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**Abstract.** Municipalities are setting targets for increasing street tree species diversity to support resilience and enhance the supply of ecosystem services from the urban forest. Assessments of street tree composition and structure, and consequent vulnerability to the stresses of urban climate change, pests, and disease, offer guidance for such targets. However, assessing local resident preferences toward species diversity within streets is also important to achieving such targets. Much of the research on street tree preference to date has focused on resident preferences for individual street tree characteristics, without reference to collective/contextual characteristics such as species diversity. We inferred resident preferences for collective street tree features, including species richness, from nearby house sale prices in the city of Brisbane, Australia. While home-buyers were willing to pay a premium for houses on streets with mature and aged trees, their tolerance for mixtures of species was limited to no more than six species nearby. Tolerance also varied within the city with greater sensitivity to mixtures of species in locations of greater socio-economic advantage. These findings suggest that increased diversity will not automatically be accepted by the community. Municipalities need to be cautious in their approach to increasing tree species diversity at finer scales, like streetscapes, within the urban forest.

**Key words.** Resident Preferences; Species Diversity; Street Trees.



**Abstract.** This study examined the usefulness of airborne light detection and ranging (LiDAR) data for estimating the individual tree health condition in Japanese mountain cherry (*Cerasus jamasakura*) in Yoshinoyama, Nara Prefecture, Japan. LiDAR variables that represented the ratio of lasers hitting tree components were calculated and their effectiveness was examined by relating them to the results of conventional field-based visual tree health assessments based on ordination, correlation analyses, and generalized linear models. The results showed that many of the LiDAR variables had significant correlations with the variables derived from visually evaluated tree health condition. In particular, the proportion of "only" returns, which represents the ratio of the lasers reflected from the crown surfaces, was the most effective for estimating total health condition in relation to the crown density, one of the key health indicators for representing physical properties. The individuals with large estimation errors had smaller crowns than the individuals with small errors, suggesting that sufficiently large crown sizes are important for more accurate estimations of the tree health condition using airborne LiDAR data.

**Key Words.** Airborne Laser Scanning; Detrended Correspondence Analysis; Hemispherical Photography; Single Tree Level; Tree Crown Density; Tree Health Assessment.



**Abstract.** Roadside trees provide benefits to drivers such as traffic calming, roadway definition, and driver stress reduction. However, trees are also one of several roadway infrastructure elements commonly involved in single-vehicle crashes. In this study, Florida Highway Saftey and Motor Vehicle records were analyzed to: evaluate the relative frequency of tree-related crashes compared to other fixed-object crashes; assess the impact of roadway-, vehicle-, and driver-related factors on tree crash frequency; and compare the severity of tree crashes relative to other single-vehicle crashes. In accessing 3,033,041 crash records from 2006 to 2013 (all complete years), we identified 323,581 single-vehicle accidents (10.6%) and 47,341 tree-related accidents (1.6%). Trees were the third most common fixed object hit in urban single-vehicle accidents and the second most common fixed object hit in rural single-vehicle accidents. Driver gender, vehicle type, light conditions, weather conditions, and land use all were correlated with the frequency. Additionally, the injuries associated with tree crashes were more severe than all other singlevehicle crash types except vehicle rollovers.

**Key Words**. Risk; Single-Vehicle Collisions; Transportation; Tree Hazards; Urban Forestry.