

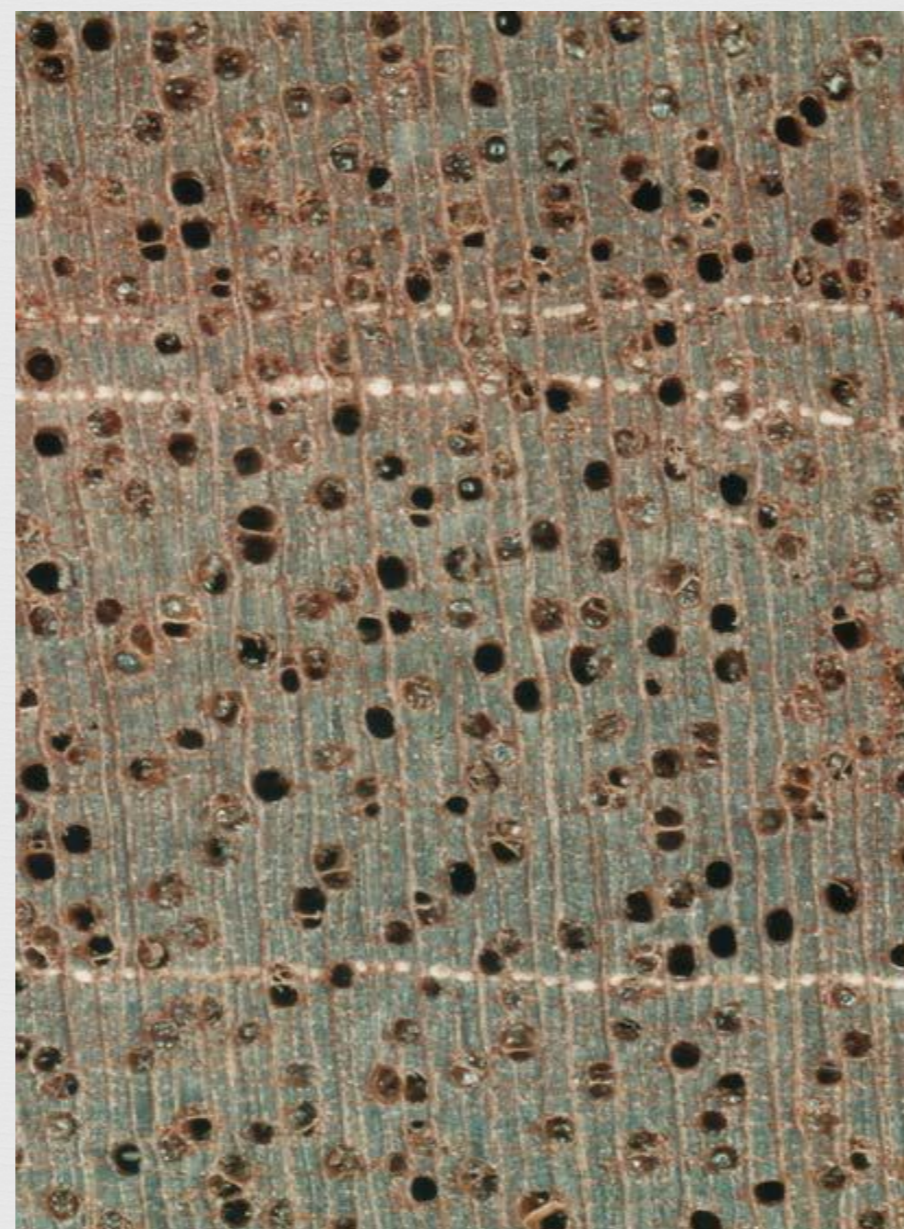
Initial research on the natural durability of RED MERANTI for window frames as a function of gross density

COST ACTION FP 1303

Final Conference Zagreb, Croatia, 6 – 7 September 2017

MERANTI

Wood species of the family Dipterocarpaceae, the genus *SHOREA* (*Shorea* spp.). The subgenus RUBROSHOREA is RED MERANTI (RM)



Cross section of Meranti (*Shorea* spp.)

AIM OF THE PROJECT

To investigate the relationship between the gross density of RM wood used for window frames and its resistance to wood-decay fungi.

EXPERIMENTAL

Gross density groups of RM in g/cm³

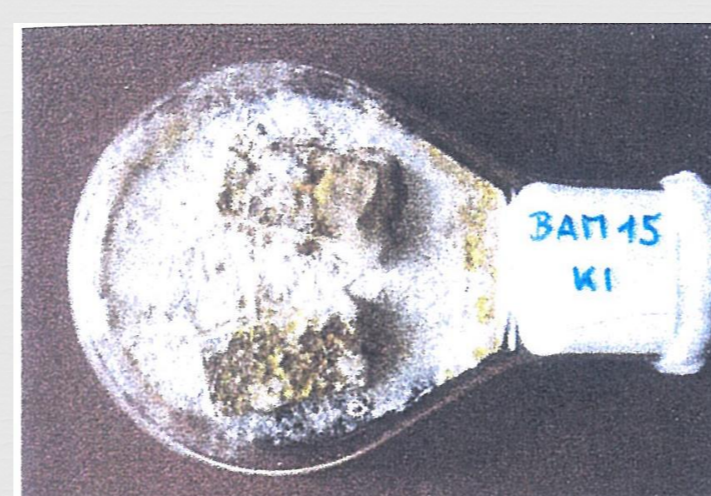
0,360	0,390	0,420	0,450	0,490	0,550	0,600	0,630	0,700
↓	↓	↓	↓	↓	↓	↓	↓	↓
0,370	0,400	0,430	0,460	0,500	0,560	0,620	0,640	0,730

Reference wood species - Durability Class

Beech	5
Pine sapwood	5

Test fungi

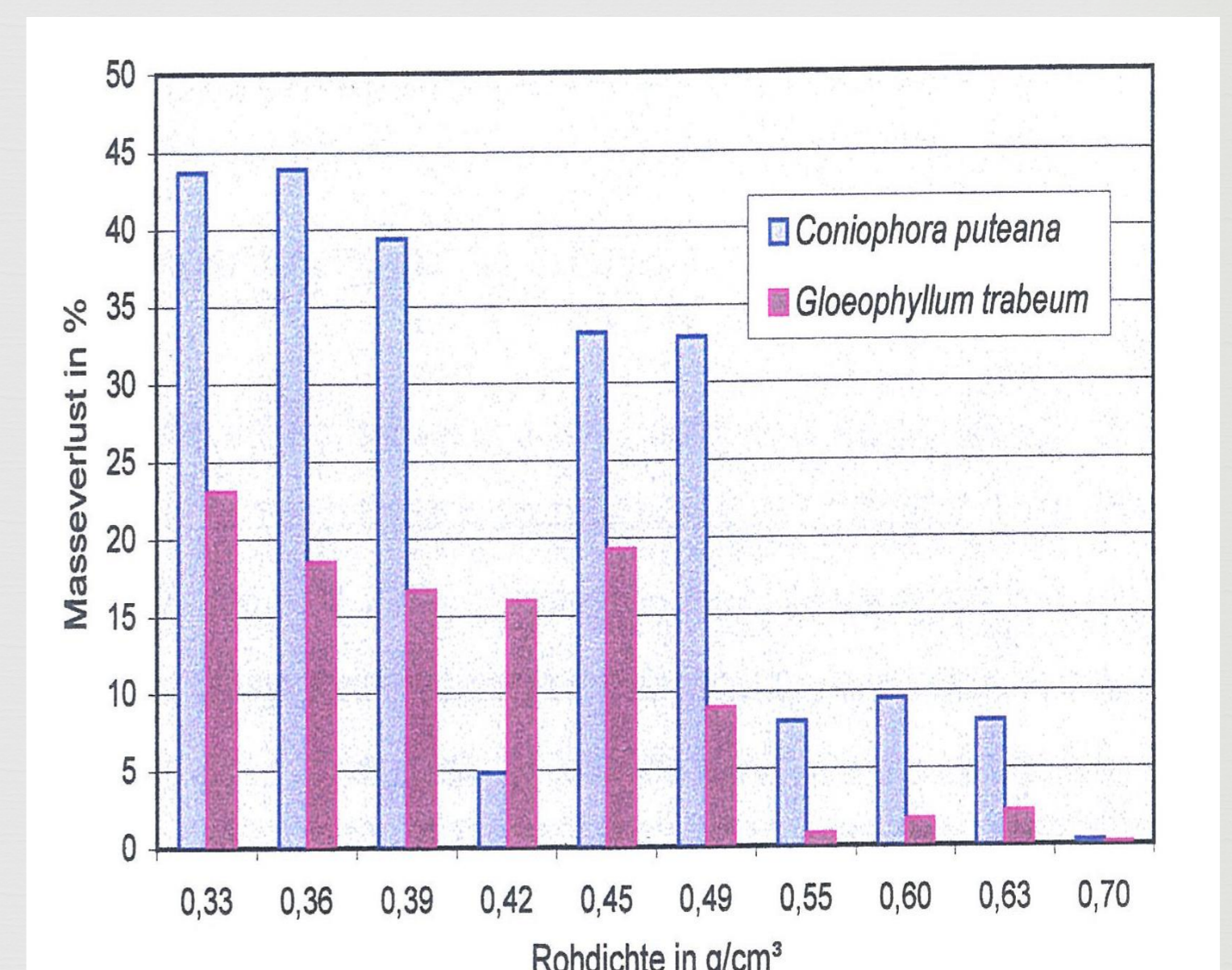
Coniophora cerebella (Schum.) Karst.
Gloeophyllum trabeum (Pers.) Mur.
Tyromyces placenta (L.:Fr.) Pilat
Trametes versicolor (Fr.) Ryv.



Mycelium of *C. cerebella* on pine

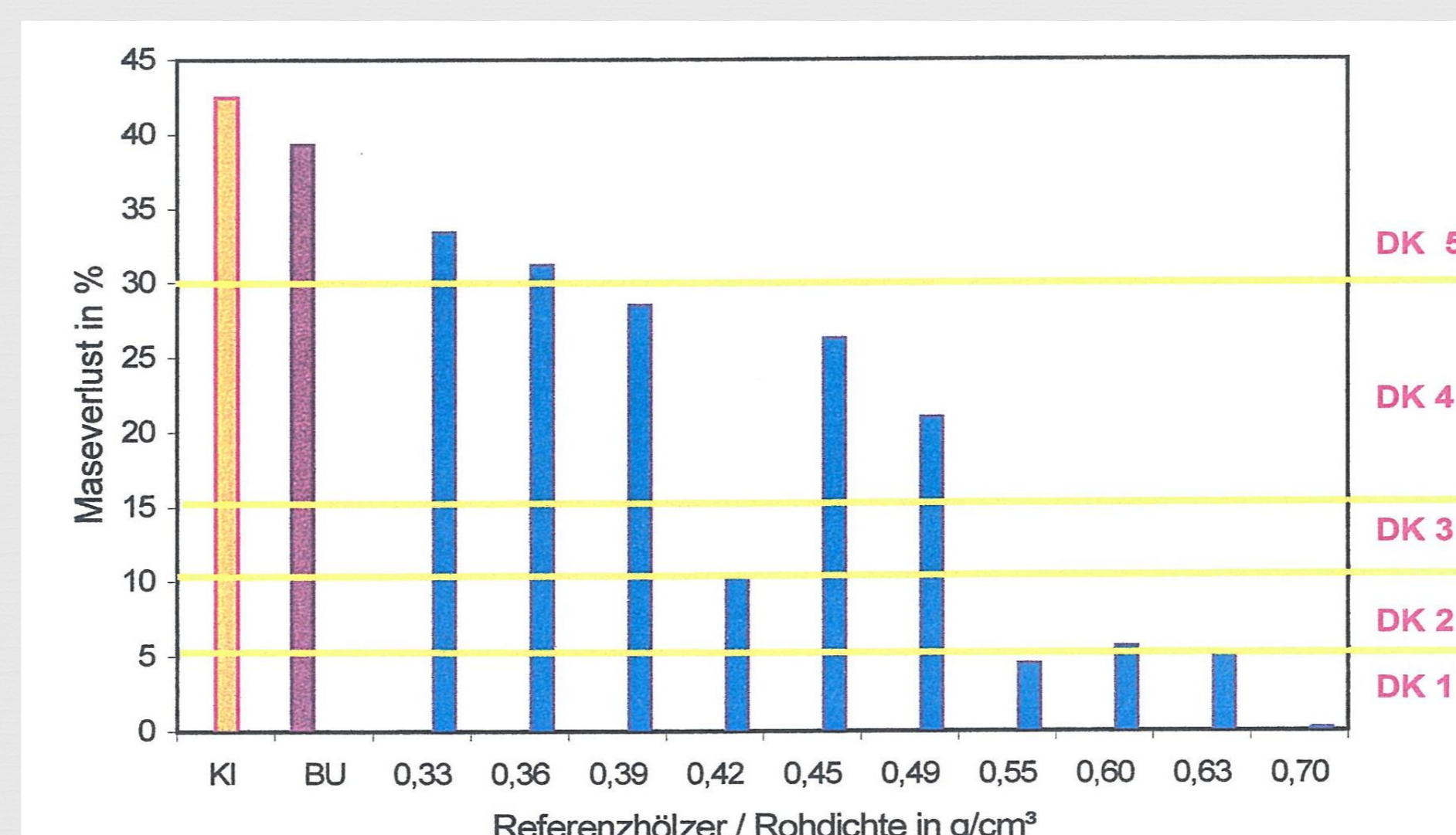
RESULTS

Average mass loss of RM for different gross density groups



DISCUSSION

Mass loss and durability classes in dependence of gross density by *C. puteana* and *G. trabeum*



Red Meranti with gross densities of **0,55 g/cm³** was durable and very durable. RM with lower gross densities (with the exception of **0,42 g/cm³**) was less or non durable.