UNIVERSIDADE FEDERAL DO AMAZONAS
DENDROMETRIA

Modelos matemáticos para equações de volume

1	DISSESCU – MEYER	$v = a_1 d + a_2 \times d^2$
2	HOHENADL – KRENN	$v = a_0 + a_1 \times d + a_2 \times d^2$
3		$v = a_0 + a_1 g$
4	HUSCH (1963)	$\log v = a_0 + a_1 \times \log d$
5	BRENAC	$\log v = a_1 \log d + a_2 \times \left(1/d\right)$
6	SPURR – VARÁVEL COMBINADA	$v = a_0 + a_1 d^2 h$
7	OGAYA	$v = d^2 (a_0 + a_1 h)$
8	STÖATE (AUSTRALIANA)	$v = a_0 + a_1 d^2 + a_2 d^2 h + a_3 h$
9	NÄSLUND (SPRUCE)	$v = a_1 d^2 + a_2 d^2 h + a_3 d h^2 + a_4 h^2$
10	TAKATA	$v = d^2 h / (a_0 + a_1 d)$
11	SCHUMACHER – HALL	$\log v = a_0 + a_1 \log d + a_2 \log h$
12	SPURR – VARIÁVEL COMB. LOGARITIMA	$\log v = a_0 + a_1 \log d^2 h$

Modelos matemáticos para relação hipsométrica

1	TROREY, 1932	$h = 1.3 + b_1 d + b_2 d^2$
2	STOFFELS AND VAN SOEST, 1953	$\log h = b_0 + b_1 \log d$
3	HENDRICKSEN, 1950	$h = b_0 + b_1 \log d$
4	AVERY AND BURKHAT, 2002	$\log h = b_0 + b_1 d^{-1}$
5	PRODAN (1997)	$h - 1.3 = d^2 / (b_0 + b_1 d)^2$
6		$h = b_0 d^{b1}$
7		$h = b_0 (1 - e^{-b1d})$
8		$h - 1.3 = b_0 \times (d / (1 + d))^{b1}$
9		$h - 1.3 = b_0 e^{-b1/d}$
10		$\log(h - 1.3) = \log b_0 \times (d / (1 + d))^{b1}$

OBS.: $\log \approx \ln \neq \log 10$