from Dolina and Boljunec area (Trieste, Italy). The first records on the olive varieties in Istria at the end of 19th century by Carlo Hugues did not include 'Istrska belica', which could be understood that it was brought to our region at a later time. Without any proof that this variety was developed from the original autochthonous genetic resources and was not methodically breeding, it cannot be listed among autochthonous varieties, so it is more appropriate for it to be ranked among domesticated varieties, like all the older varieties of a foreign origin that have been cultivated in the Republic of Slovenia for more than 50 years and are well adapted to our climatic conditions (Bandelj et. al, 2014; Vesel et. al., 2019).

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**PURPOSE:** Oil

### **MORPHOLOGICAL CHARACTERISATION:**

	T =		
Tree	Vigour		
	Growth habit		
	Canopy density		
Leaf blade	Length	Medium	
	Width	Medium	
	Radio length/width	Moderately elongated	
	Curvature of longitudinal axis	Incurved	
Fruit	Weight	Medium	
	Radio length/width in position A	Moderately elongated	
	Over colour at full maturity	Black	
	Symmetry in position A	Weakly asymmetric	
	Shape of apex in position A	Rounded	
	Nipple	Moderate	
	Shape of base in position A	Truncate	
Stone	Ratio length/width	Moderately elongated	
	Weight	Medium	
	Symmetry in position A	Weakly asymmetric	
	Symmetry in position B	Symmetric	
	Number of grooves on basal end	Between 7 and 10	
Stone	Distribution of grooves on basal end	Evenly distributed	
Stone			
Stolle	on basal end Shape of apex in position A Mucron	distributed	
Stolle	on basal end Shape of apex in position A	distributed Rounded	



## **MOLECULAR CHARACTERISATION (SSRs)**

UDO-43	DCA3	DCA9	DCA16	GAPU-101
175/175	237/247	192/192	124/169	191/217

# AGRONOMICAL CHARACTERISATION AND COMMERCIAL CONSIDERATIONS

Compared to other varieties in the Slovenian Istria region, 'Istrska belica' can bear low temperatures well. The leaves are spirally wrapped. The fruits are medium thick and are usually of a bright green color at the time of harvest. Because of it's erect growth habit, crown shaping poses some challenges. Experience of some growers has shown, that the trees become fertile earlier, if not pruned for a few years after planting. It is assumed that the variety is self-fertile, but preliminary studies have shown that even in monovarietal olive orchards the variety is preferentially fertilized with the pollen of other olive varieties, which are located very close to the olive orchard. In well cultivated groves, it is a good and regular fruiter. Until recently, the fruit ripened late, from mid-November to mid-December, but due to climate change, 'Istrska belica' is now harvested in mid-October. Its' oil yield is high and it is therefore mainly used for oil production. The quality olive oil made from the 'Istrska belica' variety is distinguished by its rich aroma, reminding of healthy, fresh, optimal ripe olive drupes, and of freshly mown grass. High content of biophenols gives the oil its characteristic bitter taste and pungent tactile sensation. 'Istrska belica' olive oil is distinguished by its high content of oleic acid and phenolic compounds, and consequently also by its high oxidation stability. Istrska belica' is very sensitive to the attacks of the fruit fly, olive moth and olive peacock spot disease. References: Vesel, V., Bandelj, D., Butinar, B., Bešter, E., Fantinič, J., Fičur, K., Podgornik, M., Valenčič, V., Volk, S., Baruca Arbeiter, A., Bučar-Miklavčič, M., 2019. Istrska belica: ohranjanje, vrednotenje, karakterizacija in zbiranje genskih virov oljk. https://www.zrskp.si/wp-content/uploads/2019/09/ISTRSKA-BELICA spletna-izdaja final.pdf Bandelj, D., Bešter, E., Bučar-Miklavčič, M., Butinar, B., Čalija, D., Hladnik, M., Hladnik, T., Kanjir, Ž., Levanič, T., Valenčič, V., Mazi, Ž., Miklavčič Višnjevec, A., Podgornik M., Valenčič V., Volk S. 2014. ABC o 'Istrski belici' = Factsheet on the olive variety 'Istrska belica' = L'ABC della varietà 'Bianca istriana'. Koper: Univerza na Primorskem, Znanstveno-raziskovalno središče: 16 p.Čebulj, A., Godec, B., Donik Purgaj, B., Hudina, M., Usenik, V., Koron, D., Solar, A., Vesel, V., Mrzlić, D., Rusjan, D. 2022. Sadni izbor za Slovenijo 2022. https://sadjarstvo.javnesluzbe.si/wp-content/uploads/2022/11/Sadni-izbor-2022 CIP.pdf

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