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E²% *T

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E²% *T

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(Platanus orientalis)

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$$S_{pi} = \pm \sqrt{\frac{P_i(1-P_i)}{N}}$$

(M=)

(m=)

$$N = \frac{t^2 \times (1-P_i)}{P_i(0.01 \times E\%)^2}$$

E%

E

%

N

P_i

t

(÷ =)

(E%)

P%

$$P\% = (n/N)^*$$

$$P = n/N$$

P

n

N

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$$\hat{t} = \frac{d}{S_d}$$

$$d = |\bar{X} - \mu|$$

$$\hat{t} = \frac{d}{S_d}$$

$$d = |\Pi - P|$$

$$S_d^2 = \frac{\Pi(1-\Pi)}{\Pi}$$

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E²%*T
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	/	/	/	/	(T)
/	/	/	/	/	E%
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Determination of Appropriate Inventory Method in Urban Forestry

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Abstract

One of the most important information in urban forestry is the knowledge of their areas. Nowadays, for this purpose, different methods are used in different countries. In this research, the first one carried out in Iran, different sampling methods including 100% inventory with 10-meters strips, simple random sampling, randomized block sampling, systematic random sampling, two stage sampling and dot grid sampling using the aerial photographs, were used to obtain the areas covered by street trees. The study area was Valiasr Avenue in Tehran (right and left side of 5000 meters of the avenue with 500 transects). The largest length of tree's crown (Which is the same as strip's width that were at the beginning point of any strip or the nearest) were measured by 100% inventory (the comparison base for other methods). Strip's areas were calculated using the largest crown length for each method 50 strips were selected and the measurements were carried out and analyzed. Normality of data were tested by χ^2 -test and t-test was used to determine the difference only block random sampling had difference between each different sampling had difference, there for T* E²% value was calculated for other methods. Results showed that dot grid sampling is the best inventory method in urban forestry.

Keywords: Inventory, Sampling, Dot grid, simple random, Block random, Systematic random, Two stage sampling, urban forestry.

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