

# Tieteellisesti vakuuttavaa vai käytäntöön vaikuttavaa metsänhoidon tutkimusta? Pari esimerkkiä metsäpuiden siementutkimuksesta

Metsätieteen päivä

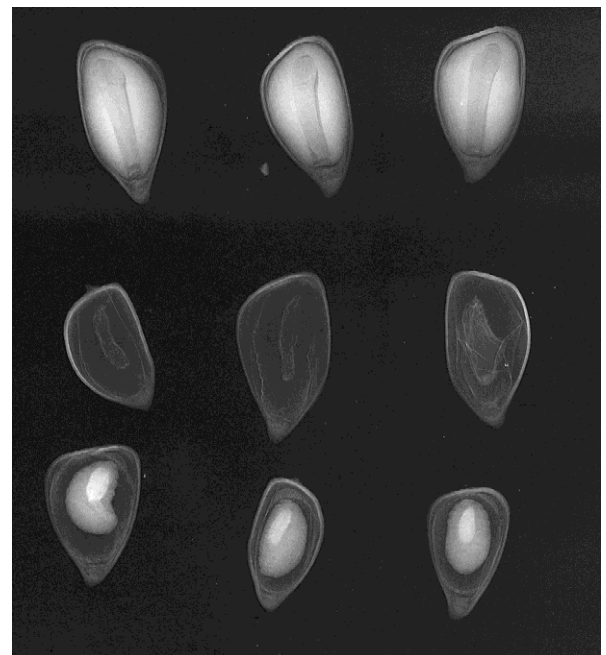
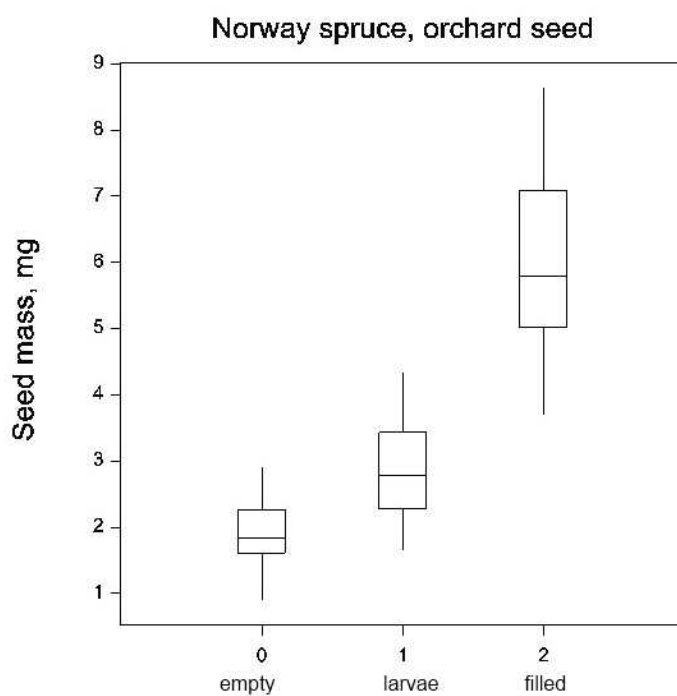
Helsinki 19.10.2016

Markku Nygren



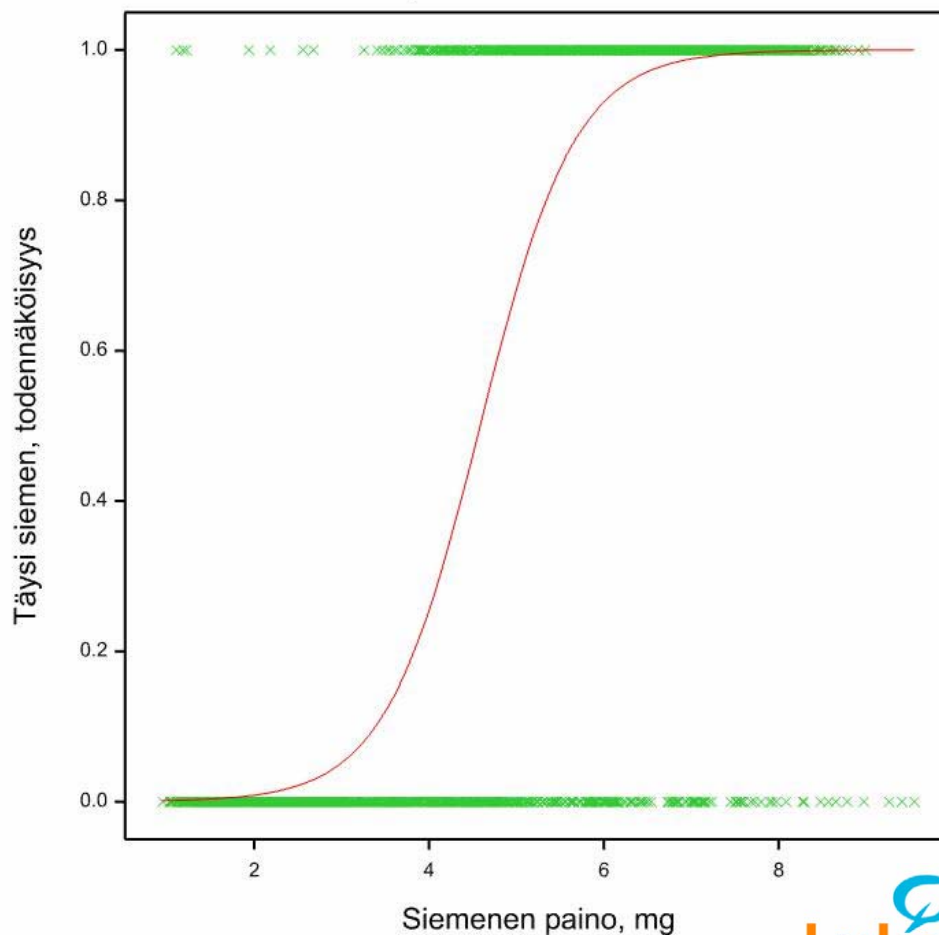
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## Esimerkki 1 : Kuusen siementen puhdistus vs. siementen massa



Siementen puhdistus:  
hukkaammeko  
siementä?

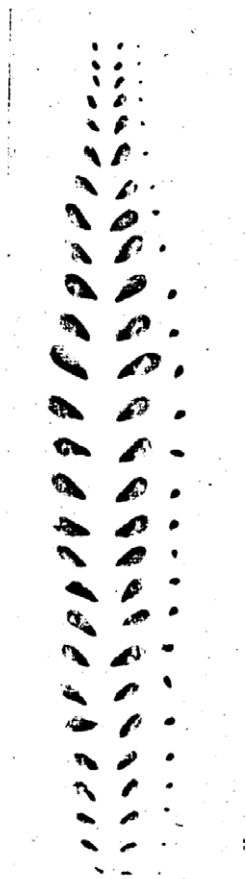
Kuusi, Suhola sv-siemen 2013



Term	Variance estimate	SE	Proportion, %
All seed			
Between clone	0.6870	0.5070	17.1
Between cone	0.1090	0.0440	2.7
Within cone	3.2150	0.0630	80.2
Full seed (>2,5mg)			
Between clone	0.2164	0.1924	24.3
Between cone	0.2138	0.0793	24.0
Within cone	0.4610	0.0112	51.7

(Himanen et al. 2016)



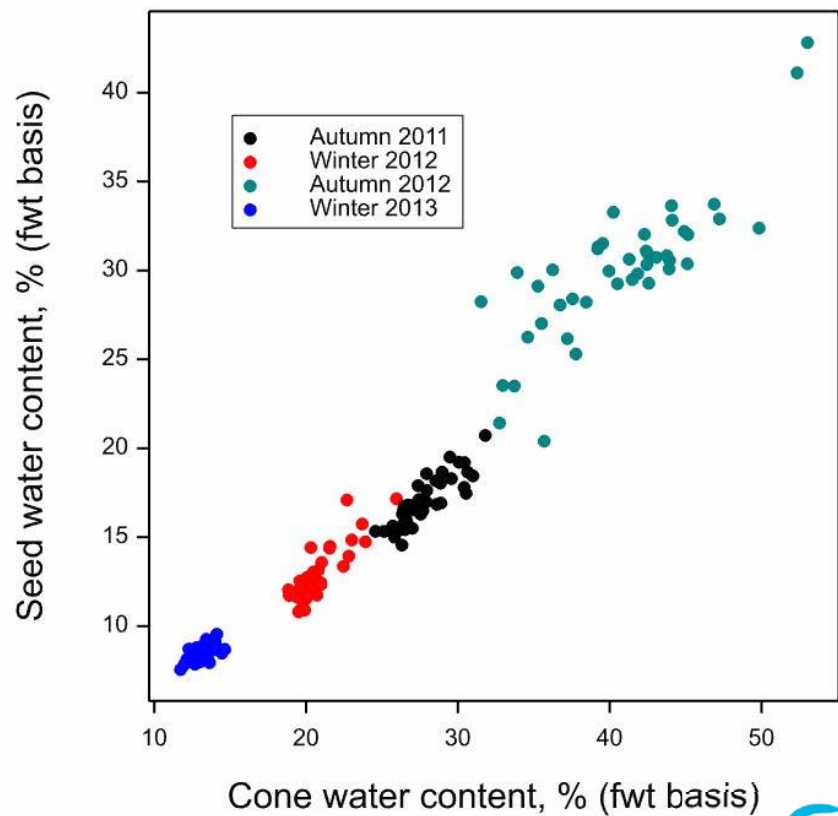


(Nordfors 1928)

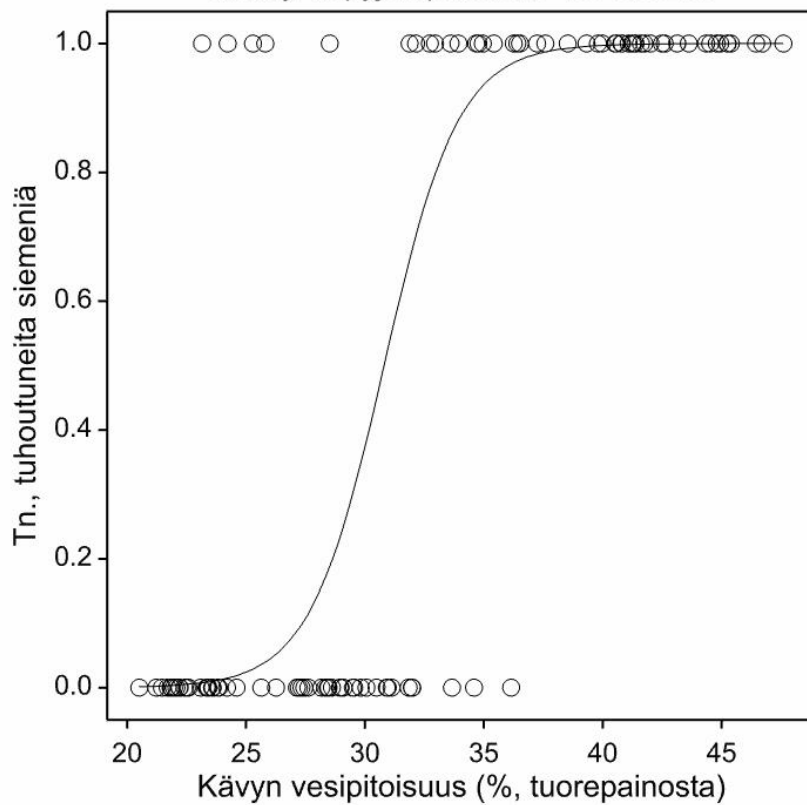


## Esimerkki 2 : Männyn siementen pakkasvauriot

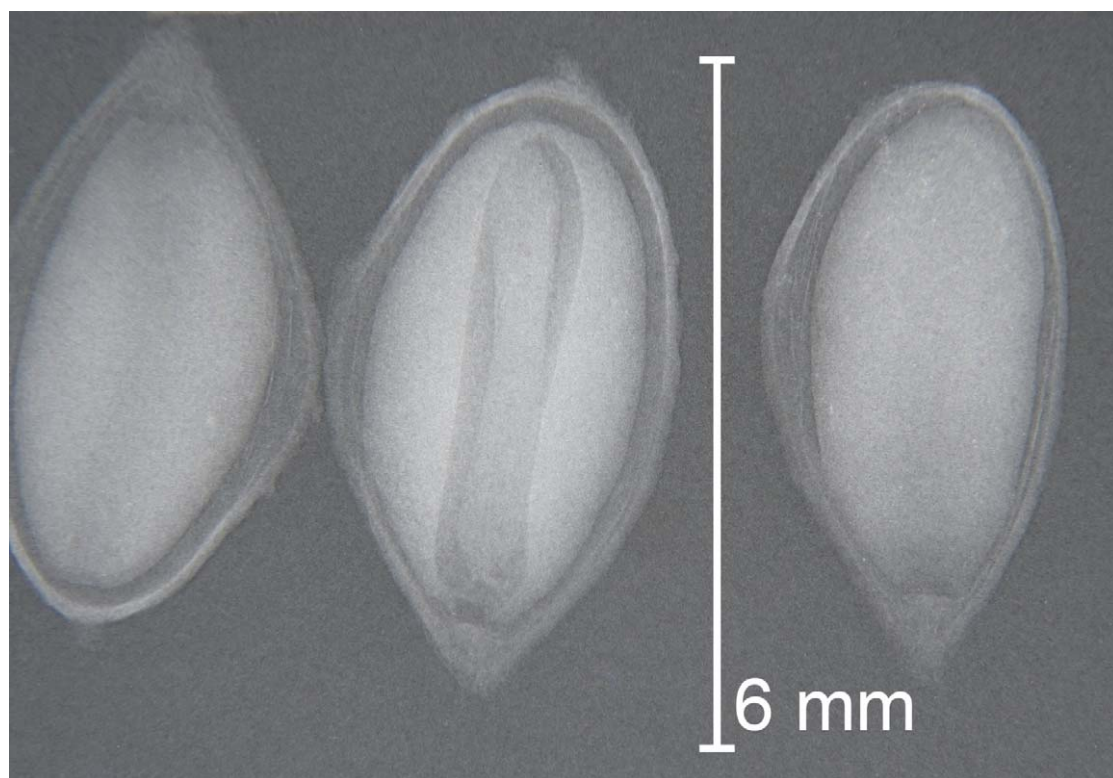
Scots pine, seed vs. cone water content



Mänty, käpyjen pakastus -30 oC, 2 h



Nygren ym. 2016



METLA





