

COST FP1303  
Sofia, Bulgaria  
02.28 - 03.01  
2017

# Colour variation within the material of new Robinia varieties with high growing rates

RÓBERT NÉMETH

MIKLÓS BAK

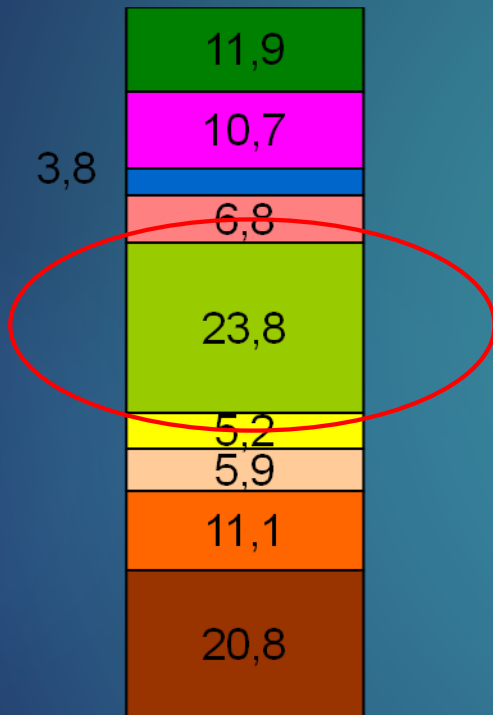
DIÁNA CSORDÓS

LÁSZLÓ TOLVAJ

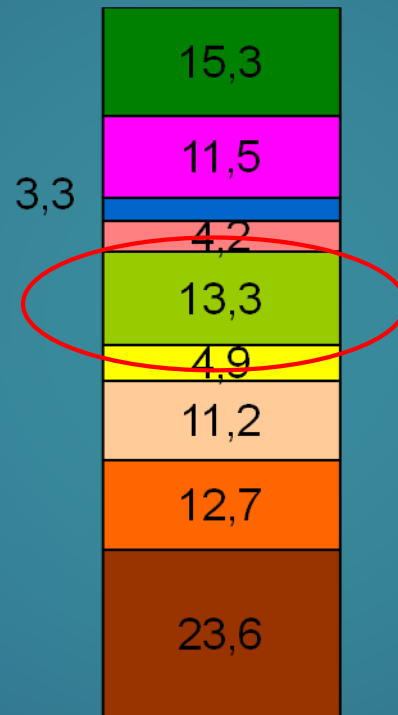
University of Sopron  
Simonyi Károly Faculty of Engineering, Wood Sciences and Applied Arts

# Importance of the topic

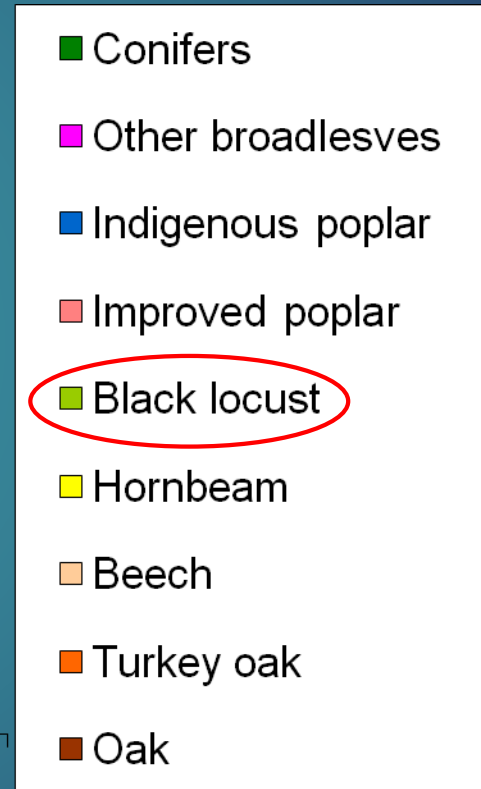
## Tree species distribution of Hungary



Area, %  
100% = 1.903,4 Mio ha



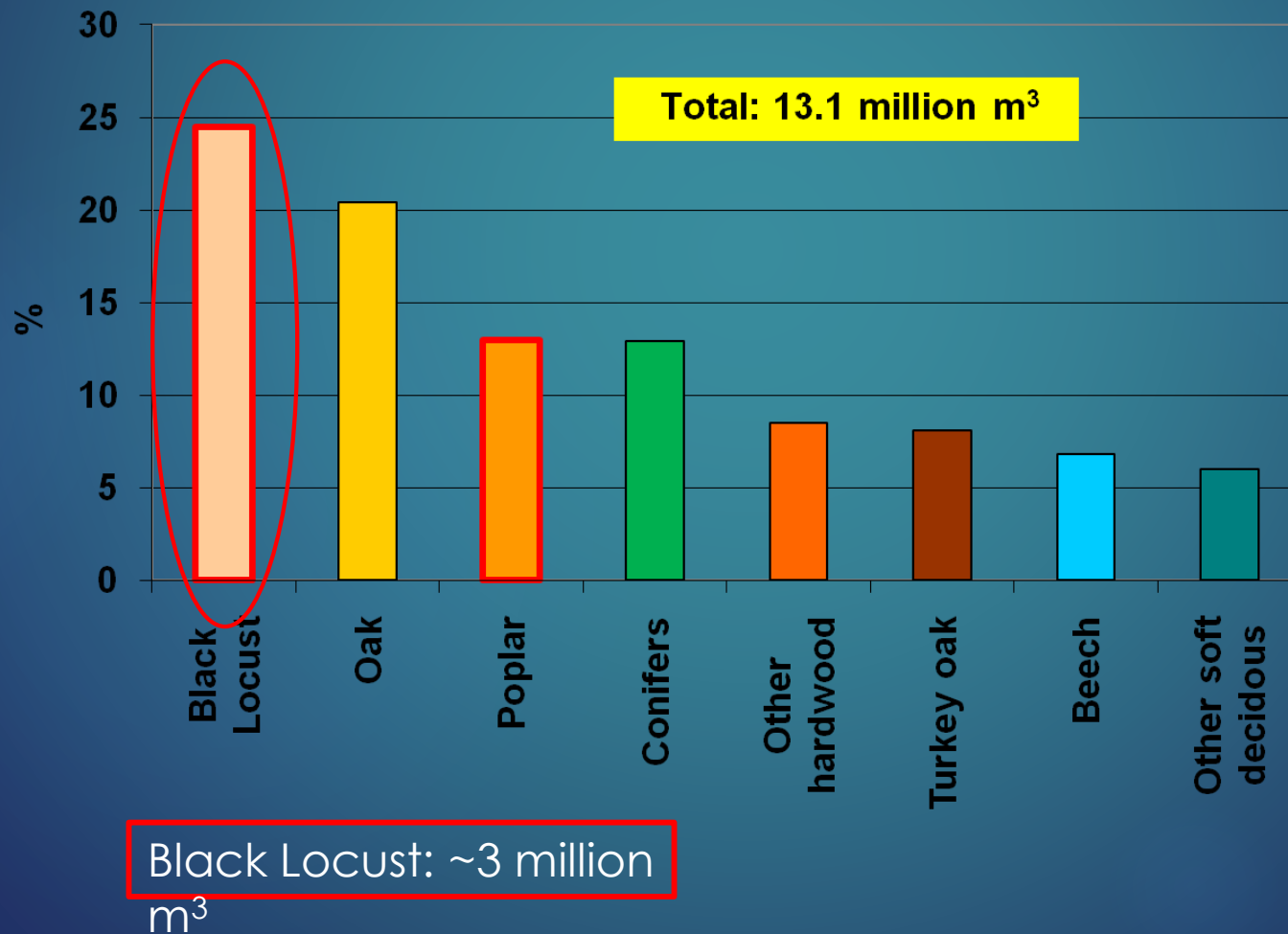
Growing stock, %  
100% = 351.9 Mio m<sup>3</sup>



*Black Locust:*  
ca. 450.000 ha  
ca. 50.000.000 m<sup>3</sup>

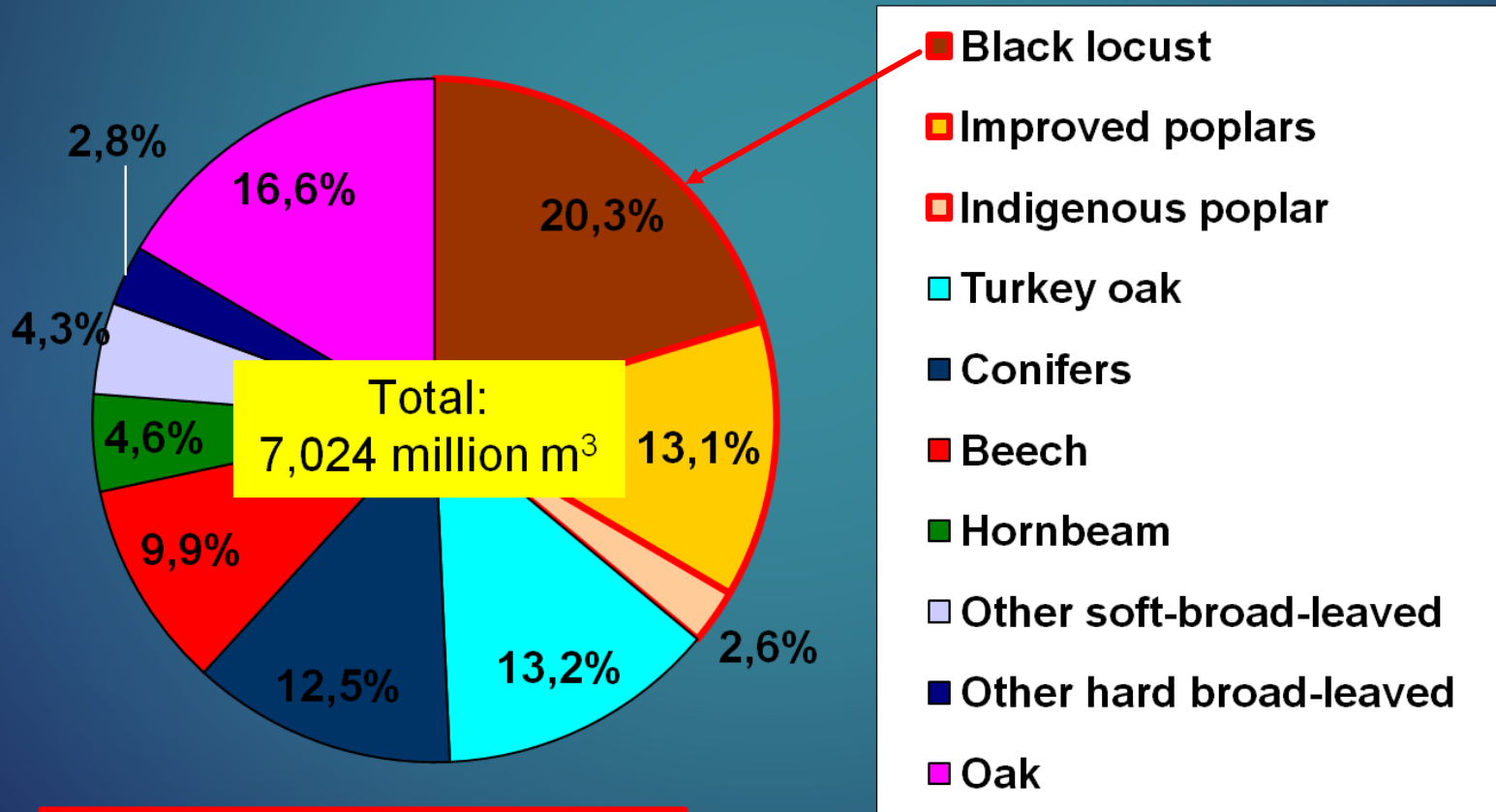
# Importance of the topic

Gross annual increment



# Importance of the topic

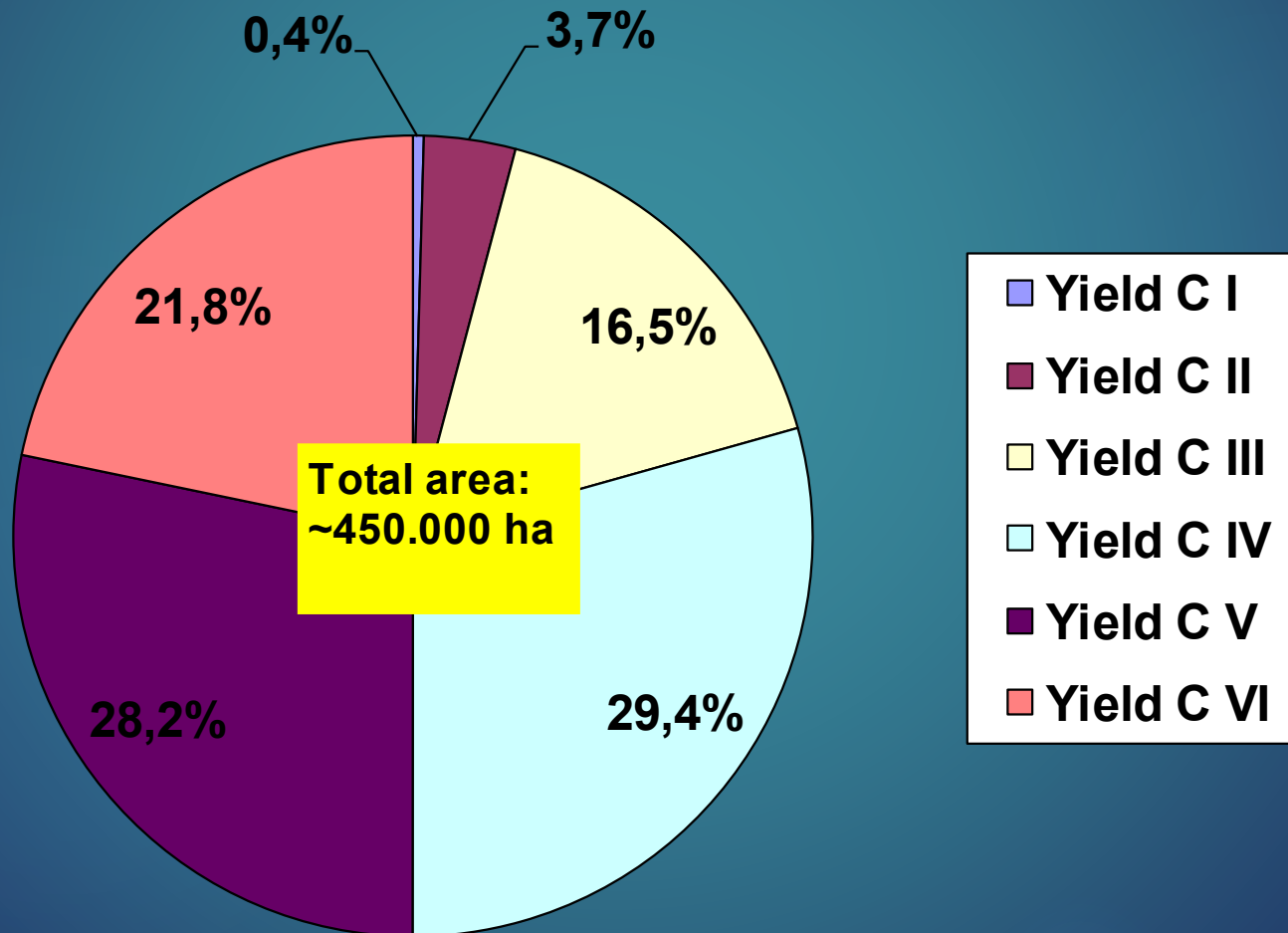
## Fellings by tree species



Black locust: ~1,5 million m<sup>3</sup>

# Importance of the topic

## Area of Robinia forests by Yield Class



# Objectives

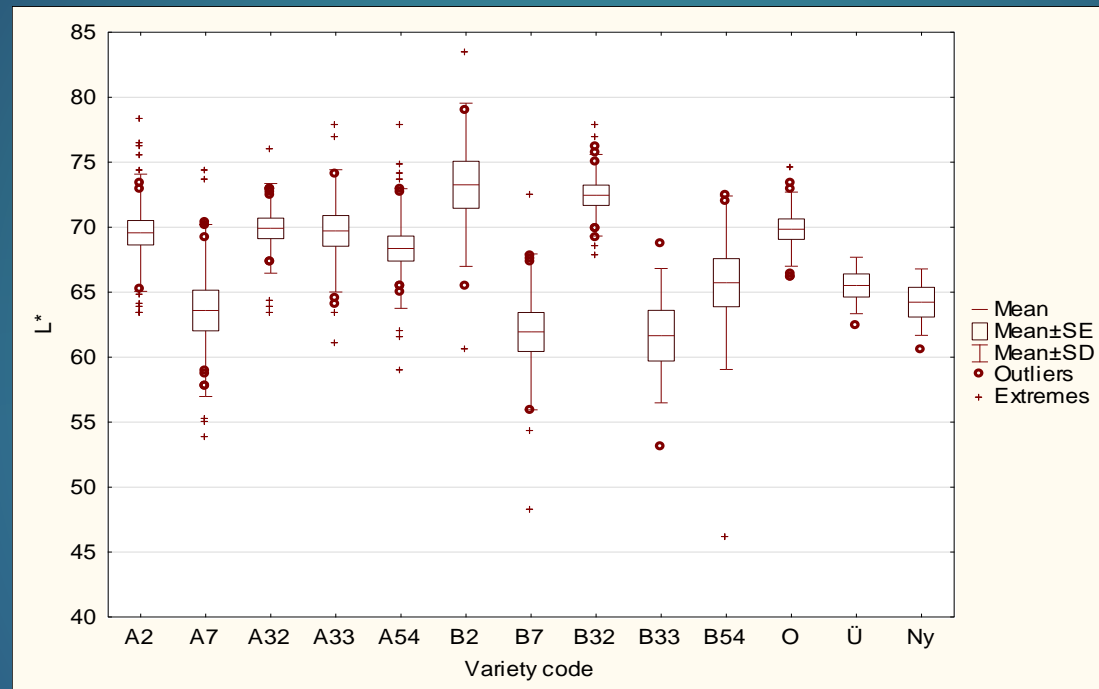
- ▶ New, extreme fast growing varieties → „Turbo Robinia”
- ▶ They might become an important industrial raw material → good mechanical and physical properties
- ▶ But! → variegation of colour (computer optimisation and surface treatment?)
- ▶ The primary goal of our work is to display the colour variability of Robinia varieties (clones) with high growth rates. Increased growth rate achieved by the breeders are likely to affect the colour of the wood, which affects its interior use and interior design.

# Typical robinia discs



Control Robinia disc (Left, Variety code: O; Age: 20 years) and New Variety disc (Right, Variety code: A54; Age: 10 years)

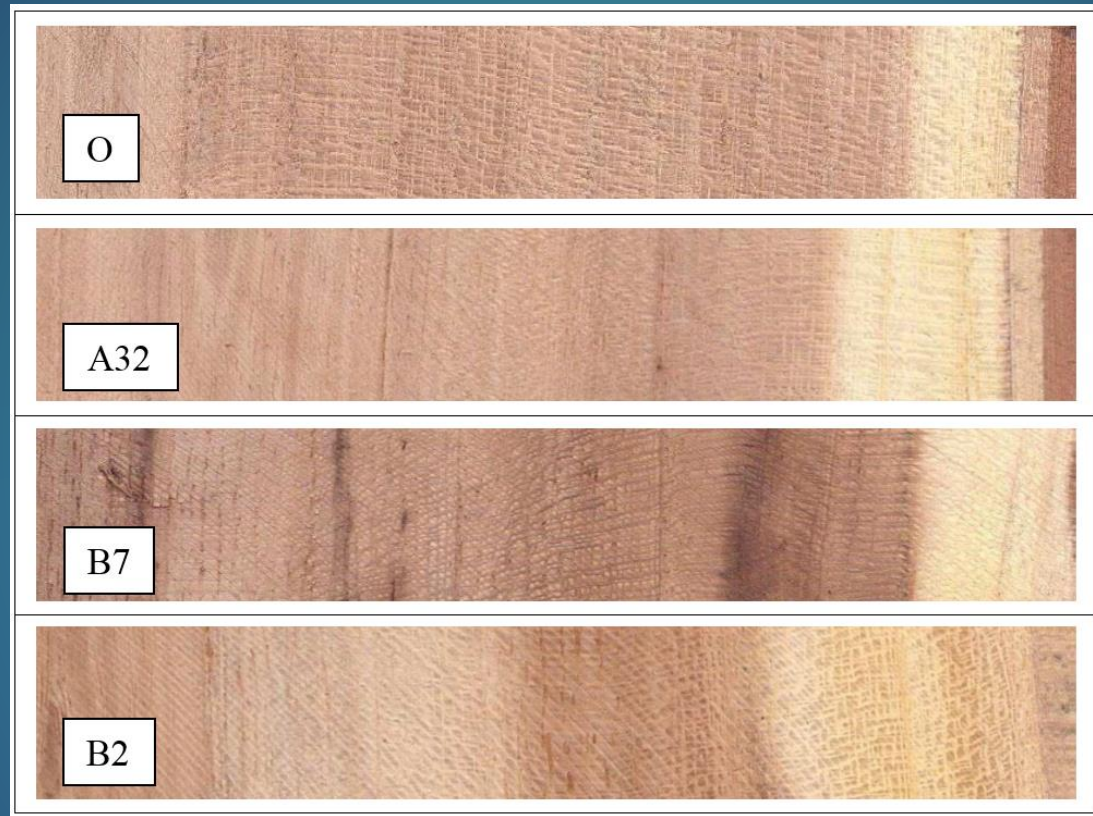
# Statistical analysis of colour properties ( $L^*$ , $a^*$ , $b^*$ )



Basic statistical values of  $L^*$  colour coordinate by the investigated Robinia varieties



# Appearance of different varieties



Typical samples of a control (O), a fast growing variety with low colour variation (A32), and two samples of fast growing varieties with high colour variation (B7 and B2)

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- ▶ For more information, please visit our poster!



Thank you for your attention!