Native people's perception of trees in the urban landscape of the Bay of Naples

Adriano Stinca [1,*], Luigi Marfella [2], and Assunta Esposito [1]

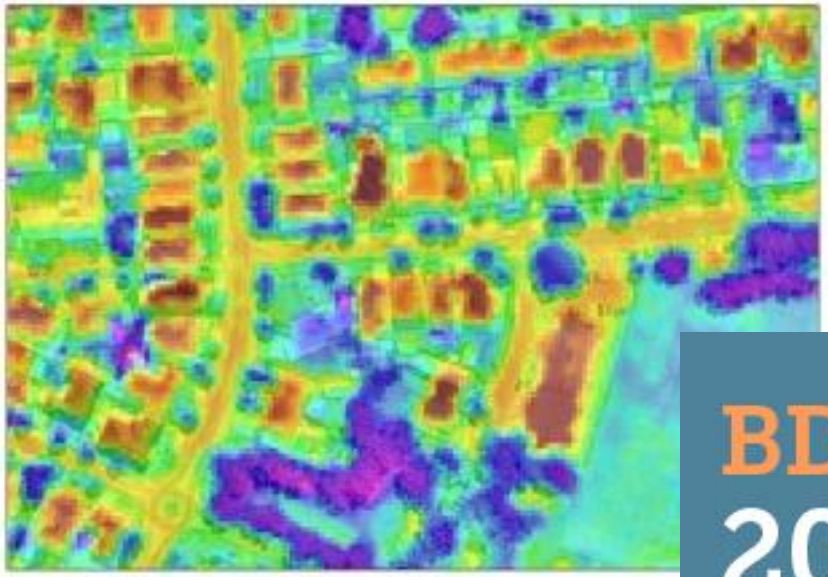
[1] Department of Environmental, Biological and Pharmaceutical Sciences and Technologies, University of Campania Luigi Vanvitelli, Via Vivaldi 43, 81100 Caserta, Italy; adriano.stinca@unicampania.it; assunta.esposito@unicampania.it
[2] School of Geography, Geology and the Environment, Keele University, Staffordshire ST5 5BG, United Kingdom; l.marfella@keele.ac.uk
* Corresponding author: adriano.stinca@unicampania.it

Università degli Studi della Campania *Luigi Vanvitelli*
Dipartimento di Scienze e Tecnologie Ambientali Biologiche e Farmaceutiche
Keele UNIVERSITY

Introduction

Ecosystem services from trees:
- mitigation of the urban heat island effect
- regulation of microclimate and hydrology
- provision of leisure spaces
- mitigation of air pollution
- sequestration of carbon dioxide

Improvement of human well-being



Adelaide, Australia

Ossola et al. *Landscape and Urban Planning*, **2021**, 209: 104046.

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Introduction

1950s

2021

Castellammare di Stabia, Italy

Urbanization

Holm oak tree

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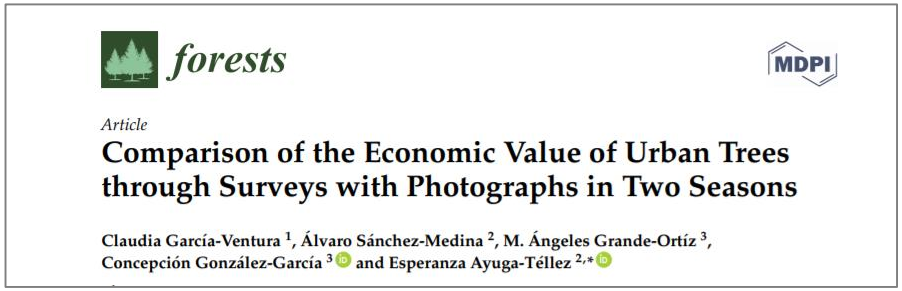
Introduction



forests

MDPI

Article

Comparison of the Economic Value of Urban Trees through Surveys with Photographs in Two Seasons

Claudia García-Ventura [1], Álvaro Sánchez-Medina [2], M. Ángeles Grande-Ortíz [3], Concepción González-García [3] and Esperanza Ayuga-Téllez [2,*]

Forest Policy and Economics 71 (2016) 71–79

Contents lists available at ScienceDirect

Forest Policy and Economics

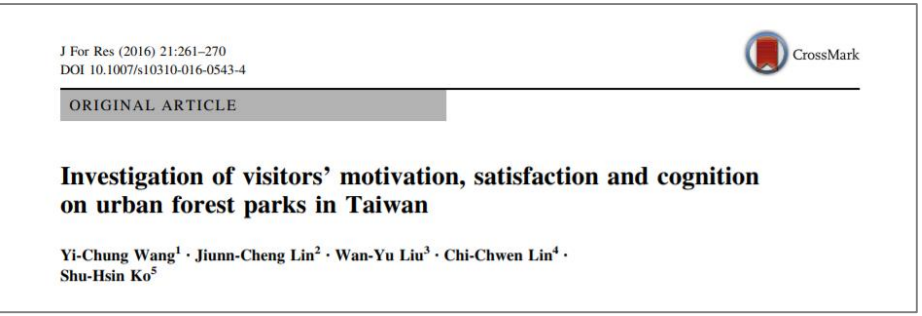
journal homepage: www.elsevier.com/locate/forpol

ELSEVIER

Latent preferences of residents regarding an urban forest recreation setting in Ljubljana, Slovenia☆

CrossMark

Anže Japelj [a,*], Robert Mavsar [b], Donald Hodges [c], Marko Kovač [d], Luka Juvančič [e]



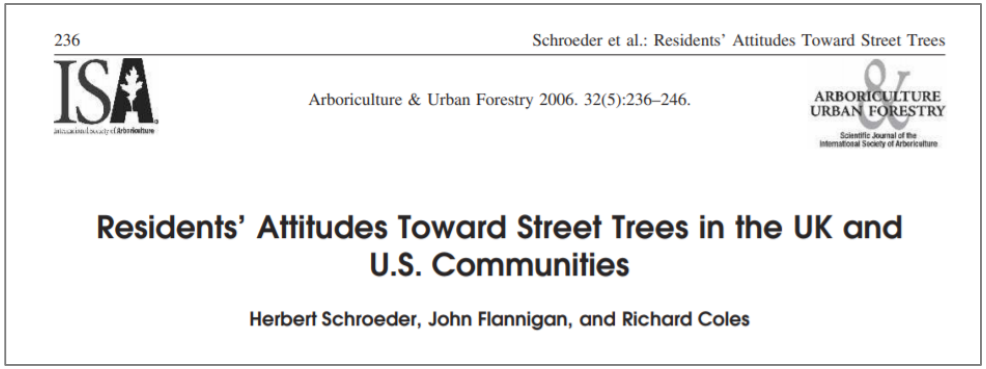
J For Res (2016) 21:261–270
DOI 10.1007/s10310-016-0543-4

CrossMark

ORIGINAL ARTICLE

Investigation of visitors' motivation, satisfaction and cognition on urban forest parks in Taiwan

Yi-Chung Wang[1] · Jiunn-Cheng Lin[2] · Wan-Yu Liu[3] · Chi-Chwen Lin[4] · Shu-Hsin Ko[5]



236 Schroeder et al.: Residents' Attitudes Toward Street Trees

ISA

Arboriculture & Urban Forestry 2006. 32(5):236–246.

ARBORICULTURE & URBAN FORESTRY

Residents' Attitudes Toward Street Trees in the UK and U.S. Communities

Herbert Schroeder, John Flannigan, and Richard Coles

Urban Ecosyst
DOI 10.1007/s11252-016-0581-x

CrossMark

Effects of biodiversity and environment-related attitude on perception of urban green space

B. Gunnarsson[1] · I. Knez[2] · M. Hedblom[3] · Å. Ode Sang[4]

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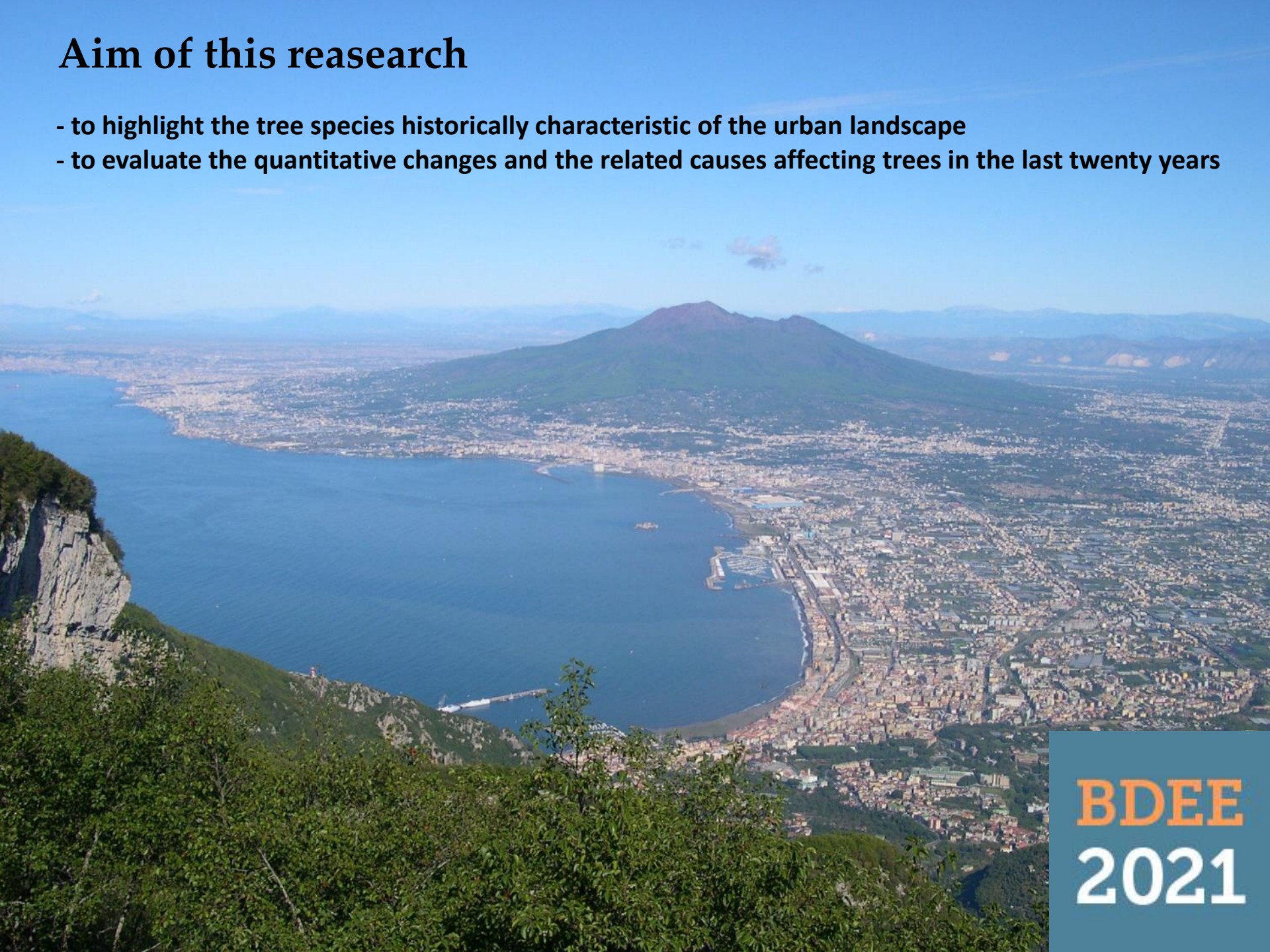
Aim of this reasearch

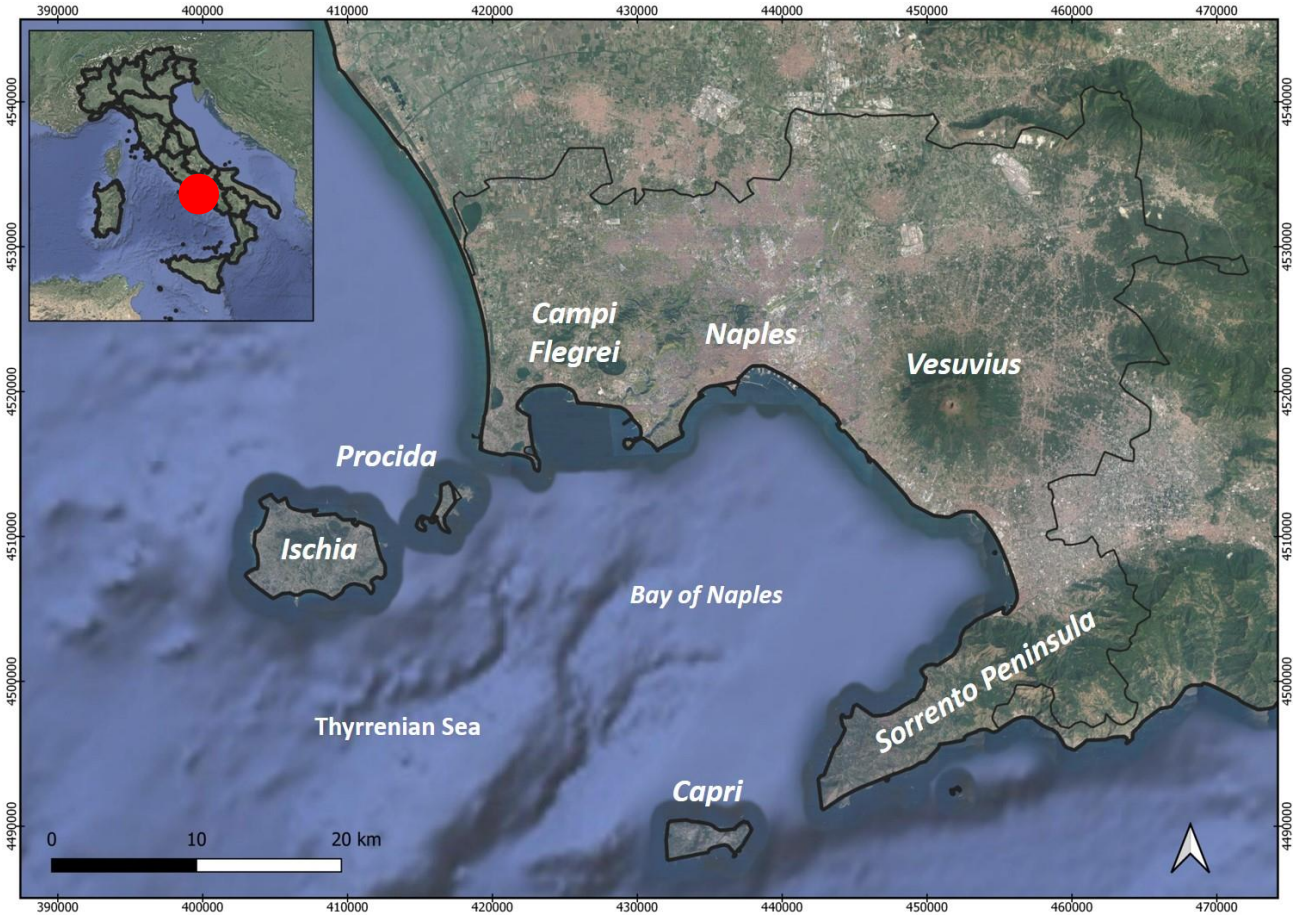
- to highlight the tree species historically characteristic of the urban landscape
- to evaluate the quantitative changes and the related causes affecting trees in the last twenty years



BDEE
2021

Materials and methods

Study area



~ 1,171 km²

92 municipalities

~ 3 million dwellers

2,580 inhabitants/km²

~ 20% artificial surfaces

~ 0–600 m a.s.l.

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Materials and methods

Data collection

1. **Which tree species do you think is historically characteristic of the urban area of the Bay of Naples?**

2. **Which tree species do you think has shown, in the last twenty years (2000-2020), a reduction or an increase in the number of individuals in the urban area of the Bay of Naples?**

3. **What factor do you think played a greater role in the reduction or increase in the number of tree individuals in the urban area of the Bay of Naples?**

4. **Are you satisfied with the current abundance (diversity and number of individuals) and state of conservation (phytosanitary conditions, pruning, etc.) of the trees in the urban area of the Bay of Naples?**

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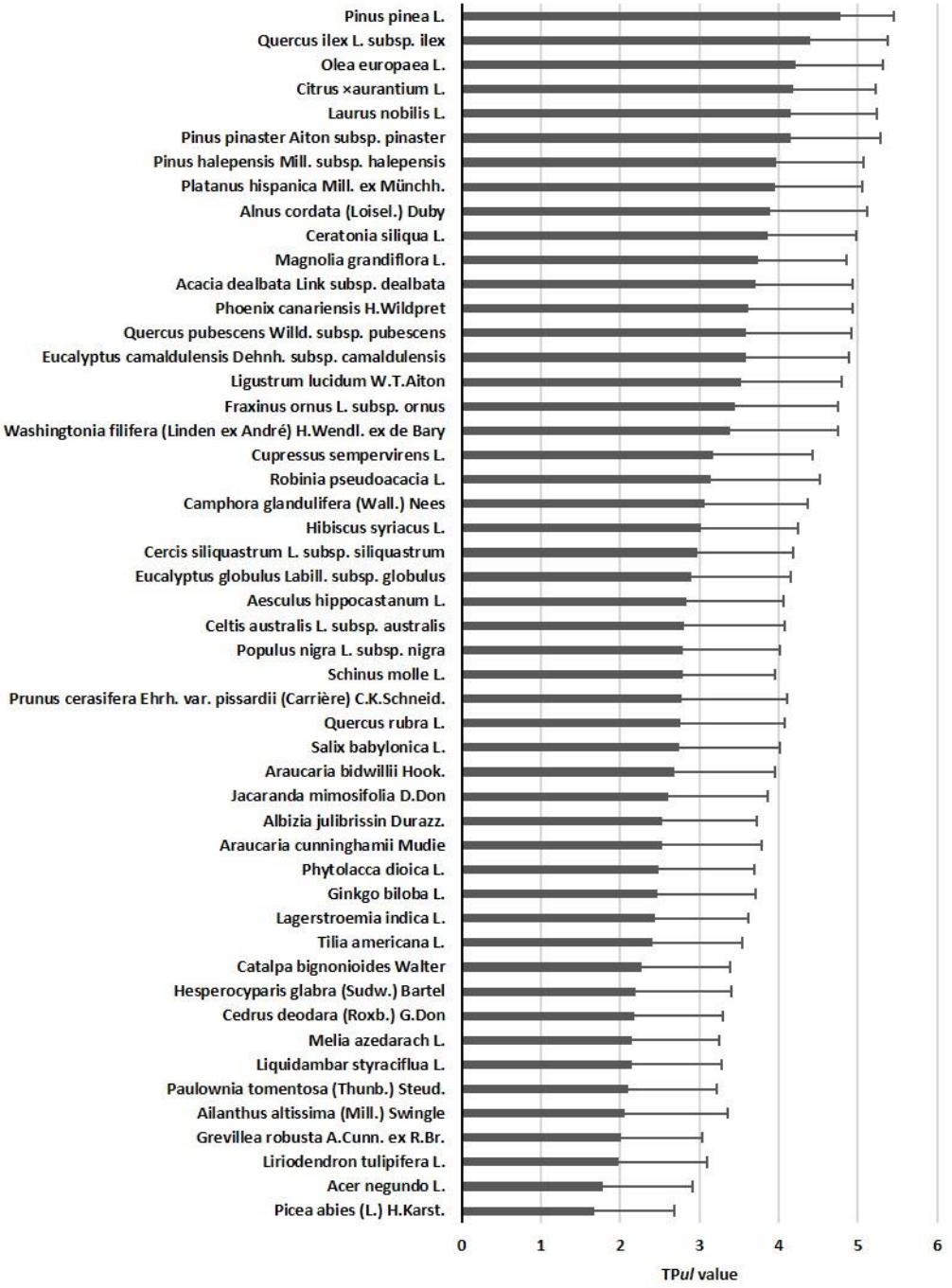
Results

Question 1

Which tree species do you think is historically characteristic of the urban area of the Bay of Naples?

[the answers 5-point rating scale ranged from 1 = "tree not characteristic of the urban landscape" to 5 = "tree very characteristic of the urban landscape"]

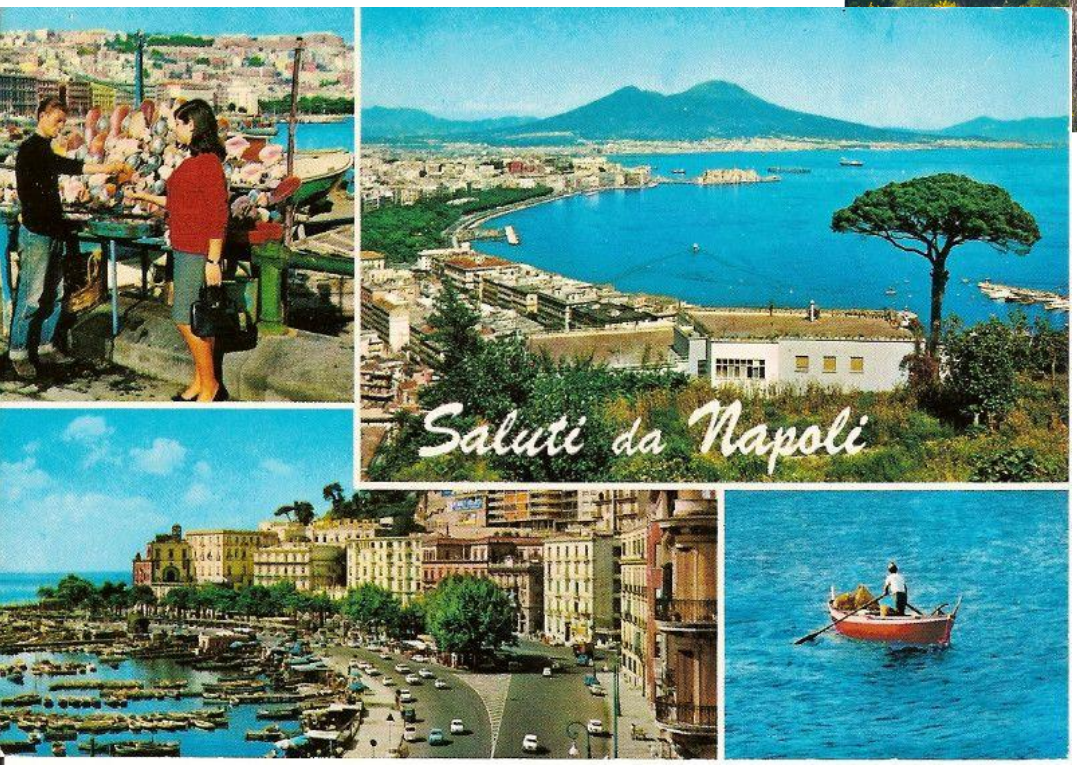


Tree landscape value perceived by respondents (TP*ul* value)

BDEE 2021

Results

***Pinus pinea* L.**
Pianaceae



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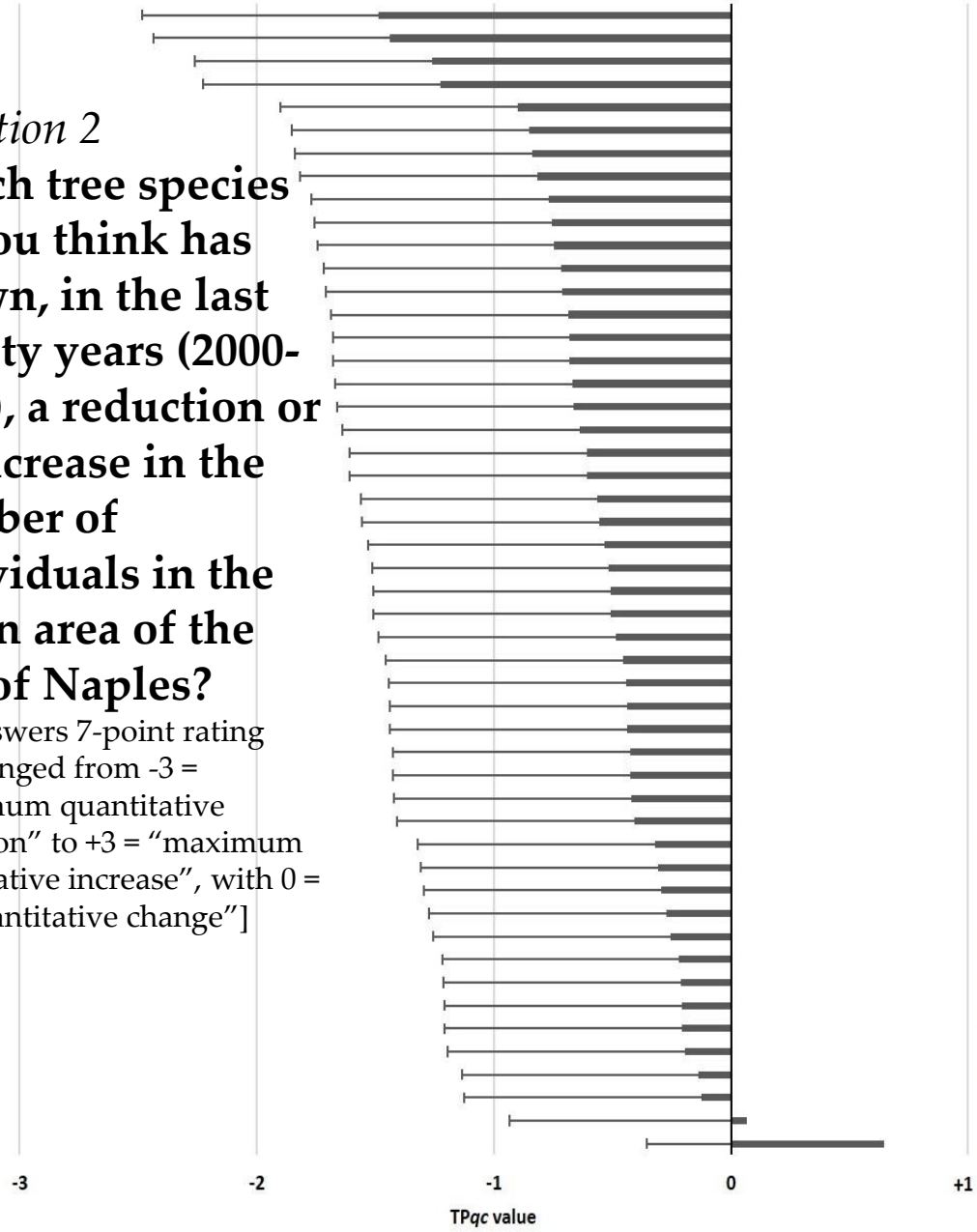
2021

Results

Question 2

Which tree species do you think has shown, in the last twenty years (2000-2020), a reduction or an increase in the number of individuals in the urban area of the Bay of Naples?

[the answers 7-point rating scale ranged from -3 = "maximum quantitative reduction" to +3 = "maximum quantitative increase", with 0 = "no quantitative change"]



Pinus pinea L.
Pinus pinaster Aiton subsp. pinaster
Pinus halepensis Mill. subsp. halepensis
Phoenix canariensis H.Wildpret
Populus nigra L. subsp. nigra
Platanus hispanica Mill. ex Münchh.
Eucalyptus camaldulensis Dehnh. subsp. camaldulensis
Salix babylonica L.
Quercus rubra L.
Alnus cordata (Loisel.) Duby
Ceratonia siliqua L.
Quercus pubescens Willd. subsp. pubescens
Eucalyptus globulus Labill. subsp. globulus
Citrus ×aurantium L.
Aesculus hippocastanum L.
Cedrus deodara (Roxb.) G.Don
Camphora glandulifera (Wall.) Nees
Fraxinus ornus L. subsp. ornus
Araucaria cunninghamii Mudie
Hesperocyparis glabra (Sudw.) Bartel
Araucaria bidwillii Hook.
Liriodendron tulipifera L.
Liquidambar styraciflua L.
Tilia americana L.
Cupressus sempervirens L.
Acacia dealbata Link subsp. dealbata
Celtis australis L. subsp. australis
Grevillea robusta A.Cunn. ex R.Br.
Phytolacca dioica L.
Ginkgo biloba L.
Catalpa bignonioides Walter
Picea abies (L.) H.Karst.
Paulownia tomentosa (Thunb.) Steud.
Washingtonia filifera (Linden ex André) H.Wendl. ex de Bary
Magnolia grandiflora L.
Laurus nobilis L.
Olea europaea L.
Prunus cerasifera Ehrh. var. pissardii (Carrière) C.K.Schneid.
Lagerstroemia indica L.
Hibiscus syriacus L.
Quercus ilex L. subsp. ilex
Jacaranda mimosifolia D.Don
Acer negundo L.
Albizia julibrissin Durazz.
Melia azedarach L.
Cercis siliquastrum L. subsp. siliquastrum
Schinus molle L.
Ligustrum lucidum W.T.Aiton
Robinia pseudoacacia L.
Ailanthus altissima (Mill.) Swingle

Value of tree quantitative change in the last twenty years perceived by respondents for each tree species (TP*qc*)

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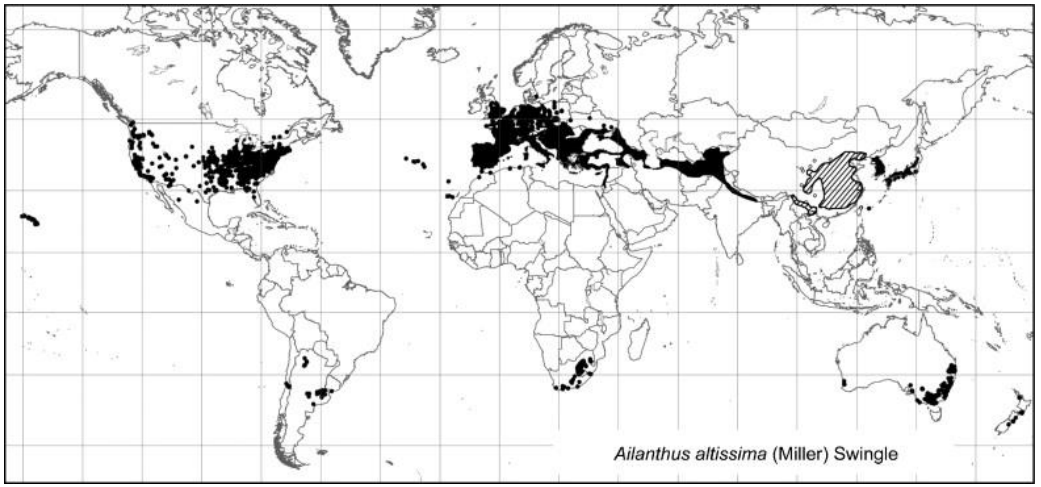
Results

Ailanthus altissima (Mill.) Swingle
Simaroubaceae



Kowarik & Säumel. *Perspect. Plant Ecol., Evol.*, **2007**, 8, 207–237.

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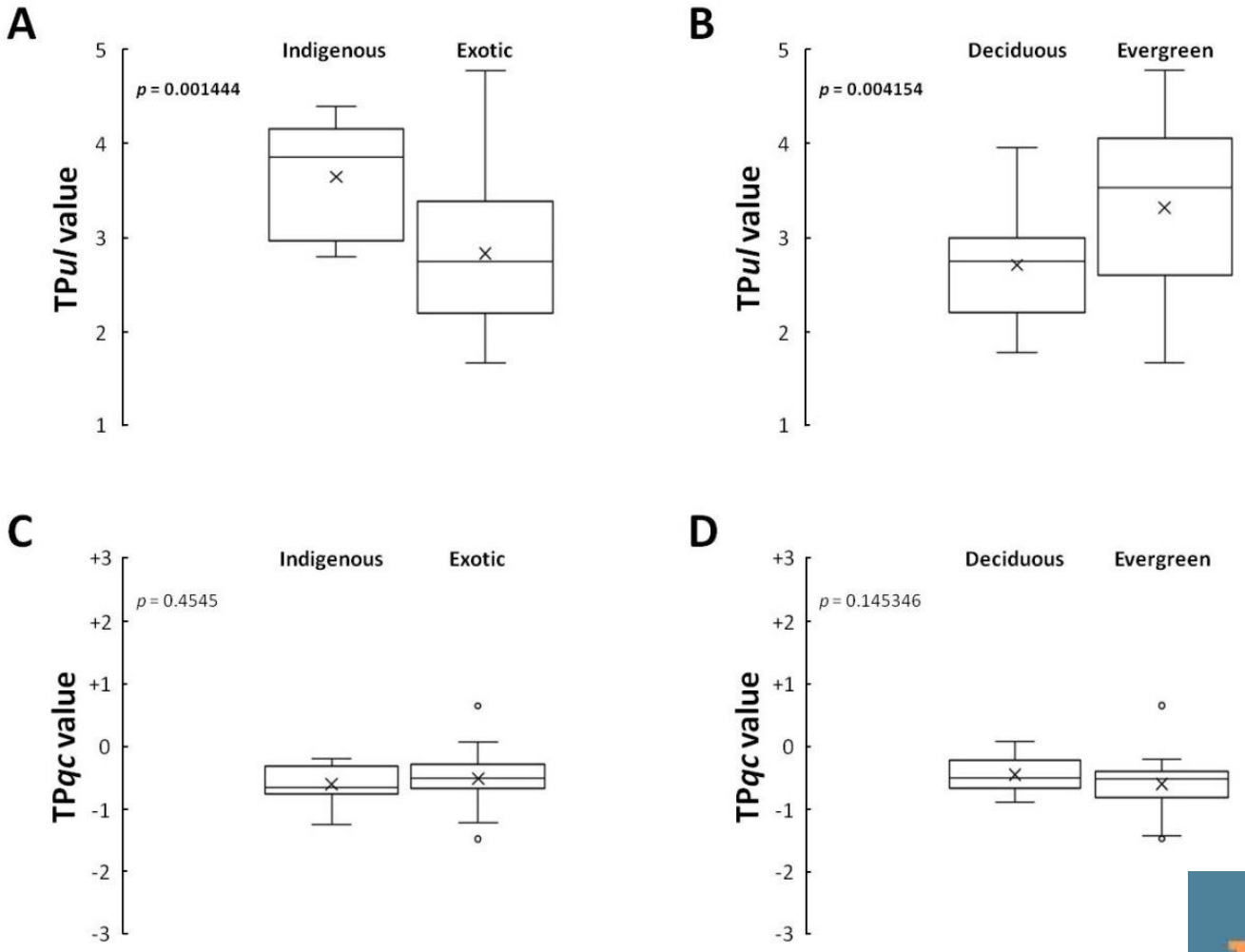
Results

Tree landscape perceived by respondents



Tree quantitative changes in the last twenty years perceived by respondents

ANOVA, Tukey test, $p < 0.05$

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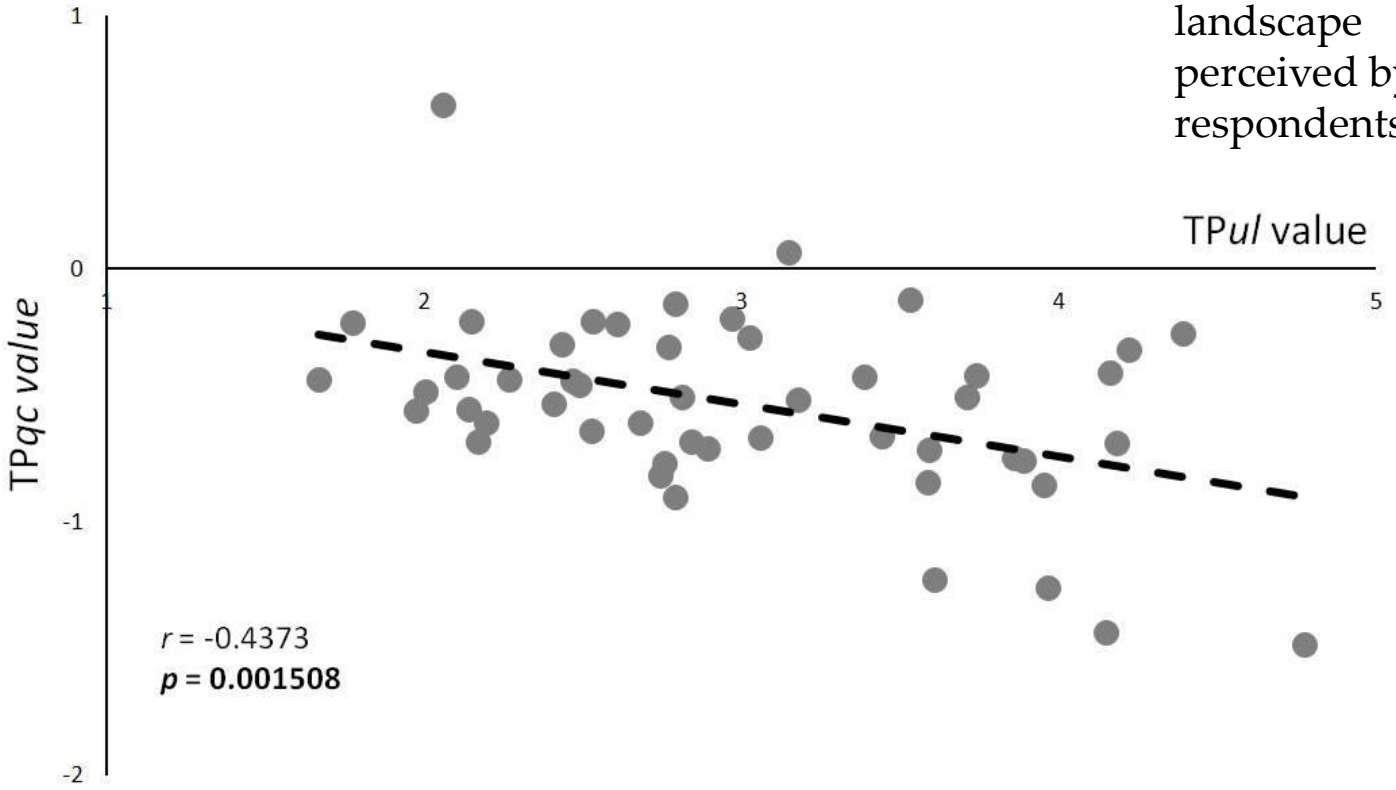
Results

Tree quantitative changes in the last twenty years perceived by respondents

Tree landscape perceived by respondents



Pearson's correlation, $p < 0.05$

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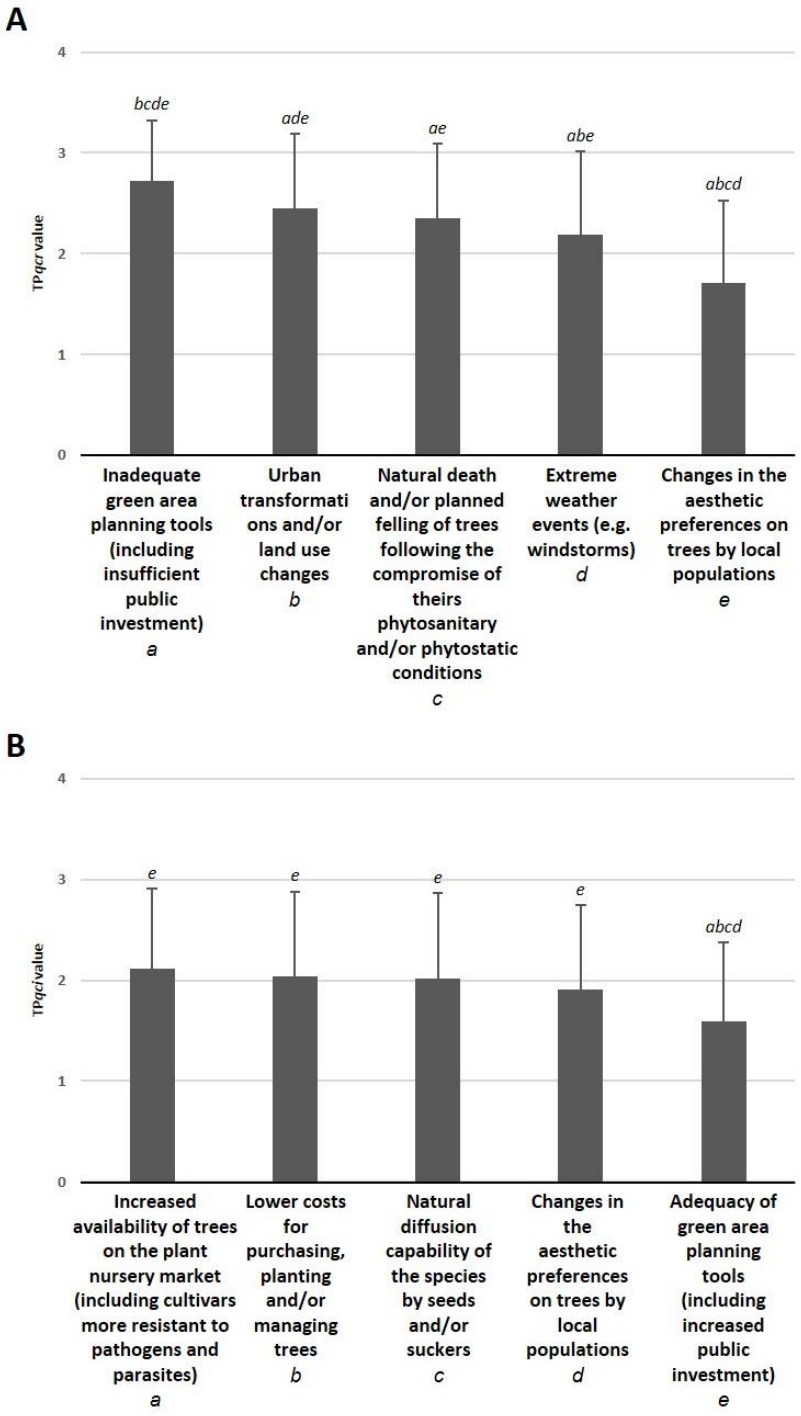
Results

Question 3

What factor do you think played a greater role in the reduction or increase in the number of tree individuals in the urban area of the Bay of Naples?

[the answers 3-point rating scale ranged from 1 = "not very important factor" to 3 = "very important factor"]



ANOVA, Tukey test, $p < 0.05$

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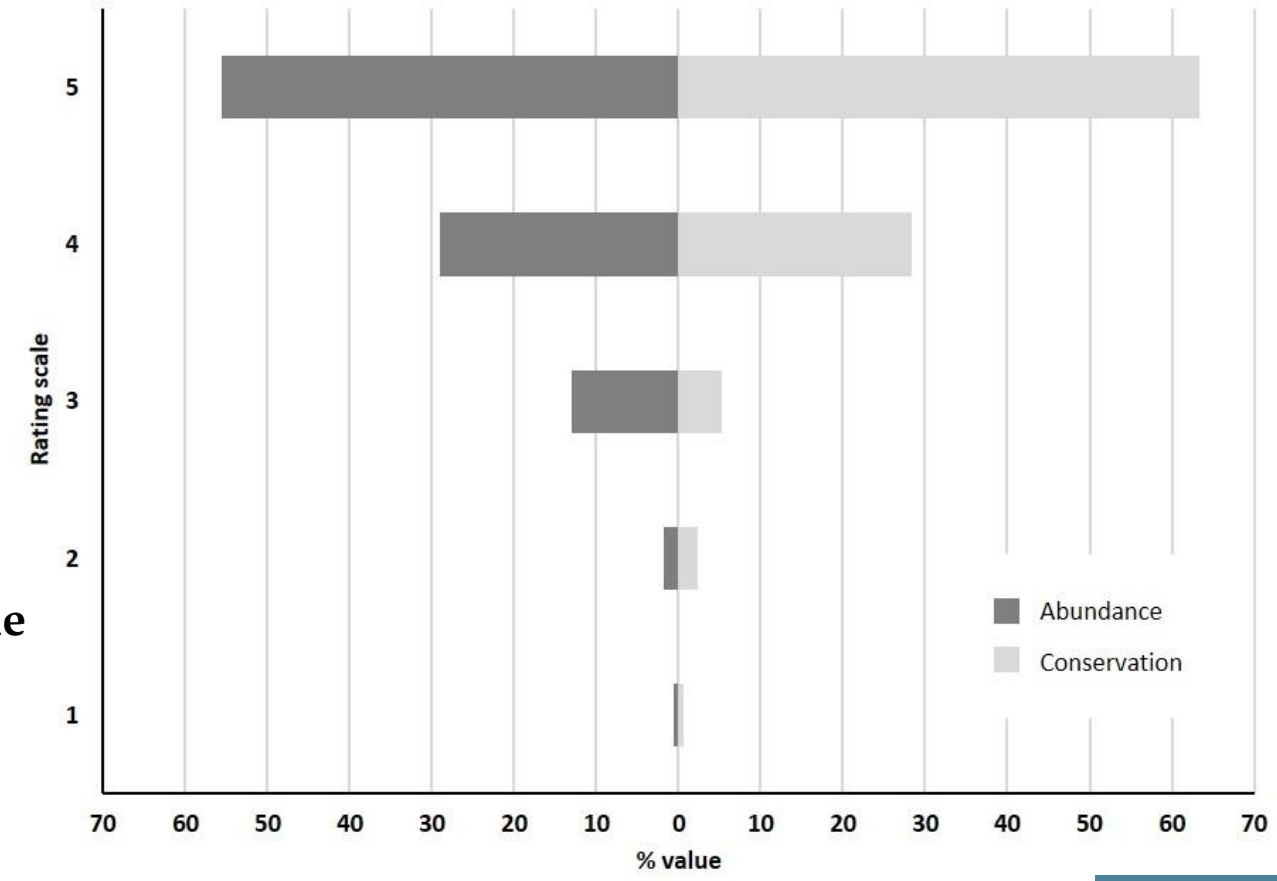
Results

Question 4

Are you satisfied with the current abundance (diversity and number of individuals) and state of conservation (phytosanitary conditions, pruning, etc.) of the trees in the urban area of the Bay of Naples?

[the answers 5-point rating scale ranged from 1 = "not satisfied" to 5 = "very satisfied"]



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Conclusion

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