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Supplement of

Evaluation of stem rot in 339 Bornean tree species: implications of size, taxonomy, and soil-related variation for aboveground biomass estimates

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Table S1. Frequency and severity (mean percent rot) of stem rot for each species in the felling, drilling, and coring datasets with corresponding species covariates (wood density and soil habitat association). Percent rot was only evaluated in felled trees. Species habitat associations are abbreviated as follows. This list excludes morphospecies, which accounted for 21 of 339 species sampled at central Sarawak and Lambir. If no observations were recorded for a species in given column, the cell is marked "NA".

				Felling		Drilling		Coring	
Family	**Genus**	**Species**	**Mean Percent Rot**	**Not Rot**	**Rot**	**Not Rot**	**Rot**	**Not Rot**	**Rot**
Trees Resolved to Species with Covariates Included in Generalized Linear Mixed Effect Models									
Alangiaceae	*Alangium*	*javanicum*	NA	NA	NA	NA	NA	1	NA
Anacardiaceae	*Koordersiodendron*	*pinnatum*	NA	NA	NA	NA	2	NA	NA
Anacardiaceae	*Melanochyla*	*elmeri*	NA	NA	NA	NA	NA	1	NA
Anacardiaceae	*Parishia*	*insignis*	12.4	NA	1	NA	NA	NA	NA
Anacardiaceae	*Parishia*	*maingayi*	5.2	NA	1	1	NA	NA	NA
Anacardiaceae	*Parishia*	*sericea*	NA	NA	NA	NA	NA	1	NA
Anacardiaceae	*Pentaspadon*	*motleyi*	61.3	NA	1	NA	NA	2	NA
Anacardiaceae	*Swintonia*	*spicifera*	0	2	NA	4	1	NA	NA
Anisophylleaceae	*Anisophyllea*	*corneri*	NA	NA	NA	NA	NA	5	NA
Annonaceae	*Mezzettia*	*macrocarpa*	NA	NA	NA	NA	NA	1	NA
Annonaceae	*Polyalthia*	*glabrescens*	NA	NA	NA	NA	NA	2	NA
Annonaceae	*Polyalthia*	*rumphii*	NA	NA	NA	NA	NA	1	NA
Annonaceae	*Popowia*	*pisocarpa*	NA	NA	NA	NA	NA	1	NA
Annonaceae	*Pseuduvaria*	*macrophylla*	NA	NA	NA	NA	NA	2	NA
Aquifoliaceae	*Ilex*	*cymosa*	NA	NA	NA	NA	NA	1	NA
Burseraceae	*Canarium*	*apertum*	8.7	NA	1	NA	1	NA	NA
Burseraceae	*Canarium*	*denticulatum*	NA	NA	NA	1	NA	NA	NA
Burseraceae	*Dacryodes*	*costata*	0	1	NA	1	NA	NA	NA
Burseraceae	*Dacryodes*	*incurvata*	0	5	NA	4	3	NA	NA
Burseraceae	*Dacryodes*	*laxa*	0	1	NA	1	NA	NA	NA

Burseraceae	*Santiria*	*apiciulata*	NA	NA	NA	1	2	NA	NA
Burseraceae	*Santiria*	*laevigata*	0	2	NA	6	3	NA	1
Burseraceae	*Santiria*	*tomentosa*	1.4	NA	2	NA	NA	NA	NA
Celastraceae	*Bhesa*	*paniculata*	19.7	NA	1	NA	1	NA	NA
Chrysobalanaceae	*Parastemon*	*urophyllum*	0.6	2	1	NA	NA	NA	NA
Clusiaceae	*Kayea*	*racemosa*	NA	NA	NA	NA	NA	6	1
Dilleniaceae	*Dillenia*	*sumatrana*	NA	NA	NA	NA	NA	1	NA
Dipterocarpaceae	*Anisoptera*	*costata*	0	1	NA	NA	1	NA	NA
Dipterocarpaceae	*Anisoptera*	*grossivenia*	0.7	NA	1	1	2	1	NA
Dipterocarpaceae	*Anisoptera*	*laevis*	35.5	NA	1	2	3	NA	NA
Dipterocarpaceae	*Anisoptera*	*marginata*	0.5	NA	2	1	3	NA	NA
Dipterocarpaceae	*Coylelobium*	*melanoxylon*	NA	NA	NA	1	NA	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*acutangulus*	0.7	12	2	16	2	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*caudiferus*	0.5	15	5	48	6	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*confertus*	0	3	NA	3	2	1	NA
Dipterocarpaceae	*Dipterocarpus*	*conformis*	0.9	6	1	13	1	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*crinitus*	0	2	NA	NA	4	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*geniculatus*	4	7	1	7	1	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*globosus*	0.5	9	2	2	NA	17	NA
Dipterocarpaceae	*Dipterocarpus*	*gracilis*	0.2	3	1	NA	NA	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*humeratus*	0	1	NA	3	NA	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*lowii*	0	3	NA	5	1	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*mundus*	0.3	5	1	8	NA	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*pachyphyllus*	2.7	11	3	18	7	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*palembanicus*	7.6	NA	1	2	1	3	NA
Dipterocarpaceae	*Dipterocarpus*	*penangianus*	11.2	3	2	6	3	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*sarawakensis*	0	4	NA	1	3	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*stellatus*	6.8	4	8	4	3	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*verrucosus*	1.4	2	1	1	2	NA	NA
Dipterocarpaceae	*Dryobalanops*	*aromatica*	10.9	9	38	31	48	15	1
Dipterocarpaceae	*Dryobalanops*	*beccarii*	8.4	5	6	11	9	NA	NA

Dipterocarpaceae	*Dryobalanops*	*lanceolata*	2.1	8	5	17	4	18	1
Dipterocarpaceae	*Dryobalanops*	*oblongifolia*	8.2	28	48	25	62	NA	NA
Dipterocarpaceae	*Hopea*	*cernua*	0	1	NA	1	NA	NA	NA
Dipterocarpaceae	*Hopea*	*dryobalanoides*	1.4	NA	1	1	1	NA	NA
Dipterocarpaceae	*Hopea*	*dyeri*	11.9	2	2	4	5	NA	NA
Dipterocarpaceae	*Hopea*	*fluvialis*	7.6	NA	1	NA	NA	NA	NA
Dipterocarpaceae	*Hopea*	*latifolia*	NA	NA	NA	1	NA	NA	NA
Dipterocarpaceae	*Hopea*	*nervosa*	NA	NA	NA	NA	1	NA	NA
Dipterocarpaceae	*Hopea*	*pachycarpa*	7.5	1	1	NA	1	NA	NA
Dipterocarpaceae	*Hopea*	*pterygota*	NA	NA	NA	NA	1	NA	NA
Dipterocarpaceae	*Parashorea*	*macrophylla*	0	1	NA	6	NA	NA	NA
Dipterocarpaceae	*Parashorea*	*smythiesii*	9.8	5	11	10	2	NA	NA
Dipterocarpaceae	*Shorea*	*acuminatissima*	8	4	1	NA	5	NA	NA
Dipterocarpaceae	*Shorea*	*acuta*	NA	NA	NA	NA	NA	NA	1
Dipterocarpaceae	*Shorea*	*agamii*	0	1	NA	1	1	NA	NA
Dipterocarpaceae	*Shorea*	*albida*	12.6	NA	1	NA	1	NA	NA
Dipterocarpaceae	*Shorea*	*amplexicaulis*	12.9	2	5	7	4	NA	NA
Dipterocarpaceae	*Shorea*	*andulensis*	24.3	1	6	3	4	NA	NA
Dipterocarpaceae	*Shorea*	*argentifolia*	6.5	3	2	7	5	NA	NA
Dipterocarpaceae	*Shorea*	*atrinervosa*	10.9	3	8	1	2	NA	NA
Dipterocarpaceae	*Shorea*	*beccariana*	5.2	13	5	11	12	NA	NA
Dipterocarpaceae	*Shorea*	*brunnescens*	NA	NA	NA	3	2	NA	NA
Dipterocarpaceae	*Shorea*	*collaris*	19.7	8	21	20	29	NA	NA
Dipterocarpaceae	*Shorea*	*coriacea*	16.8	NA	1	1	2	NA	NA
Dipterocarpaceae	*Shorea*	*crassa*	1.6	2	2	2	1	NA	NA
Dipterocarpaceae	*Shorea*	*curtisii*	13	NA	1	4	2	1	NA
Dipterocarpaceae	*Shorea*	*dasyphylla*	NA	NA	NA	2	1	NA	NA
Dipterocarpaceae	*Shorea*	*dolichocarpa*	13.4	4	4	5	9	NA	NA
Dipterocarpaceae	*Shorea*	*domatiosa*	9.8	1	3	NA	2	NA	NA
Dipterocarpaceae	*Shorea*	*elliptica*	3.3	1	1	3	1	NA	NA
Dipterocarpaceae	*Shorea*	*exelliptica*	21.3	NA	1	2	NA	NA	NA

Dipterocarpaceae	*Shorea*	*faguetiana*	9.5	3	4	4	7	NA	NA
Dipterocarpaceae	*Shorea*	*faguetoides*	16.1	6	25	12	21	NA	NA
Dipterocarpaceae	*Shorea*	*fallax*	2.2	NA	1	2	2	NA	NA
Dipterocarpaceae	*Shorea*	*ferruginea*	18.8	3	7	6	17	NA	NA
Dipterocarpaceae	*Shorea*	*flava*	NA	NA	NA	2	NA	NA	NA
Dipterocarpaceae	*Shorea*	*gibbosa*	0	1	NA	NA	NA	NA	NA
Dipterocarpaceae	*Shorea*	*glaucescens*	11.5	1	1	3	1	NA	NA
Dipterocarpaceae	*Shorea*	*havilandii*	3.7	1	3	1	NA	NA	NA
Dipterocarpaceae	*Shorea*	*hopeifolia*	4.6	NA	1	1	3	NA	NA
Dipterocarpaceae	*Shorea*	*iliasii*	NA	NA	NA	1	NA	NA	NA
Dipterocarpaceae	*Shorea*	*kunstleri*	0.8	1	1	6	1	NA	NA
Dipterocarpaceae	*Shorea*	*laevis*	19.7	NA	8	2	3	NA	NA
Dipterocarpaceae	*Shorea*	*lamellata*	0	1	NA	1	4	NA	NA
Dipterocarpaceae	*Shorea*	*laxa*	NA	NA	NA	NA	NA	5	2
Dipterocarpaceae	*Shorea*	*leprosula*	4.7	1	1	1	1	NA	NA
Dipterocarpaceae	*Shorea*	*macrantha*	NA	NA	NA	1	1	NA	NA
Dipterocarpaceae	*Shorea*	*macroptera*	7.5	8	7	7	6	3	NA
Dipterocarpaceae	*Shorea*	*maxwelliana*	10.9	NA	3	NA	NA	NA	NA
Dipterocarpaceae	*Shorea*	*mecistopteryx*	8	4	2	4	NA	NA	1
Dipterocarpaceae	*Shorea*	*multiflora*	4.9	NA	1	2	5	NA	NA
Dipterocarpaceae	*Shorea*	*myrionerva*	30.3	2	9	14	11	NA	NA
Dipterocarpaceae	*Shorea*	*nitens*	NA	NA	NA	1	NA	NA	NA
Dipterocarpaceae	*Shorea*	*ochracea*	6	1	2	3	4	1	NA
Dipterocarpaceae	*Shorea*	*ovalis*	15.3	1	1	2	1	NA	NA
Dipterocarpaceae	*Shorea*	*ovata*	47.7	NA	1	NA	2	1	1
Dipterocarpaceae	*Shorea*	*pachyphylla*	8.5	1	1	NA	1	NA	NA
Dipterocarpaceae	*Shorea*	*palembanica*	2.5	2	2	2	1	NA	NA
Dipterocarpaceae	*Shorea*	*parvifolia*	9.4	31	37	51	24	7	1
Dipterocarpaceae	*Shorea*	*patoiensis*	NA	NA	NA	NA	NA	5	1
Dipterocarpaceae	*Shorea*	*pauciflora*	9	1	5	12	4	NA	NA
Dipterocarpaceae	*Shorea*	*pilosa*	3.7	NA	2	1	3	NA	NA

Dipterocarpaceae	*Shorea*	*pinanga*	18.8	5	9	19	17	NA	NA
Dipterocarpaceae	*Shorea*	*platyclados*	49.2	NA	1	NA	2	NA	NA
Dipterocarpaceae	*Shorea*	*praestans*	30.1	2	3	NA	NA	NA	NA
Dipterocarpaceae	*Shorea*	*pubistyla*	NA	NA	NA	NA	NA	2	NA
Dipterocarpaceae	*Shorea*	*quadrinervis*	29.5	2	6	3	13	1	NA
Dipterocarpaceae	*Shorea*	*resina-negra*	44.9	NA	1	1	1	NA	NA
Dipterocarpaceae	*Shorea*	*rubella*	NA	NA	NA	1	NA	NA	NA
Dipterocarpaceae	*Shorea*	*rubra*	9.3	5	16	21	29	NA	NA
Dipterocarpaceae	*Shorea*	*rugosa*	0	1	NA	2	1	NA	NA
Dipterocarpaceae	*Shorea*	*sagittata*	9.8	19	15	33	44	NA	NA
Dipterocarpaceae	*Shorea*	*scaberrima*	11.7	8	10	7	10	NA	NA
Dipterocarpaceae	*Shorea*	*scrobiculata*	NA	NA	NA	NA	NA	8	1
Dipterocarpaceae	*Shorea*	*slooteni*	33.1	NA	4	NA	7	NA	NA
Dipterocarpaceae	*Shorea*	*smithiana*	NA	NA	NA	1	NA	3	1
Dipterocarpaceae	*Shorea*	*superba*	0.6	2	2	7	2	NA	NA
Dipterocarpaceae	*Shorea*	*virescens*	0	3	NA	6	1	NA	NA
Dipterocarpaceae	*Shorea*	*xanthophylla*	0	1	NA	NA	NA	NA	NA
Dipterocarpaceae	*Upuna*	*borneensis*	1.8	NA	1	NA	NA	NA	NA
Dipterocarpaceae	*Vatica*	*badiifolia*	NA	NA	NA	NA	NA	1	1
Dipterocarpaceae	*Vatica*	*borneensis*	0	1	NA	NA	NA	NA	NA
Dipterocarpaceae	*Vatica*	*micrantha*	NA	NA	NA	NA	NA	20	3
Dipterocarpaceae	*Vatica*	*nitens*	0	1	NA	NA	NA	NA	NA
Dipterocarpaceae	*Vatica*	*oblongifolia*	15.5	NA	1	NA	NA	NA	NA
Dipterocarpaceae	*Vatica*	*vinosa*	1.3	NA	3	4	2	NA	NA
Ebenaceae	*Diospyros*	*dictyoneura*	NA	NA	NA	NA	NA	1	NA
Ebenaceae	*Diospyros*	*diepenhorstii*	NA	NA	NA	NA	NA	1	NA
Ebenaceae	*Diospyros*	*mindanensis*	NA	NA	NA	NA	NA	2	NA
Ebenaceae	*Diospyros*	*sarawakana*	NA	NA	NA	NA	NA	1	NA
Ebenaceae	*Diospyros*	*sumatrana*	NA	NA	NA	NA	NA	1	NA
Ebenaceae	*Tabernaemontana*	*macrocarpa*	NA	NA	NA	NA	NA	2	NA
Euphorbiaceae	*Blumeodendron*	*kurzii*	0.8	3	2	3	NA	NA	NA

Euphorbiaceae	*Cephalomappa*	*beccariana*	NA	NA	NA	NA	NA	1	NA
Euphorbiaceae	*Cleistanthus*	*myrianthus*	40	NA	2	1	2	NA	NA
Euphorbiaceae	*Macaranga*	*bancana*	NA	NA	NA	NA	NA	1	NA
Euphorbiaceae	*Macaranga*	*beccariana*	NA	NA	NA	NA	NA	18	NA
Euphorbiaceae	*Macaranga*	*brevipetiolata*	NA	NA	NA	NA	NA	6	NA
Euphorbiaceae	*Macaranga*	*gigantea*	NA	NA	NA	NA	NA	5	1
Euphorbiaceae	*Macaranga*	*havilandii*	NA	NA	NA	NA	NA	3	NA
Euphorbiaceae	*Macaranga*	*hosei*	NA	NA	NA	NA	NA	3	1
Euphorbiaceae	*Macaranga*	*hullettii*	NA	NA	NA	NA	NA	3	NA
Euphorbiaceae	*Macaranga*	*hypoleuca*	NA	NA	NA	NA	NA	3	NA
Euphorbiaceae	*Macaranga*	*lamellata*	NA	NA	NA	NA	NA	11	NA
Euphorbiaceae	*Macaranga*	*praestans*	NA	NA	NA	NA	NA	3	NA
Euphorbiaceae	*Macaranga*	*recurvata*	NA	NA	NA	NA	NA	2	NA
Euphorbiaceae	*Macaranga*	*trachyphylla*	NA	NA	NA	NA	NA	4	NA
Euphorbiaceae	*Macaranga*	*triloba*	NA	NA	NA	NA	NA	7	NA
Euphorbiaceae	*Macaranga*	*umbrosa*	NA	NA	NA	NA	NA	4	NA
Euphorbiaceae	*Macaranga*	*winkleri*	NA	NA	NA	NA	NA	11	NA
Euphorbiaceae	*Moultonianthus*	*leembruggianus*	NA	NA	NA	NA	NA	1	1
Euphorbiaceae	*Pimelodendron*	*griffithianum*	NA	NA	NA	NA	NA	1	NA
Euphorbiaceae	*Ptychopyxis*	*glochidiifolia*	NA	NA	NA	NA	NA	1	NA
Euphorbiaceae	*Trigonostemon*	*capillipes*	NA	NA	NA	NA	NA	1	NA
Fabaceae	*Dialium*	*indum*	10.6	NA	1	NA	NA	6	NA
Fabaceae	*Koompassia*	*excelsa*	0.2	NA	1	2	1	3	NA
Fabaceae	*Koompassia*	*malaccensis*	5.7	4	4	2	NA	NA	NA
Fabaceae	*Millettia*	*chaperi*	0	1	NA	2	NA	NA	NA
Fabaceae	*Parkia*	*speciosa*	NA	NA	NA	1	NA	4	NA
Fabaceae	*Sindora*	*beccariana*	12.3	2	1	5	1	NA	NA
Fabaceae	*Sindora*	*leiocarpa*	0.4	NA	1	5	1	NA	NA
Fagaceae	*Lithocarpus*	*bennettii*	0	1	NA	NA	NA	NA	NA
Fagaceae	*Lithocarpus*	*leptogyne*	NA	NA	NA	NA	NA	NA	1
Flacourtiaceae	*Hydnocarpus*	*woodii*	0	4	NA	5	NA	NA	NA

Hypericaceae	*Cratoxylum*	*arboresecens*	4.2	11	23	2	NA	NA	NA
Hypericaceae	*Cratoxylum*	*formosum*	2	NA	1	NA	NA	NA	NA
Hypericaceae	*Cratoxylum*	*glaucum*	NA	NA	NA	4	NA	NA	NA
Ixonanthaceae	*Allantospermum*	*borneense*	NA	NA	NA	NA	NA	7	NA
Juglandaceae	*Engelhardtia*	*rigida*	NA	NA	NA	NA	NA	1	NA
Lauraceae	*Actinodaphne*	*glomerata*	NA	NA	NA	NA	NA	1	NA
Lauraceae	*Alseodaphne*	*bancana*	NA	NA	NA	NA	NA	1	NA
Lauraceae	*Cryptocarya*	*crassinervia*	0	2	NA	NA	NA	NA	NA
Lauraceae	*Endiandra*	*clavigera*	NA	NA	NA	NA	NA	2	NA
Lauraceae	*Eusideroxylon*	*malagangai*	NA	NA	NA	NA	NA	3	NA
Lauraceae	*Litsea*	*machilifolia*	3	1	1	2	1	NA	NA
Lauraceae	*Phoebe*	*macrophylla*	0	1	NA	NA	NA	NA	NA
Lecythidaceae	*Barringtonia*	*curranii*	NA	NA	NA	NA	NA	1	NA
Malvaceae	*Durio*	*cf. oblongus*	NA	NA	NA	NA	NA	1	NA
Malvaceae	*Durio*	*oxleyanus*	NA	NA	NA	NA	NA	1	NA
Malvaceae	*Heritiera*	*simplicifolia*	NA	NA	NA	1	NA	NA	NA
Malvaceae	*Microcos*	*blattaefolia*	NA	NA	NA	NA	NA	1	NA
Moraceae	*Artocarpus*	*anisophyllus*	1	4	1	4	2	NA	NA
Moraceae	*Artocarpus*	*elasticus*	NA	NA	NA	4	1	NA	NA
Moraceae	*Artocarpus*	*odoratissimus*	0.8	NA	1	NA	NA	NA	NA
Myristicaceae	*Gymnacranthera*	*eugenifolia*	NA	NA	NA	NA	NA	1	NA
Myristicaceae	*Gymnacranthera*	*forbesii*	0	2	NA	2	NA	1	NA
Myristicaceae	*Horsfieldia*	*wallichii*	NA	NA	NA	NA	NA	2	NA
Myristicaceae	*Knema*	*ashtonii*	NA	NA	NA	NA	NA	3	NA
Myristicaceae	*Knema*	*conferta*	NA	NA	NA	2	NA	NA	NA
Myristicaceae	*Knema*	*elmeri*	NA	NA	NA	NA	NA	8	NA
Myristicaceae	*Knema*	*laurina*	NA	NA	NA	NA	NA	1	NA
Myristicaceae	*Myristica*	*borneensis*	NA	NA	NA	NA	NA	1	NA
Myristicaceae	*Myristica*	*lowiana*	NA	NA	NA	NA	NA	1	NA
Myrtaceae	*Syzygium*	*cf. grande*	NA	NA	NA	NA	NA	NA	1
Myrtaceae	*Tristaniopsis*	*whiteana*	NA	NA	NA	2	1	NA	NA

Olacaceae	*Ochanostachys*	*amentacea*	14.3	NA	1	1	1	NA	NA
Olacaceae	*Scorodocarpus*	*borneensis*	15.7	1	2	1	1	1	NA
Phyllanthaceae	*Aporusa*	*bulattissima*	NA	NA	NA	NA	NA	1	NA
Phyllanthaceae	*Baccaurea*	*puberula*	NA	NA	NA	NA	NA	1	NA
Phyllanthaceae	*Baccaurea*	*sarawakensis*	NA	NA	NA	NA	NA	6	NA
Putranjivaceae	*Drypetes*	*sibuyanensis*	NA	NA	NA	NA	NA	2	NA
Santalaceae	*Strombosia*	*ceylanica*	NA	NA	NA	NA	NA	1	NA
Sapindaceae	*Pometia*	*pinnata*	NA	NA	NA	3	2	1	NA
Sapotaceae	*Madhuca*	*malaccensis*	NA	NA	NA	NA	NA	2	NA
Sapotaceae	*Palaquium*	*cryptocaryiifolium*	NA	NA	NA	NA	NA	1	NA
Sapotaceae	*Palaquium*	*dasyphyllum*	7.4	NA	1	NA	NA	NA	NA
Sapotaceae	*Palaquium*	*rostratum*	0	2	NA	2	NA	NA	NA
Simaroubaceae	*Quassia*	*borneensis*	NA	NA	NA	NA	NA	1	1
Malvaceae	*Scaphium*	*borneensis*	NA	NA	NA	NA	NA	NA	1
Malvaceae	*Sterculia*	*hosei*	NA	NA	NA	NA	NA	1	NA
Thymelaeaceae	*Aquilaria*	*beccariana*	NA	NA	NA	NA	NA	1	NA
Thymelaeaceae	*Gonystylus*	*affinis*	0	1	NA	NA	NA	NA	NA
Malvaceae	*Schoutenia*	*glomerata*	NA	NA	NA	NA	NA	1	NA
Trigonaceae	*Trigoniastrum*	*hypoleucum*	NA	NA	NA	NA	NA	1	NA
Ulmaceae	*Gironniera*	*nervosa*	0	1	NA	1	NA	NA	NA
Ulmaceae	*Gironniera*	*subaequalis*	0	1	NA	NA	NA	NA	NA
Verbenaceae	*Teijsmanniodendron*	*hollrungii*	NA	NA	NA	NA	NA	1	NA
Verbenaceae	*Teijsmanniodendron*	*simplicifolium*	NA	NA	NA	NA	NA	4	2
TOTAL			**8.3**	**368**	**455**	**644**	**541**	**311**	**26**
Trees Resolved to Species but Without One or Both Species-level Covariates									
Anacardiaceae	*Campnosperma*	*auriculata*	0	1	NA	NA	NA	NA	NA
Anacardiaceae	*Gluta*	*laxiflora*	NA	NA	NA	2	NA	4	NA
Anacardiaceae	*Mangifera*	*havilandii*	14.7	NA	2	NA	1	NA	NA
Anacardiaceae	*Melanorrhoea*	*beccarrii*	NA	NA	NA	NA	1	NA	NA
Anacardiaceae	*Melanorrhoea*	*maingayi*	NA	NA	NA	NA	1	NA	NA

Anacardiaceae	*Melanorrhoea*	*pubescens*	NA	NA	NA	3	NA	NA	NA
Anacardiaceae	*Nothopegia*	*borneensis*	2.1	NA	1	NA	NA	NA	NA
Anacardiaceae	*Swintonia*	*acuta*	0	1	NA	NA	NA	NA	NA
Anacardiaceae	*Swintonia*	*schwenkii*	0	1	NA	2	NA	NA	NA
Annonaceae	*Mezzettia*	*leptopoda*	0	3	NA	2	1	NA	NA
Apocynaceae	*Alstonia*	*spatulata*	0	1	NA	NA	NA	NA	NA
Apocynaceae	*Dyera*	*costulata*	0	3	NA	4	1	NA	NA
Burseraceae	*Canarium*	*asperum*	8.7	NA	2	1	NA	NA	NA
Burseraceae	*Dacryodes*	*expansa*	0	1	NA	NA	1	4	4
Burseraceae	*Santiria*	*grandiflora*	2.1	4	2	9	3	NA	NA
Burseraceae	*Santiria*	*mollis*	0	1	NA	3	2	NA	NA
Dipterocarpaceae	*Dipterocarpus*	*eurynchus*	NA	NA	NA	4	NA	NA	NA
Dipterocarpaceae	*Shorea*	*asahi*	14.8	NA	2	1	2	NA	NA
Dipterocarpaceae	*Shorea*	*borneensis*	NA	NA	NA	1	NA	NA	NA
Dipterocarpaceae	*Shorea*	*cristata*	41.9	NA	2	3	1	NA	NA
Dipterocarpaceae	*Shorea*	*macrobalanos*	7.1	1	2	NA	NA	NA	NA
Dipterocarpaceae	*Shorea*	*macrophylla*	13	NA	3	7	3	8	NA
Dipterocarpaceae	*Shorea*	*scabrida*	9.8	2	5	8	3	NA	NA
Euphorbiaceae	*Elateriospermum*	*tapos*	2.5	10	3	12	4	1	NA
Euphorbiaceae	*Macaranga*	*conifera*	2.4	NA	2	NA	NA	3	NA
Euphorbiaceae	*Macaranga*	*pruinosa*	NA	NA	NA	1	NA	NA	NA
Euphorbiaceae	*Mallotus*	*wrayii*	1.2	3	1	3	NA	NA	NA
Fabaceae	*Dialium*	*procerum*	NA	NA	NA	4	1	NA	NA
Fabaceae	*Millettia*	*vasta*	0	3	NA	3	4	3	2
Fabaceae	*Sindora*	*affinis*	0	2	NA	4	NA	NA	NA
Fagaceae	*Castanopsis*	*costata*	0	1	NA	NA	NA	NA	NA
Fagaceae	*Castanopsis*	*oviformis*	0	1	NA	1	1	NA	NA
Fagaceae	*Hydnocarpus*	*calophylla*	0	3	NA	NA	NA	NA	NA
Fagaceae	*Lithocarpus*	*echinifer*	6.9	NA	1	1	NA	NA	NA
Fagaceae	*Lithocarpus*	*pseudokunsterli*	79	NA	1	NA	NA	NA	NA
Fagaceae	*Lithocarpus*	*pulcher*	NA	NA	NA	NA	1	NA	NA

Fagaceae	*Lithocarpus*	*revolutus*	0	1	NA	1	NA	NA	NA
Fagaceae	*Quercus*	*elmeri*	0	1	NA	NA	NA	NA	NA
Fagaceae	*Quercus*	*subsericea*	43	NA	1	NA	NA	NA	NA
Lauraceae	*Alseodaphne*	*oblanceolata*	NA	NA	NA	1	NA	NA	NA
Lauraceae	*Beilschmiedia*	*perakensis*	0.1	1	1	2	2	NA	NA
Lauraceae	*Eusideroxylon*	*zwageri*	NA	NA	NA	2	5	NA	NA
Lauraceae	*Litsea*	*ficoidea*	0	2	NA	3	1	NA	NA
Lauraceae	*Litsea*	*nodularis*	5.4	2	1	2	NA	NA	NA
Lauraceae	*Litsea*	*ochracea*	11.2	NA	2	NA	1	NA	NA
Lauraceae	*Litsea*	*petiolata*	0.7	NA	1	NA	NA	NA	NA
Lauraceae	*Litsea*	*varians*	NA	NA	NA	1	NA	NA	NA
Lecythidaceae	*Barringtonia*	*hallieri*	NA	NA	NA	1	NA	NA	NA
Lecythidaceae	*Barringtonia*	*sarcostachys*	0	2	NA	NA	NA	NA	NA
Magnoliaceae	*Talauma*	*gigantifolia*	0	1	NA	NA	NA	NA	NA
Malvaceae	*Durio*	*dulcis*	NA	NA	NA	1	NA	NA	NA
Malvaceae	*Durio*	*lanceolatus*	0	1	NA	4	NA	NA	NA
Malvaceae	*Heritiera*	*albiflora*	39.5	NA	1	NA	NA	NA	NA
Malvaceae	*Heritiera*	*aurea*	0	1	NA	NA	2	NA	NA
Meliaceae	*Aglaia*	*affinis*	NA	NA	NA	1	NA	NA	NA
Moraceae	*Artocarpus*	*nitidus*	NA	NA	NA	NA	1	NA	NA
Moraceae	*Parartocarpus*	*bracteata*	1.1	NA	1	1	NA	NA	NA
Moraceae	*Parartocarpus*	*venenosus_ssp_born*	0	1	NA	2	1	NA	NA
Moraceae	*Parartocarpus*	*venenosus_ssp_forbesii*	3.4	NA	1	NA	NA	NA	NA
Myristicaceae	*Gymnacranthera*	*contracta*	5.8	3	3	1	1	NA	NA
Myristicaceae	*Knema*	*galeata*	20	1	1	4	1	5	NA
Myristicaceae	*Knema*	*latericia*	6.7	1	1	NA	NA	5	NA
Myristicaceae	*Knema*	*nemacinerae*	7.5	NA	2	1	2	NA	NA
Myristicaceae	*Myristica*	*maxima*	0.2	6	1	13	NA	NA	NA
Myristicaceae	*Myristica*	*papyracea*	NA	NA	NA	1	NA	NA	NA
Myristicaceae	*Myristica*	*villosa*	NA	NA	NA	2	NA	NA	NA
Phyllanthaceae	*Aporusa*	*chalocarpa*	0	1	NA	NA	1	NA	NA

Phyllanthaceae	*Aporusa*	*subcaudata*	0.5	NA	1	1	NA	NA	NA
Phyllanthaceae	*Baccaurea*	*dolichobotrys*	0.1	NA	1	2	NA	NA	NA
Phyllanthaceae	*Baccaurea*	*pyriformis*	18.6	NA	1	NA	NA	1	NA
Polygalaceae	*Xanthophyllum*	*ellipticum*	0	1	NA	NA	NA	NA	NA
Sapindaceae	*Nephelium*	*rubescens*	0	1	NA	1	NA	NA	NA
Sapotaceae	*Palaquium*	*decurrens*	0	2	NA	3	NA	NA	NA
Sapotaceae	*Palaquium*	*obovatum*	1	NA	1	NA	1	NA	NA
Sapotaceae	*Palaquium*	*rivulare*	13.7	NA	1	1	NA	NA	NA
Sapotaceae	*Palaquium*	*stenophyllum*	0	1	NA	3	NA	NA	NA
Sapotaceae	*Payena*	*endertii*	NA	NA	NA	1	NA	NA	NA
Malvaceae	*Scaphium*	*longipetiolum*	14.7	NA	2	3	NA	NA	NA
Malvaceae	*Scaphium*	*macropodum*	2.6	3	2	8	2	3	NA
Malvaceae	*Sterculia*	*macrophylla*	0	1	NA	NA	NA	NA	NA
Thymelaeaceae	*Gonystylus*	*acuminata*	NA	NA	NA	2	NA	NA	NA
Malvaceae	*Pentace*	*corneri*	0	2	NA	3	1	NA	NA
Malvaceae	*Pentace*	*curtisii*	5.6	NA	1	2	NA	NA	NA
Malvaceae	*Pentace*	*laxiflora*	9.3	1	1	2	NA	1	NA
Verbenaceae	*Teijsmanniodendron*	*ahernianum*	0	1	NA	NA	NA	NA	NA
Verbenaceae	*Teijsmanniodendron*	*bogoriense*	4.7	1	1	NA	1	NA	NA
Verbenaceae	*Teijsmanniodendron*	*glabrum*	0	1	NA	1	NA	NA	NA
Verbenaceae	*Teijsmanniodendron*	*holophyllum*	0	1	NA	1	1	NA	NA
Verbenaceae	*Teijsmanniodendron*	*sarawakanum*	0	1	NA	NA	NA	NA	NA
TOTAL			**6.1**	**84**	**58**	**157**	**55**	**38**	**6**

Table S2. Fifteen soil properties measured in topsoil and subsoil in the Central Sarawak drilling and felling data and used to construct soil PC axes, with their range of values observed across sample plots and loadings on the first four PC axes in the principle components analysis (see main text for details). Cumulatively, the first four PCs explained 58 % of the total variance in soil properties, and 29%, 13%, 8%, and 8% were explained separately by PC1, PC2, PC3, and PC4, respectively. Topsoil samples represent the top 10 cm of the soil profile, and subsoil samples were collected from 45-55 cm in depth. The variables with the five largest rotation coefficients for each PC axis are highlighted in bold. Soil concentrations are expressed in units of milliequivalents per 100 g of soil (me%), parts per million (ppm), or percent dry weight (%). CEC = Cation Exchange Capacity.

			Range		PC Axis Loadings			
Soil Variable	**Units**	**Soil layer**	**Min**	**Max**	**PC1**	**PC2**	**PC3**	**PC4**
CEC	me%	Subsoil	1.6	17	0.17	0.2	0.23	0.1
CEC	me%	Topsoil	2.03	28.79	0.09	0.12	**0.26**	**0.36**
Clay	%	Subsoil	8.8	57.5	**0.27**	-0.12	0.15	-0.08
Clay	%	Topsoil	4.1	54.6	**0.27**	-0.15	0.12	-0.06
Fe/Al sesquioxides	%	Subsoil	0.71	29.89	0.26	-0.1	0.05	-0.1
Fe/Al sesquioxides	%	Topsoil	0.66	21.74	**0.28**	-0.1	-0.02	-0.12
Organic Content	%	Subsoil	0.12	6	0.08	-0.14	-0.08	0.18
Organic Content	%	Topsoil	0.33	9.09	0.07	0.02	0.16	**0.49**
pH		Subsoil	3.2	5.8	-0.07	**0.37**	0.04	-0.15
pH		Topsoil	2.9	5.8	-0.03	**0.36**	-0.1	-0.2
Reserve Ca	ppm	Subsoil	6	1296	0.21	-0.07	-0.15	0.01
Reserve Ca	ppm	Topsoil	1.05	2957	0.11	0.05	**-0.39**	0.11
Reserve K	ppm	Subsoil	430	15294	0.25	0.01	0.11	**-0.29**
Reserve K	ppm	Topsoil	95	10162	**0.27**	-0.02	-0.02	-0.22
Reserve Mg	ppm	Subsoil	65	9882	0.19	**0.27**	-0.02	-0.12
Reserve Mg	ppm	Topsoil	17.92	7215	0.2	0.24	-0.07	-0.12
Reserve P	ppm	Subsoil	32	995	0.22	-0.09	-0.19	0.03
Reserve P	ppm	Topsoil	0.172	634	0.24	-0.06	-0.21	0.12

Total N	%	Subsoil	0.015	0.292	0.25	-0.04	-0.07	0.09
Total N	%	Topsoil	0.025	1.26	0.17	0.01	0.14	**0.31**
Exchangeable Ca	me%	Subsoil	0.01	3.07	-0.06	0.16	-0.21	0.11
Exchangeable Ca	me%	Topsoil	0.01	10.89	-0.02	0.17	**-0.39**	0.15
Exchangeable K	me%	Subsoil	0.01	0.91	0.08	0.16	0.09	0.17
Exchangeable K	me%	Topsoil	0.01	0.82	0.1	0.11	0.08	**0.33**
Exchangeable Mg	me%	Subsoil	0.01	1.96	0.07	**0.33**	-0.18	0.02
Exchangeable Mg	me%	Topsoil	0.01	3.59	0.1	**0.33**	-0.22	0.12
Exchangeable Na	me%	Subsoil	0.01	0.27	0	0.25	**0.32**	-0.09
Exchangeable Na	me%	Topsoil	0.01	0.29	0.02	**0.27**	**0.32**	-0.07
Silt	%	Subsoil	5.9	49	**0.27**	0.01	0	-0.07
Silt	%	Topsoil	7.4	55.2	**0.28**	0.04	0.04	0.02

Table S3. Comparison of soil geology, taxonomy, and chemistry between Lambir (Baillie et al. 2006) and Central Sarawak (Baillie et al. 1987).

		Lambir		Central Sarawak	
Parent material	**Age**	**Neogene Tertiary**		**Paleogene Tertiary**	
	Lithology	Sandstone	Shale	Sandstone	Shale
Taxonomy	World Reference Base	Haplic Acrisol (Arenosol)	Haplic Acrisol (Alisol)	Haplic Acrisol (Arenosol)	Haplic Acrisol (Alisol)
	Soil Taxonomy	Typic Palaeudult	Typic Hapludult	Typic Palaeudult	Typic Hapludult
	Sarawak soil family	Nyalau	Merit	Nyalau	Merit
Topsoil	Organic C %	2	1.2	2.1	2.1
	C:N	14	10	11	9
	Total P ppm	91	128	120	269
Subsoil	Texture	Sandy clay loam	Clay	Sandy clay loam	Clay
	pH	4.7	4.7	4.5	4.6
	Total P ppm	78	123	178	233
	Total K ppm	2498	4630	3878	5778
	Total Mg ppm	796	1667	1232	2563
	Total Ca ppm	128	127	176	281

Table S4. The number of trees identified to each taxonomic level of resolution (species, morphospecies, genus, and family) for each stem rot frequency dataset.

Taxonomic Resolution of Tree ID	Felling	Drilling	Coring
Species	965	1397	356
Morpho-species	22	24	4
Genus	12	215	5
Family	35	142	0
Undetermined	1	2	0
Total	**1035**	**1780**	**365**

Table S5. Fixed effect parameter estimates from the best-supported mixed-effect models predicting the influence of ecological covariates on the frequency and severity of stem rot. Model 1 included: diameter at breast height (DBH), wood density (WD), and soil principle component (PC) axes. Model 2 included: DBH, WD, and soil habitat association. Covariates included in the final models (presented here) were determined by model selection. Estimates are expressed on a logit scale. See the main text for details.

Response Variable	Dataset	Model	Final Model	Covariate	Estimate	CI: 2.5%	CI: 97.5%
Stem Rot Frequency	Felling	Model 1	DBH, Soil PC3	Intercept	-1.687	-2.333	-1.040
				DBH	0.036	0.025	0.048
				Soil PC3	0.152	0.007	0.297
Stem Rot Frequency	Felling	Model 2	DBH x Soil Assoc.	Clay/FineLoam: Intercept	-0.896	-2.688	0.896
				Clay/FineLoam x DBH: Slope	0.015	-0.017	0.047
				Generalist: Intercept	-1.977	-3.444	-0.510
				Generalist x DBH: Slope	0.042	0.010	0.074
				Loam/Fineloam: Intercept	-1.160	-3.011	0.690
				Loam/Fineloam x DBH: Slope	0.041	0.007	0.075
				Sandy Loam/Loam: Intercept	-0.896	-2.688	0.896
				Sandy Loam/Loam x DBH: Slope	0.092	0.042	0.143
Stem Rot Frequency	Drilling	Model 1	DBH, Soil PC2, Soil PC3	Intercept	-2.148	-2.851	-1.445
				DBH	0.032	0.022	0.042
				Soil PC2	0.167	0.003	0.332
				Soil PC3	-0.279	-0.419	-0.138
Stem Rot Frequency	Drilling	Model 2	DBH	Intercept	-1.993	-2.696	-1.290
				DBH	0.029	0.019	0.039
Stem Rot Frequency	Coring	Model 1&2	DBH	Intercept	-4.755	-6.059	-3.452
				DBH	0.072	0.044	0.099
Stem Rot Severity	Felling	Model 1	No covariates retained	Intercept	1.951	1.720	2.182
Stem Rot Severity	Felling	Model 2	WD x Soil Assoc.	Clay/FineLoam: Intercept	1.180	-2.153	4.512
				Clay/FineLoam x WD: Slope	0.729	-3.881	5.339

Generalist: Intercept	-2.035	-5.368	1.297
Generalist x WD: Slope	5.515	0.905	10.124
Loam/Fineloam: Intercept	3.094	0.004	6.184
Loam/Fineloam x WD: Slope	-1.112	-4.594	2.370
Sandy Loam/Loam: Intercept	4.306	0.578	8.035
Sandy Loam/Loam x WD: Slope	-2.765	-6.892	1.363

Table S6. Variance partitioning coefficients (VPC) for nested taxonomic random effects (Family/Genus/Species) indicating the proportion of variance in stem rot frequency and severity explained by each taxonomic level after accounting for tree size (DBH) as a fixed effect. If the inclusion of a taxonomic level did not improve the model AIC by > 2, it was not included in the final model, and its absence is denoted by "NA" in the table.

	Stem Rot Frequency			Stem Rot Severity
Taxonomic level	**Fell**	**Drill**	**Core**	**Felling**
Family	NA	NA	NA	NA
Genus	0.09	0.03	0.09	0.10
Species	0.08	0.11	NA	0.04
Total Taxonomic VPC	**0.17**	**0.14**	**0.09**	**0.15**
Residual Variance	0.83	0.86	0.91	0.85

Table S7. Model selection based on Akaike's Information Criterion (AIC) for each linear mixed effect model testing the association of DBH, wood density (WD), species soil habitation association (Soil Assoc.) and four soil principle components (PC) with stem rot frequency in the felling, drilling and coring datasets and with stem rot severity in the felling dataset. See the main text for details. Final models denoted with ** and boldface font and are presented in further detail in Tables 2, 3, and S6. The full model selection procedure involved comparison of a very large number of models for Models 1 and 2 for each dataset, and so an abridged version is presented here for concision. For models with a given number of predictors, the AIC value of the model with the lowest AIC is given.

Dataset	Model	No. Predictors	Predictors	AIC
Felling	Model 1	6	DBH*WD, PC1, PC2, PC3, PC4	977
		5	DBH, PC1, PC2, PC3, PC4	973
		4	DBH, PC2, PC3, PC4	971
		3	DBH, PC2, PC3	969
		2	**DBH, PC3**	**970****
		1	DBH	972
		0	Intercept only	1009
Felling	Model 2	7	WD*Soil Assoc.*DBH	973
		6	WD*Soil Assoc., DBH*WD, DBH*Soil Assoc.	968
		5	WD*DBH, DBH*Soil Assoc.	965
		4	WD, DBH*Soil Assoc.	963
		3	**DBH*Soil Assoc.**	**961****
		2	DBH, Soil Assoc.	970
		1	DBH	972
		0	Intercept only	1009
Drilling	Model 1	6	WD*DBH, PC1, PC2, PC3, PC4	864
		5	DBH, PC1, PC2, PC3, PC4	863
		4	DBH, PC2, PC3, PC4	863
		3	**DBH, PC2, PC3**	**863****
		2	DBH, PC2	865
		1	DBH	876
		0	Intercept only	909

Drilling	Model 2	7	WD*Soil Assoc.*DBH	882
		6	WD*Soil Assoc., DBH*WD, DBH*Soil Assoc.	884
		5	WD*DBH, DBH*Soil Assoc.	880
		4	WD*DBH, Soil Assoc.	877
		3	WD, DBH, Soil Assoc.	877
		2	DBH, Soil Assoc.	875
		1	**DBH**	**876****
		0	Intercept only	909
Coring	Model 1	7	WD*Soil Type*DBH	184
		6	WD*Soil Type, DBH*WD, DBH*Soil Type	183
		5	DBH*WD, DBH*Soil Type	182
		4	WD*DBH, Soil Type	180
		3	WD*DBH	180
		2	DBH, Soil Type	180
		1	**DBH**	**180****
		0	Intercept only	216
Coring	Model 2	7	WD*Soil Assoc.*DBH	190
		6	WD*Soil Assoc., DBH*WD, DBH*Soil Assoc.	185
		5	WD*Soil Assoc., DBH*WD	182
		4	WD*DBH, Soil Assoc.	182
		3	WD*DBH	180
		2	WD, DBH	181
		1	**DBH**	**180****
		0	Intercept only	216
Stem rot severity	Model 1	6	WD*DBH, PC1, PC2, PC3, PC4	1671
		5	WD, PC1, PC2, PC3, PC4	1654
		4	WD, PC2, PC3, PC4	1647
		3	WD, PC2, PC3	1641
		2	WD, PC3	1636
		1	PC3	1635
		0	**Intercept only**	**1635****
Stem rot severity	Model 2	7	WD*Soil Assoc.*DBH	1671
		6	WD*Soil Assoc., DBH*WD, DBH*Soil Assoc.	1666
		5	WD*Soil Assoc., DBH*WD	1641
		4	WD*Soil Assoc., DBH	1635
		3	**WD*Soil Assoc.**	**1624****
		2	WD, Soil Assoc.	1639
		1	WD	1636
		0	Intercept only	1635

Table S8. Goodness of fit of models of stem rot probability and severity as measured by pseudo-R^2 (pR^2) metrics. The marginal pR^2 is a measure of the proportion of variance in stem rot probability or severity explained by the fixed effects alone, whereas the conditional pR^2 estimates the variance explained by both the fixed and random effects. For all models species was the only random effect.

Model	Marginal pR^2	Conditional pR^2
Stem rot probability		
Felling model 1	0.08	0.28
Felling model 2	0.15	0.32
Drilling model 1	0.10	0.35
Drilling model 2	0.06	0.38
Coring model 1 & 2	0.23	0.40
Stem rot severity		
Felling model 1	0.02	0.17
Felling model 2	0.08	0.18

Figure S1. Diagram showing the sampling design at plots within clusters, with an example of how the BAF-10 prism is used to determine which trees are classified as in or out of the variable-sized plot, as judged by the prism according to angle subtended by the diameter at breast height (DBH) and the distance from plot centre. Augered soil samples (stars) were 0-50 cm in depth, and the profile pit at the plot center (rectangle) was 55 cm deep. Auger samples were analysed as detailed in the Methods section of the main text for soil properties.

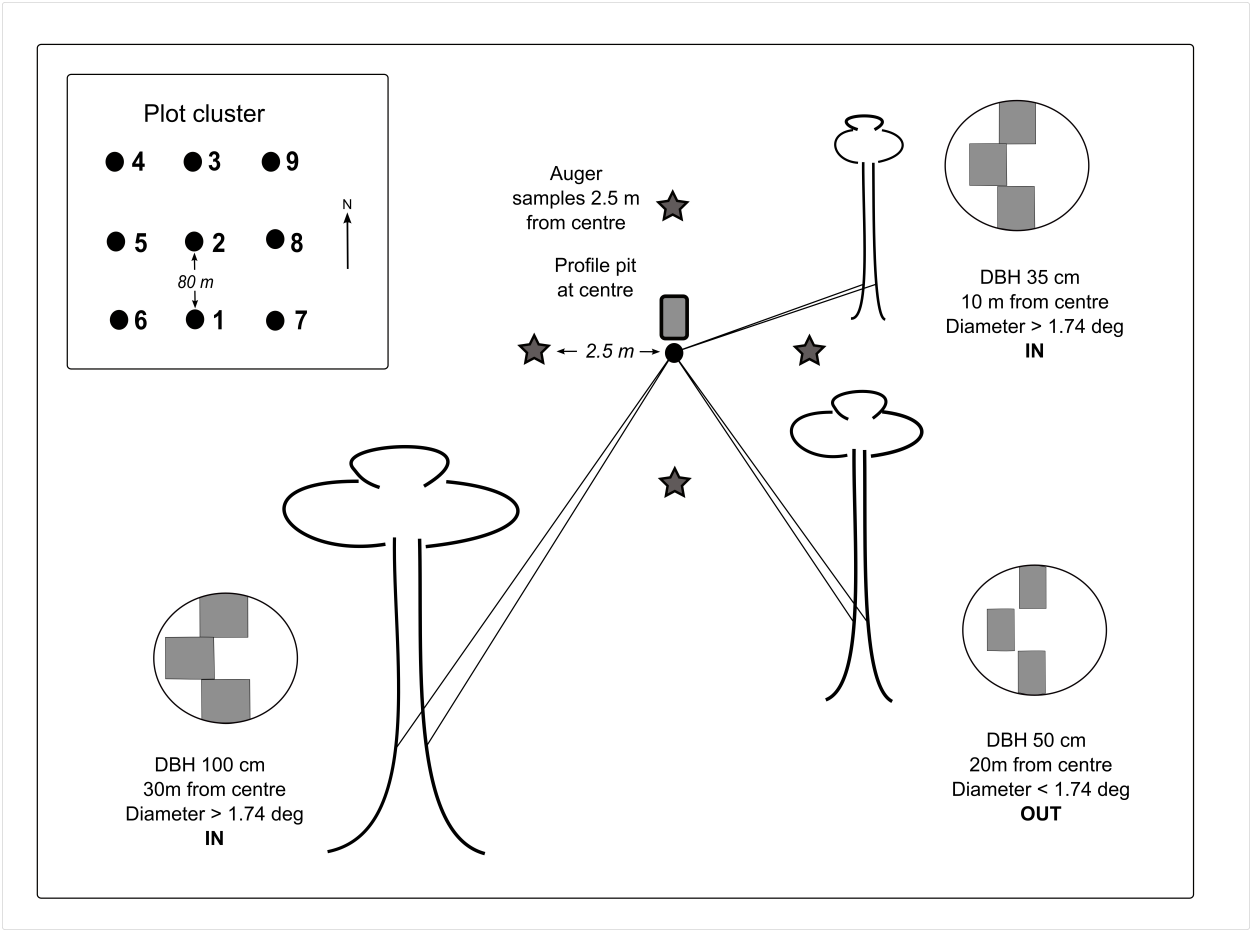

Figure S2. Historical photographs of field workers sampling for stem rot during the Forest Industries Development Project study, producing the Central Sarawak Drilling and Felling datasets. Photographs were taken in 1969 by Peter Sie. Clockwise from the top left, the photographs show felling of a tree, drilling of a tree (top, right), measurement of a log with stem rot (bottom, right), and measurement of a sound log (bottom left).

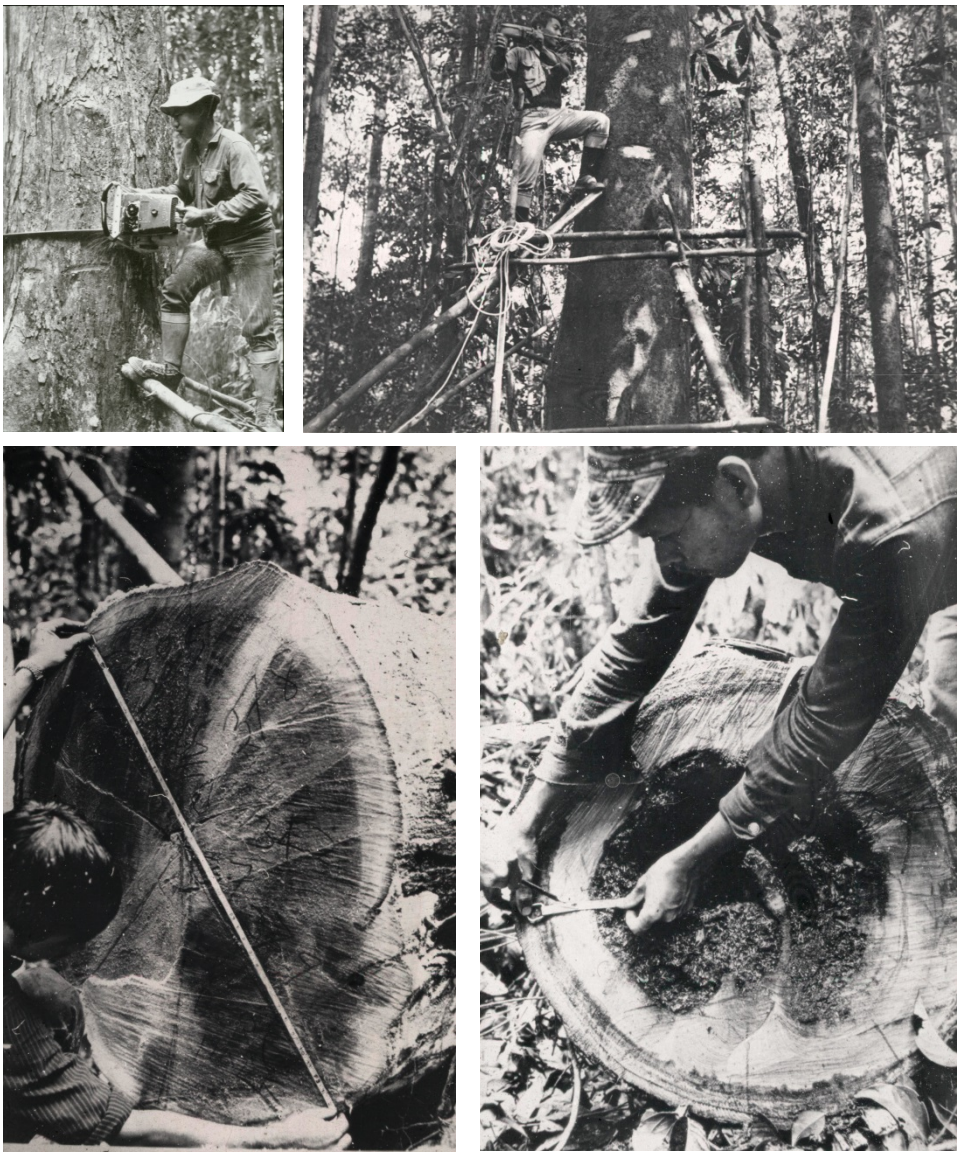

Figure S3. Boxplots showing the distributions of values of the first four soil principal components (PC) for each of 36 clusters included in the analysis of the correlation of stand-level biomass lost to stem rot ($Loss_{max}$) with soil environmental variables.

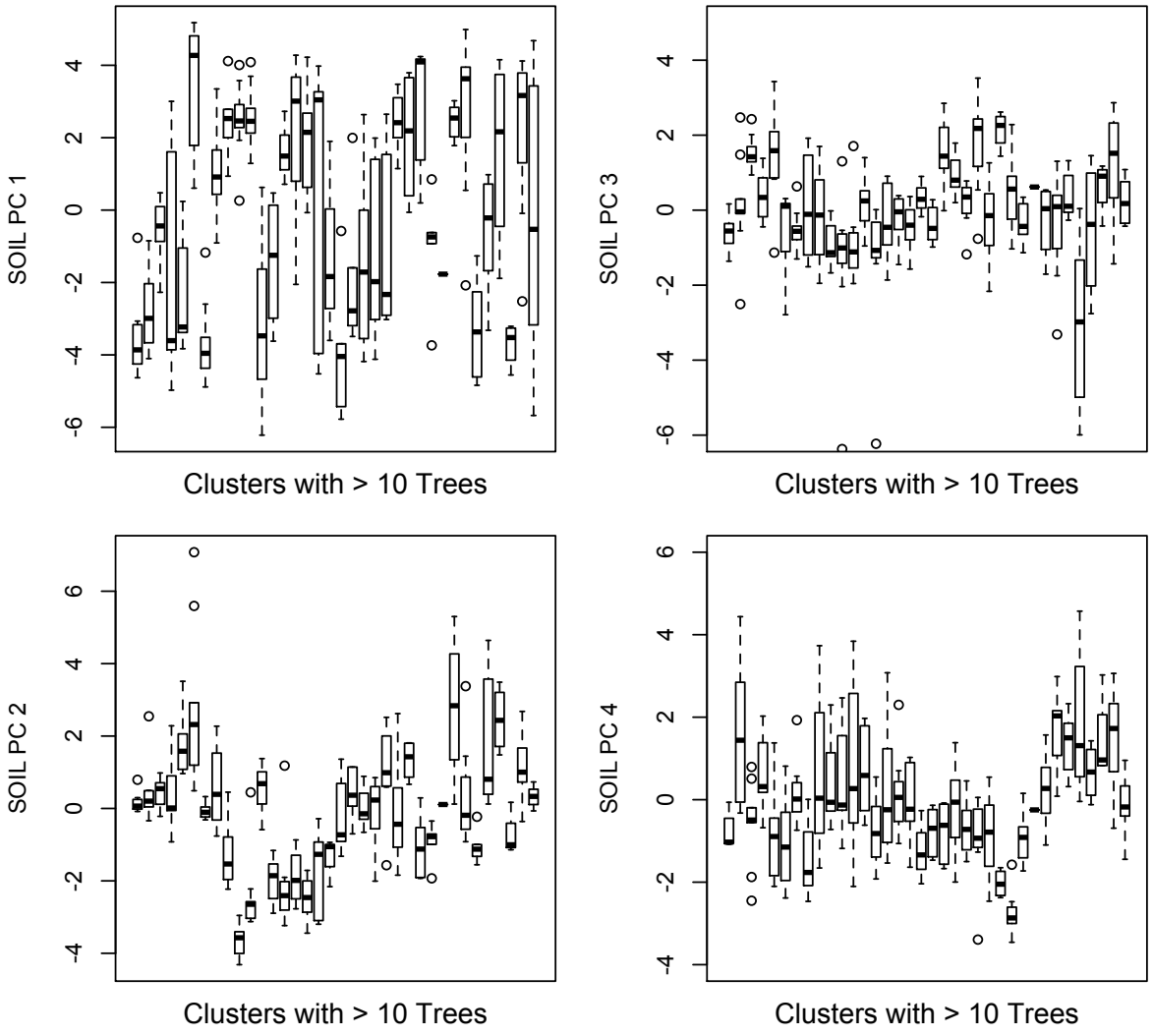

Figure S4. Size distributions of trees evaluated for stem rot presence/absence in the drilling, felling, and coring datasets.

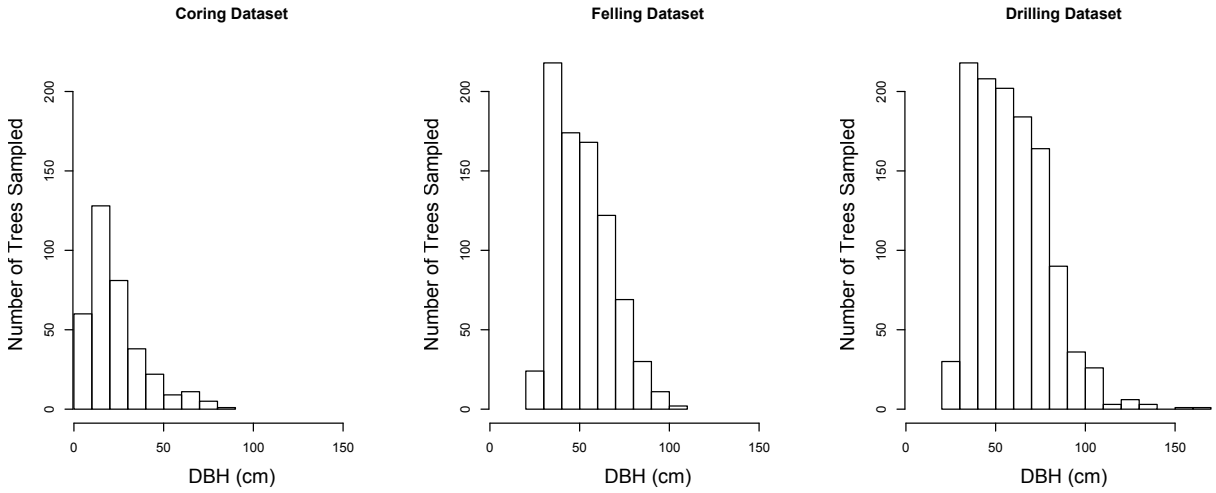

Figure S5. Predicted probability of stem rot as a function of diameter at breast height (DBH) for trees in the coring (purple), drilling (blue), and felling (green) datasets. Points at the top and bottom are a rug plot showing the presence and absence, respectively, of stem rot for each tree at its DBH and are jittered to decrease overlap. See the main text for modelling details. As is the case for all models with a binomial error distribution, there is no error in the prediction of the probability of the response variable based on the linear predictor for each observation, and since DBH is the only continuous fixed-effect in the linear predictor in this generalized linear mixed effects model, the prediction for each tree falls exactly on one curve for each data set.

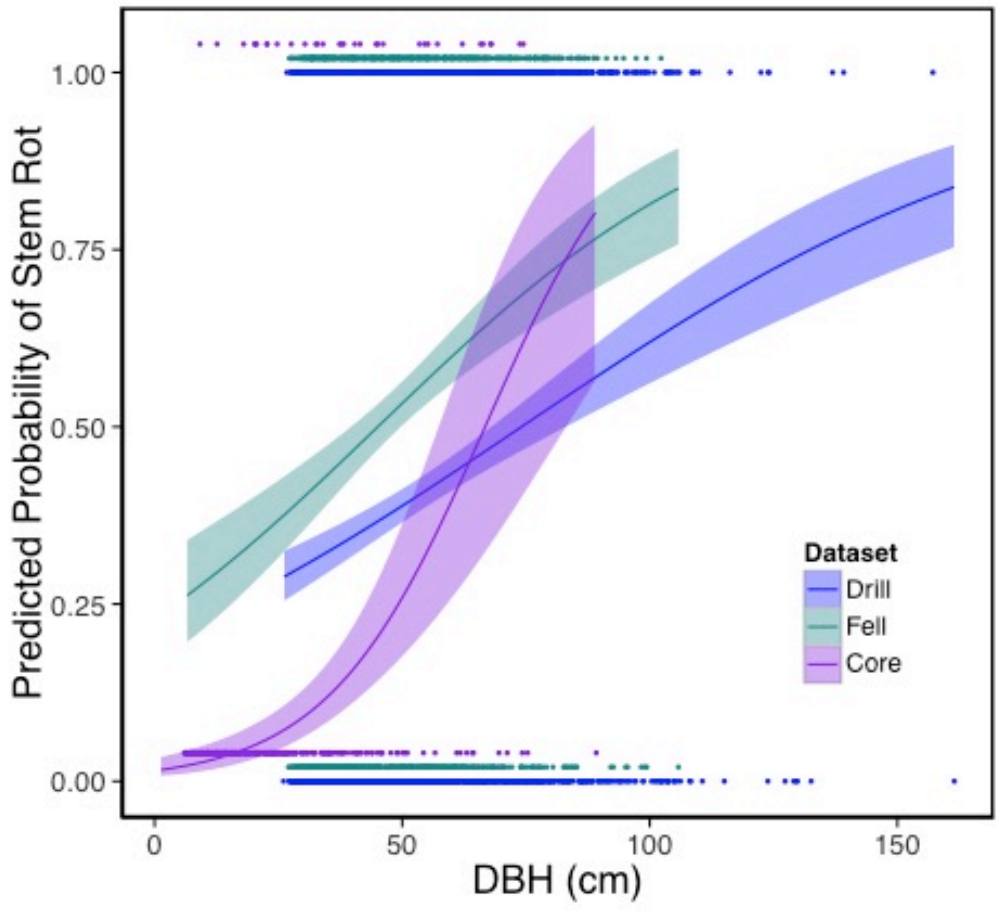

Figure S6. Variation in the predicted probability of stem rot with soil principle component two (PC2) and principle component three (PC3) in the Central Sarawak drilling (A, B) and felling (C, D) datasets. Circles are predicted values of stem rot probability based on model 1 and are scaled with tree diameter at breast height (DBH). Ticks at the top and bottom are a rug plot showing the presence and absence, respectively, of stem rot for each tree at its soil PC value and are jittered to decrease overlap. The curve shows the predicted relationship between stem rot probability and soil PCs with all other predictor variables held at their mean values. Dotted lines represent upper and lower 95% confidence limits. See the main text for modelling details.

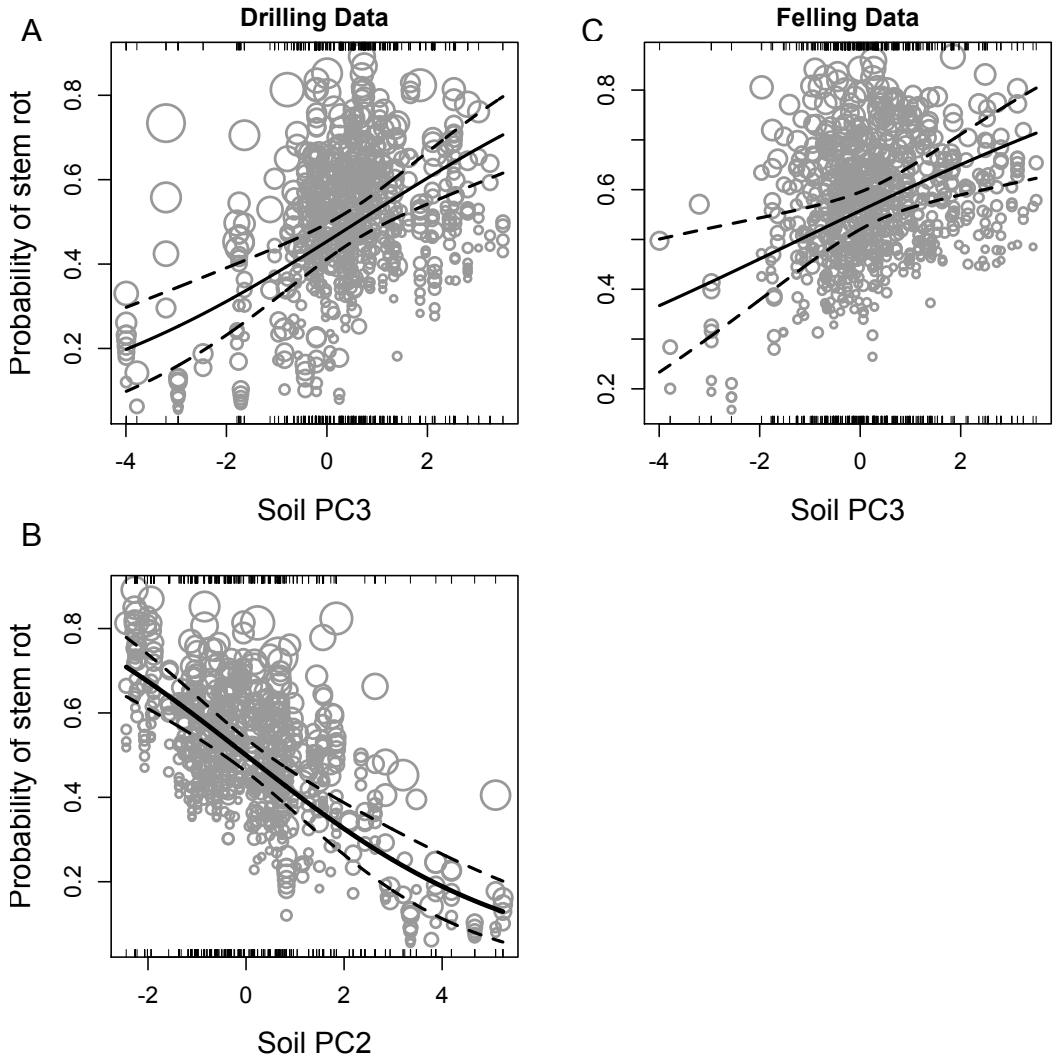

Figure S7. Predicted probability of stem rot as a function of DBH for species in four soil habitat association groups (represented by different colors, see figure legend) for model 2 in the felling dataset. Shaded regions correspond to 95% confidence envelopes. Points at the top and bottom are a rug plot showing the presence and absence, respectively, of stem rot for each tree at its DBH and are jittered to decrease overlap.