Supplementary Material

Tab.S1 - Species of vascular plants inhabiting decaying logs in the Karkonosze Mts. (Poland).

Acer pseudoplatanus L.	*Impatiens parviflora* DC
Alliaria petiolata (M. Bieb) Cavara & Grande	*Lamiastrum galeobdolon* (L.) Ehrend & Polatschek
Athyrium distenifolium Tausch ex Opiz	*Larix decidua* Mill
Betula pendula Roth	*Luzula luzuloides* (Lam.) Dandy & Wilmott
Calamagrostis arundinacea (L) Roth	*Luzula sylvatica* (Huds.) Gaudin
Calamagrostis villosa (Chaix) J.F.Gmel.	*Lycopodium annotinum* L.
Calluna vulgaris (L.) Hull	*Maianthemum bifolium* (L.)F.W. Schmidt
Carex sylvatica Huds.	*Mercurialis perennis* L.
Convallaria maialis L.	*Mycelis muralis* (L.) Dumort.
Deschampsia caespitosa (L.)P. Beauv.	*Oxalis acetosella* L.
Deschampsia flexuosa (L.) Trin.	*Phegopteris connectilis* (Michx.) Watt
Digitalis purpurea L.	*Picea abies* (L.) H. Karst.
Dryopteris carthusiana (Vill.) H.P. Fuchs	*Poa nemoralis* L.
Dryopteris dilatata (Hoffm.)A. Gray	*Polygonatum verticillatum* (L.) All.
Dryopteris expansa (C.Presl) Fraser-Jenk, Jermy	*Prenanthes purpurea* L.
Dryopteris filix-mas (L.) Schott	*Rubus idaeus* L.
Dryopteris sp	*Rubus* sp
Fagus sylvatica L.	*Senecio nemorensis* L.
Galeopsis pubescens Besser	*Sorbus aucuparia* L. Emend. Hedl/
Galium saxatile L.	*Urtica dioica*
Gymnocarpium dryopteris (L.) Newmann	*Trientalis europea* L.
Hedera helix L.	*Vaccinium myrtillus* L.
Homogyne alpina (L.) Cass.	*Vaccinium vitis-idea* L.

Tab. S2 - The description of used models of GLM. The best fitted models are in bold. AIC – Akaike information criterion.

Response variable	Type of model	AIC
colonization of beech logs	~ALTITUDE+DECOMPOSITION+LENGTH+BRYOPHYTES	142.76
	~ALTITUDE+SHADE+DECOMPOSITION+AREA+LENGTH+MOISTURE+DIAMETER+BRYOPHYTES	134.74
	~ALTITUDE+SHADE+DECOMPOSITION+LENGTH+MOISTURE+DIAMETER+BRYOPHYTES	134.27
	~ALTITUDE+SHADE+DECOMPOSITION+LENGTH+DIAMETER+BRYOPHYTES	132.59
	~ALTITUDE+DECOMPOSITION+LOWER+BRYOPHYTES	131.75
	~DECOMPOSITION+LOWER+BRYOPHYTES	131.14
	~ALTITUDE+DECOMPOSITION+LENGTH+DIAMETER+BRYOPHYTES	130.61
	~ALTITUDE+DECOMPOSITION+DIAMETER+BRYOPHYTES	129.18
	~DIAMETER+BRYOPHYTES)	128.55
	~DECOMPOSITION+DIAMETER+BRYOPHYTES)	128.53
	~ALTITUDE+DECOMPOSITION+UPPER+BRYOPHYTES	128.19
	~DECOMPOSITION+UPPER+BRYOPHYTES	**127.17**
colonization of spruce logs	~ALTITUDE+SHADE+DECOMPOSITION+UPPER+LOWER+AREA+LENGTH+MOISTURE+DIAMETER+BRYOPHYTES	278.48
	~ALTITUDE+DECOMPOSITION+AREA+DIAMETER+BRYOPHYTES	278.3
	~ALTITUDE+DECOMPOSITION+LOWER+BRYOPHYTES	276.9
	~ALTITUDE+DECOMPOSITION+BRYOPHYTES	276.56
	~ALTITUDE+DECOMPOSITION+AREA+LENGTH+UPPER+BRYOPHYTES	275.53
	~ALTITUDE+DECOMPOSITION+AREA+LENGTH+BRYOPHYTES	275.49
	~ALTITUDE+SHADE+DECOMPOSITION+AREA+LENGTH+DIAMETER+BRYOPHYTES	275.25
	~ALTITUDE+DECOMPOSITION+LENGTH+UPPER+BRYOPHYTES	275.16
	~ALTITUDE+DECOMPOSITION+LENGTH+DIAMETER+BRYOPHYTES	274.67
	~ALTITUDE+DECOMPOSITION+LENGTH+LOWER+BRYOPHYTES	274.29
	~ALTITUDE+DECOMPOSITION+LENGTH+BRYOPHYTES	**273.56**