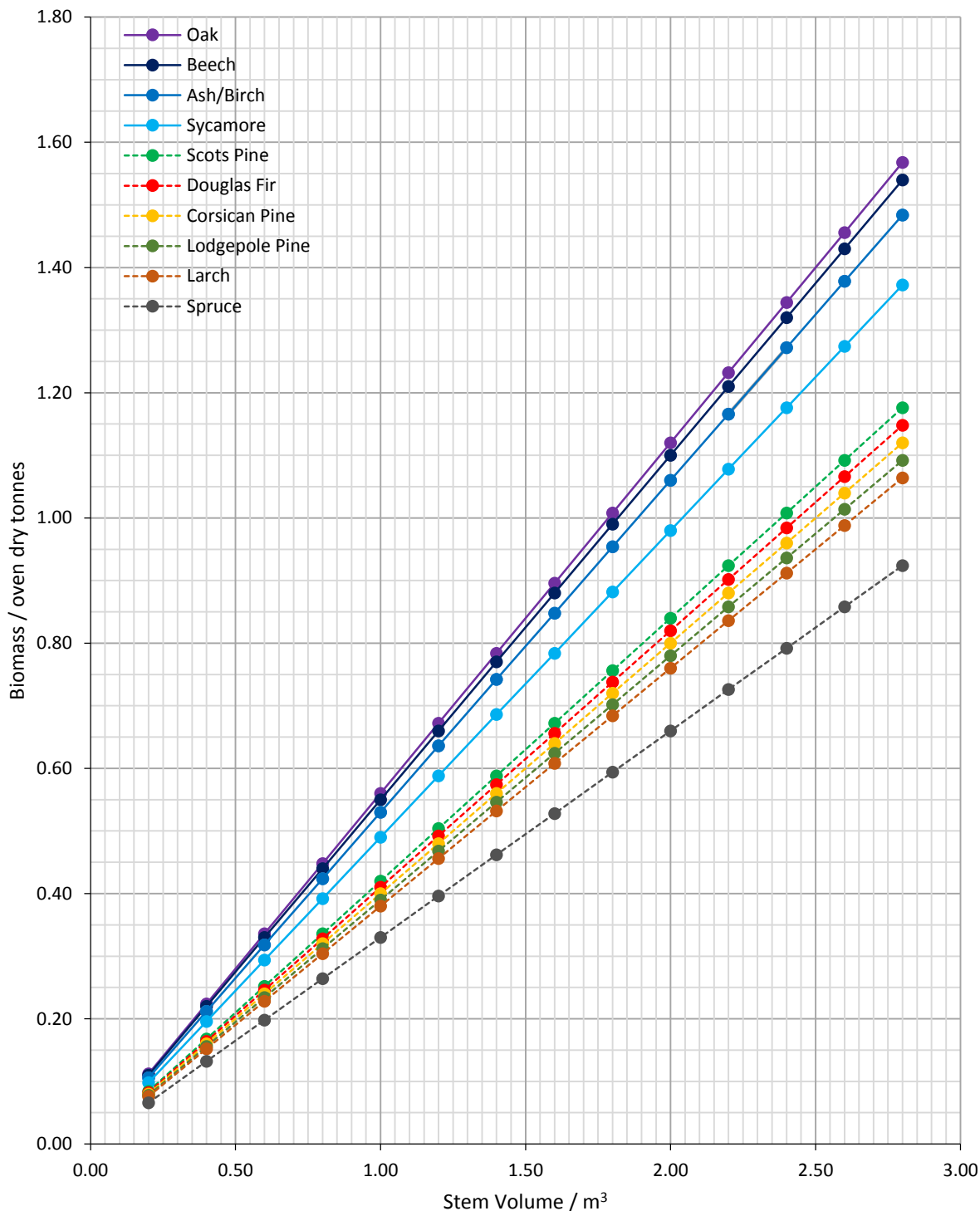


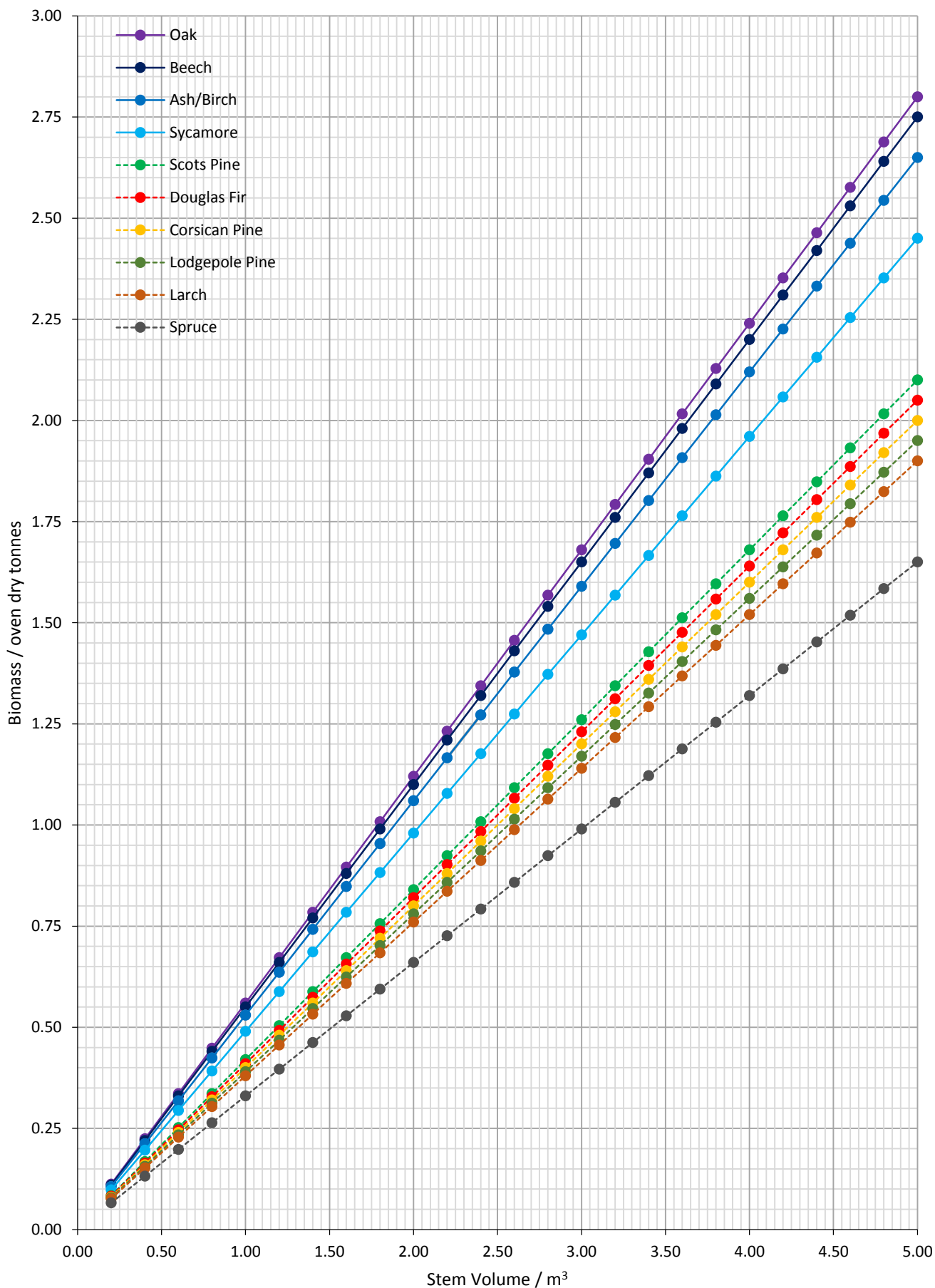
Conversion Chart 1 – Stem Volume to Biomass



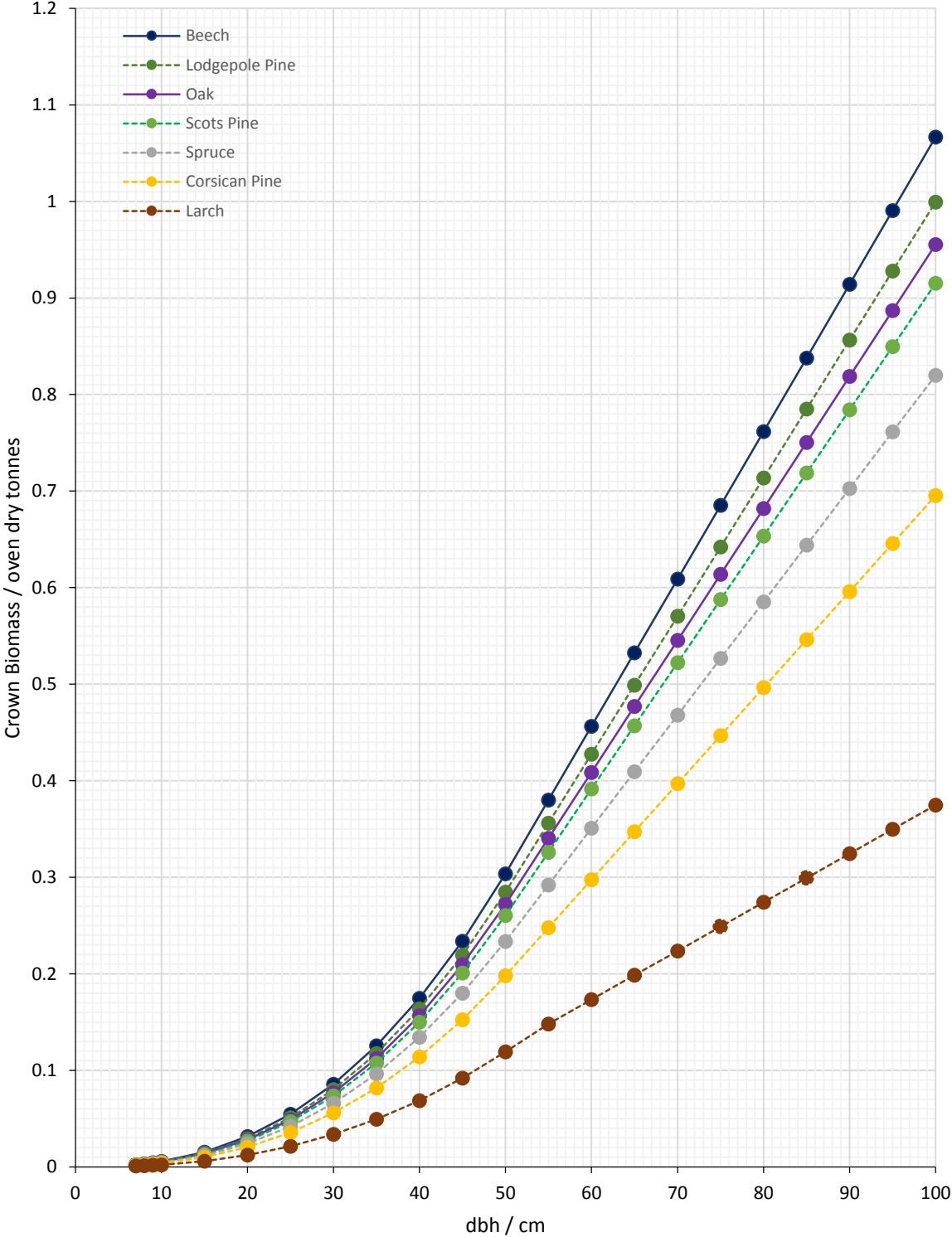
Equations for calculating stem (trunk) volume from: **D Zinnis et al. (2005) Biomass and Stem Volume Equations for Tree Species in Europe Silva Fennica, Monographs 4** (D = dbh, H = height). Biomass estimates for the listed species can be read directly from the graph or you can convert any Stem Volume to Biomass by multiplying the volume by the appropriate Nominal Specific Gravity for that species. Data from **T.A.R.Jenkins et al (2011) FC Woodland Carbon Code: Carbon Assessment Protocol.**

Species	Stem Volume Equations	a	b	c	Nominal Specific Gravity
Ash	$a+b.D^2.H^c$	-0.012107	0.0000777	0.75	0.53
Beech	$a+b.D^2.H^c$	-0.014306	0.0000748	0.75	0.55
Birch	$a+b.D^2.H^c$	-0.009184	0.0000673	0.75	0.53
Corsican Pine	$D^a.H^b.e^c$	1.891920	0.953740	-2.725050	0.4
Douglas Fir	$D^a.H^b.e^c$	1.900530	0.807260	-2.431510	0.41
Larch	$D^a.H^b.e^c$	1.866700	1.081180	-3.048800	0.38
Lodepole Pine	$D^a.H^b.e^c$	1.893030	0.986670	-2.886140	0.39
Oak	$a+b.D^2.H^c$	-0.011724	0.0000765	0.75	0.56
Scots Pine	$D^a.H^b.e^c$	1.820750	1.074270	-2.885000	0.42
Spruce	$D^a.H^b.e^c$	1.783830	1.133970	-2.908930	0.33
Sycamore	$a+b.D^2.H^c$	-0.012668	0.0000737	0.75	0.49

Conversion Chart 1a – Stem Volume to Biomass (large trees)

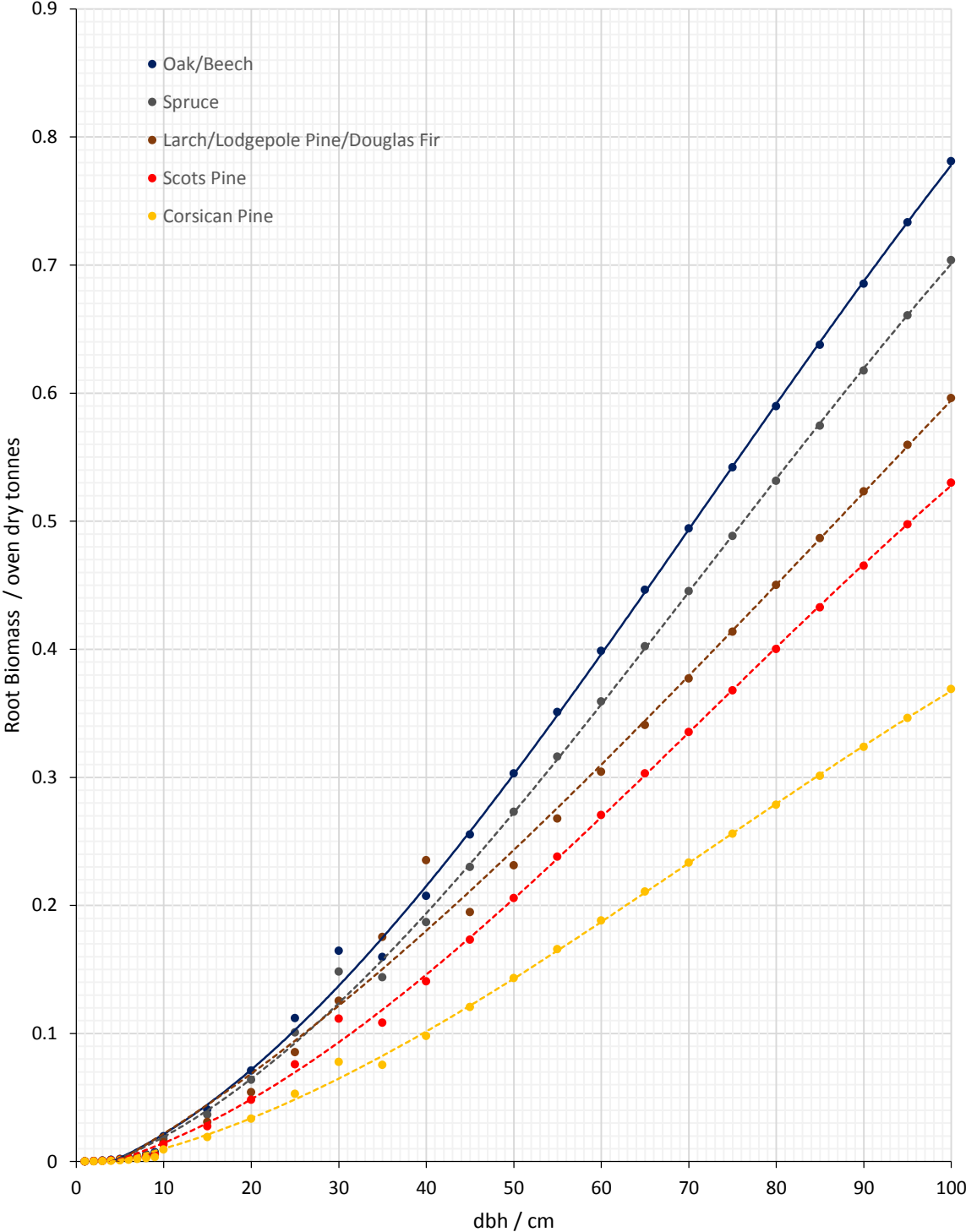


Conversion Chart 2 – Crown Biomass from dbh



For Sycamore, Ash, Birch and also Douglas Fir use the Oak line to read of Crown Biomass figures

Conversion Chart 3 – Root Biomass from dbh



Fewer data are available for Root Biomass estimates especially for deciduous trees.
All deciduous trees should be read from the line for Oak/Beech.