

DENOMINATIONS AND SYNONYMS:

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

Tsigkeli, Kalamatiani, Kalamata, Chondrolia, Aetonycholia, Aetonychi, Tsigkeli, Kalamatiani, Kalamata, Chondrolia, Aetonycholia, Aetonychi,

ORIGIN AND DIFFUSION:

It is a Greek variety. It is grown throughout the mainland (Aetoloakarnania, Lakonia, Fthiotida Messinia, Arkadia, Ilia) and recently has been expanded in Thessaly, Macedonia, Epirus, Samos, and Crete. It covers about 24% of the country's table olive-growing acreage and it is the dominant table olive variety in new plantations (DOEPEL, 2022).

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PURPOSE: Oil, Table olives

MORPHOLOGICAL CHARACTERISATION:

Tree	Vigour	Strong
	Growth habit	Spreading
	Canopy density	Medium
Leaf blade	Length	Long
	Width	Broad
	Ratio length/width	Moderately elongated
	Curvature of longitudinal axis	Straight
Fruit	Weight	High
	Ratio length/width in position A	Very elongated
	Over colour at full maturity	Black
	Symmetry in position A	Strongly asymmetric
	Shape of apex in position A	Acute
	Nipple	Absent or weak
	Shape of base in position A	Truncate
Stone	Ratio length/width	Very elongated
	Weight	High
	Symmetry in position A	Strongly asymmetric
	Symmetry in position B	Symmetric
	Number of grooves on basal end	Between 7 and 10
	Distribution of grooves on basal end	Evenly distributed
	Shape of apex in position A	Acute
	Mucron	Absent
	Shape of base in position A	Acute
	Rugosity of surface	Medium



MOLECULAR CHARACTERISATION (SSRs)

UDO-43	DCA3	DCA9	DCA16	GAPU-101
208/214	229/251	164/192	122/124	191/199

AGRONOMICAL CHARACTERISATION AND COMMERCIAL CONSIDERATIONS

This variety is of medium hardiness (Metzidakis). It has a low rooting ability and an intermediate start of bearing (Kostelenos, 2011). The fruit ripens late and it is harvested when it has undergone a full colour change. Although it is considered of dual purpose, it is grown chiefly for Greek-style black olives. Productivity is high and alternate. The fruit stands up well to preparation and handling. It is processed and packed as natural black olives due to its excellent colour stability. It has a high flesh-to-stone ratio and it is freestone. It gives a medium yield of excellent-quality oil which is rich in polyphenols. It is resistant to salinity (Loupassaki et al., 2002; Chartzoulakis et al., 2002; Chartzoulakis 2005), moderately resistant to cold, and sensitive to excessively hot climates. It is moderately susceptible to olive leaf spot, while less susceptible to olive knot, verticillium wilt (Antoniou et al., 2008) and olive fly (Kalaitzaki et al.).

References: Antoniou, P.P., Markakis, E.A., Tjamos, S.E., Paplomatas, E.J., Tjamos, E.C. 2008. Novel methodologies in screening and selecting olive varieties and rootstocks for resistance to *Verticillium dahliae*. *Eur. J. Plant Pathol.* 122, 549–560. Chartzoulakis K.S. 2005. Salinity and olive: Growth, salt tolerance, photosynthesis and yield. *Agricultural Water Management* 78:108–121. DOEPEL (2022) National Interprofessional Organization for Table Olives in Greece. Kalaitzaki A, Koufakis I, Papadaratsaki A, Manolikaki I, Koubouris G (unpublished data) Field evaluation of the susceptibility of olive cultivars to *Bactrocera oleae* in Western Crete (Southern Greece). Kostelenos G. 2011. *Elements of Olive Growing*. Book. Loupassaki M.H., Chartzoulakis K.S., Digalaki N.B., Androulakis I.I. 2002. Effects of salt stress on concentration of nitrogen, phosphorus, potassium, calcium, magnesium, and sodium in leaves, shoots, and roots of six olive cultivars. *Journal of Plant Nutrition* 25 (11):2457–2482. Metzidakis (unpublished data) Agronomical characterization of olive varieties in Greece.

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