



Početna stranica  
Abecedni popis časopisa

Časopisi po područjima  
Prirodne znanosti  
Tehničke znanosti  
Biomedicina i zdravstvo  
Biotehničke znanosti  
Društvene znanosti  
Humanističke znanosti

Uredništva  
Prijava novog časopisa



Croatian Journal of Forest Engineering, Vol.26 No.2 Prosinac 2005.

Izvorni znanstveni članak

### Efficiency of ultrasonic Vertex III hypsometer compared to the most commonly used hypsometers in Croatian forestry

Mario Božić  
Juro Čavlović  
Nikola Lukić  
Krunoslav Teslak  
Danijel Kos

Puni tekst (Engleski) Str. 91 - 99 (pdf, 154.98 KB) downloads: 338

#### Sažetak

The article investigates the efficiency of the ultrasonic Vertex hypsometer in tree height measurements in relation to some of the most commonly used hypsometers in Croatian forestry. The whole measurement process consists of three steps: time needed to reach the measurement zone, time needed to determine the distance to a tree, and time needed to measure and read the height of a tree. Measurements were conducted with four hypsometers: Vertex, Blume-Leiss, Bitterlich's Spiegel Relaskop with a standard scale (RO) and Bitterlich's Spiegel Relaskop with a CP scale (with the horizontally /RCPH/ or vertically /RCPV/ positioned staff). Research results do not show any statistically important differences among the hypsometers in terms of time needed to reach the measurement zone. In measuring tree heights in a stricter sense (without the element of reaching the measurement zone), the least amount of time was required by the Vertex (28.4 cmin) on average. The Vertex is followed by the relaskop with a CP scale, the horizontally (57.4 cmin) or vertically positioned staff (86.1 cmin), then the Blume-Leiss (84.0 cmin) and finally the relaskop with a standard scale (106.8 cmin). The differences between the Vertex and other hypsometers are statistically significant. Despite a slightly higher price of the Vertex, its speed, precision, accuracy and simplicity of use, as well as the possibility of simple circular plot forest inventories rank it above all the other instruments.

#### Ključne riječi

tree height; hypsometers; height measurement; time study; variance analysis



Pretraživanje članaka

traži

Napredno pretraživanje

Upute za pretraživanje

Moj profil

Registracija novih korisnika

Korisnička oznaka (email)

Lozinka

prijava

Zaboravili ste lozinku?

Posjeta: 753 (od 01.01.2007.)