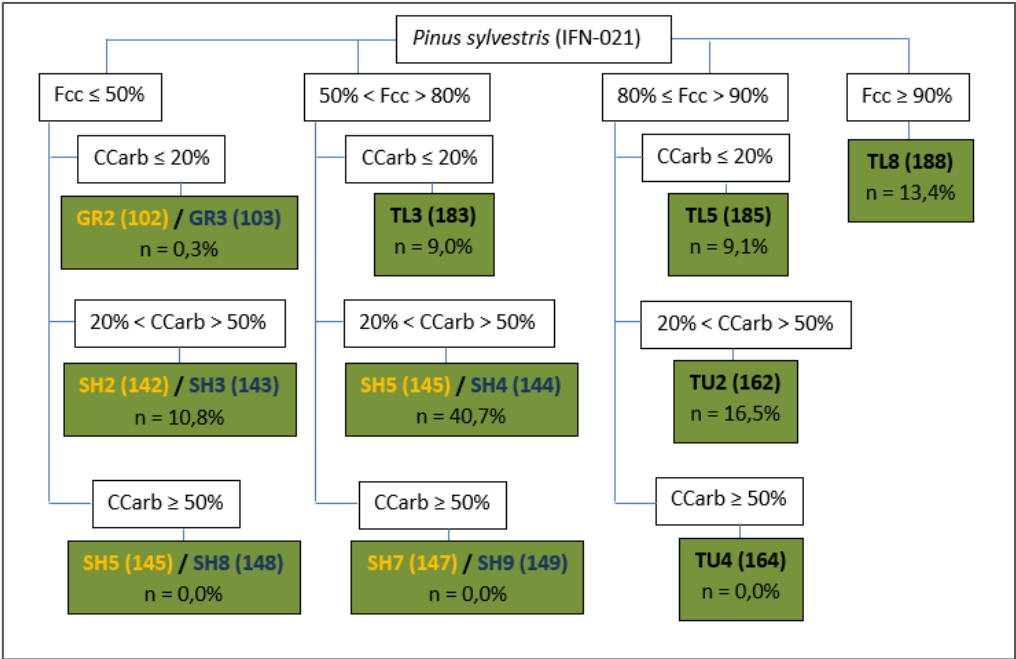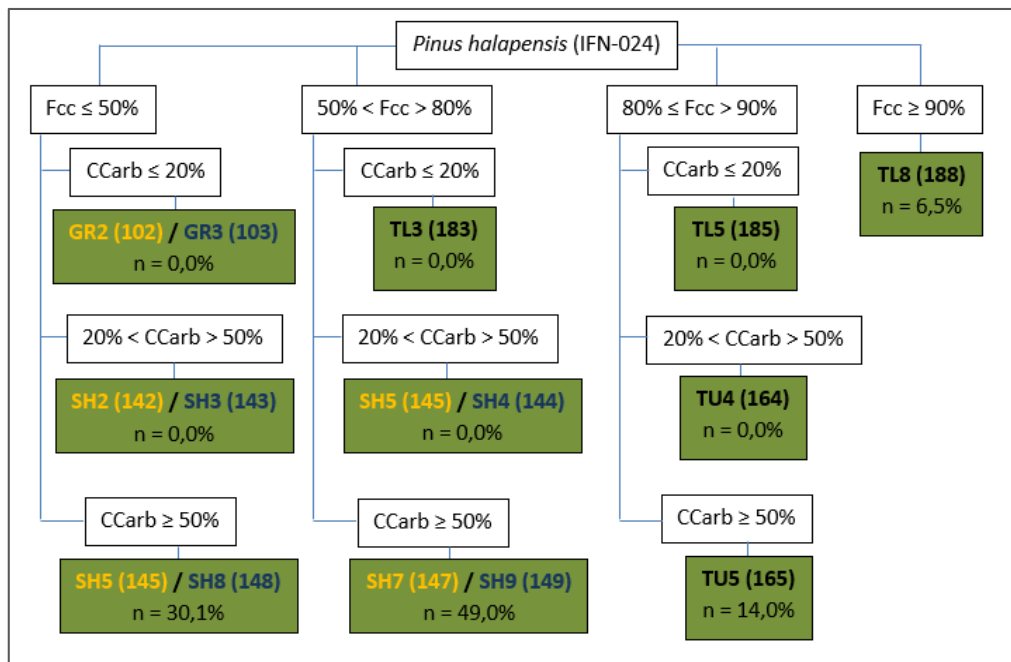**Supplementary Materials**

Algorithms used for assignation of the Scott and Burgan model per species/land use types, according to Table 2: Fcc = Forest Canopy Cover; CCarb = Understory Shrub Cover; Yellow colour = model assigned if the pixel is located within the dry area; Blue colour = model assigned if the pixel is located within the humid area; Black colour = model assigned regardless of the area; n = representativeness of the model (% in the total area covered by species).
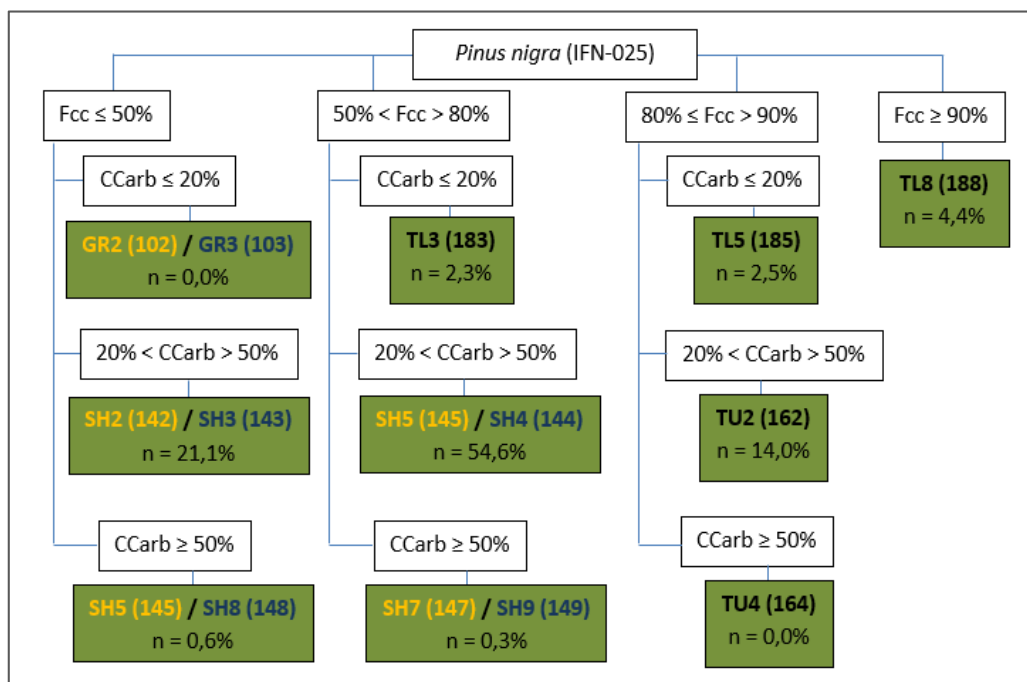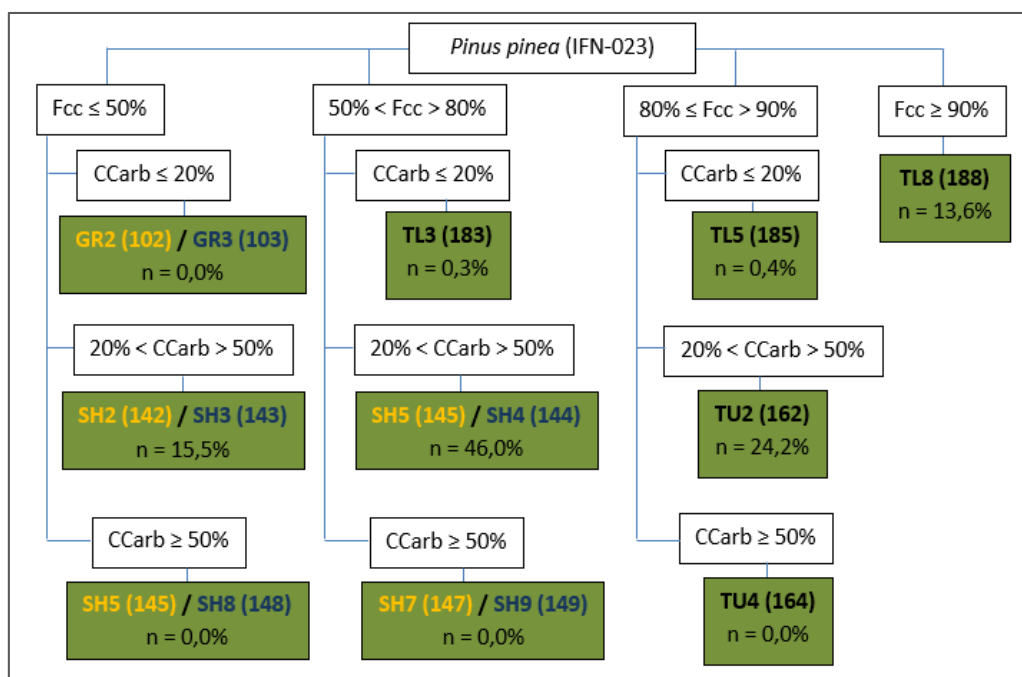
1. **Wooded forest area**

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Pinus sylvestris*
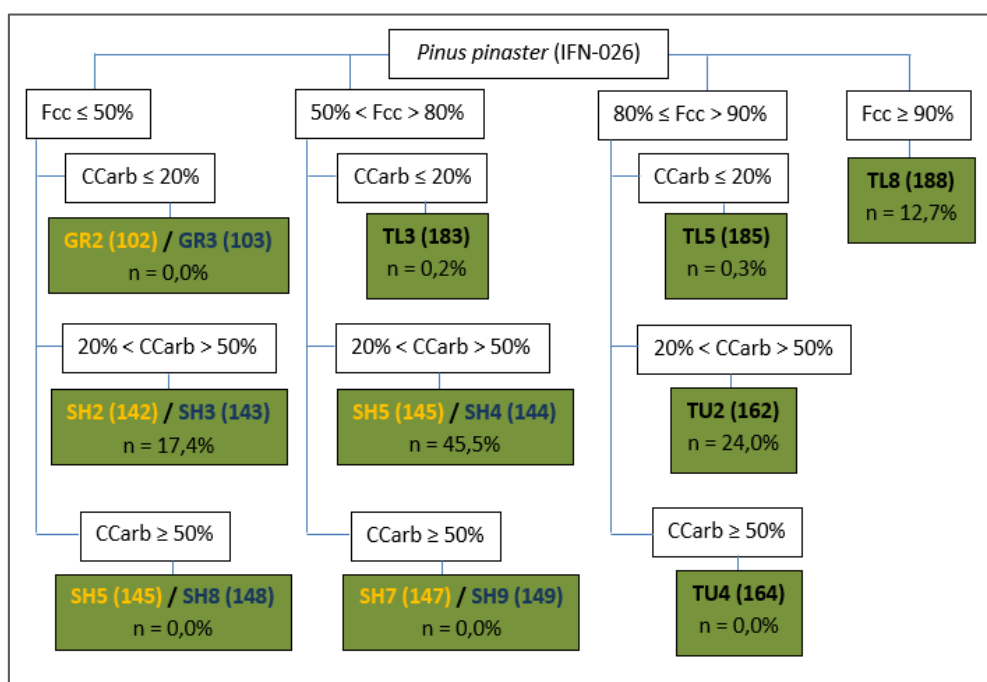
Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Pinus halepensis*
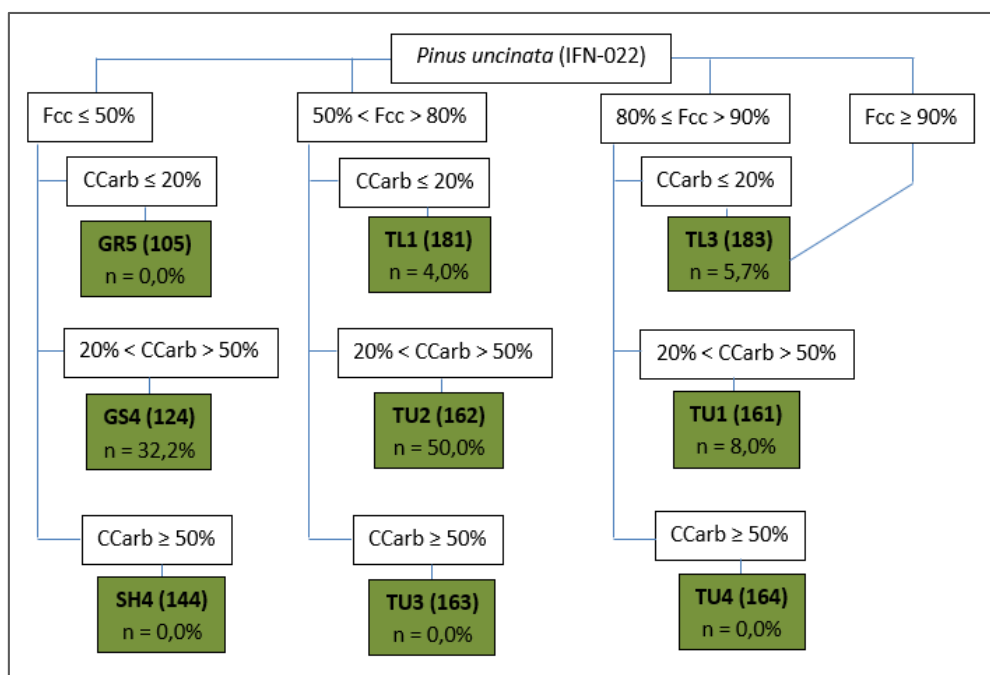

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Pinus nigra*
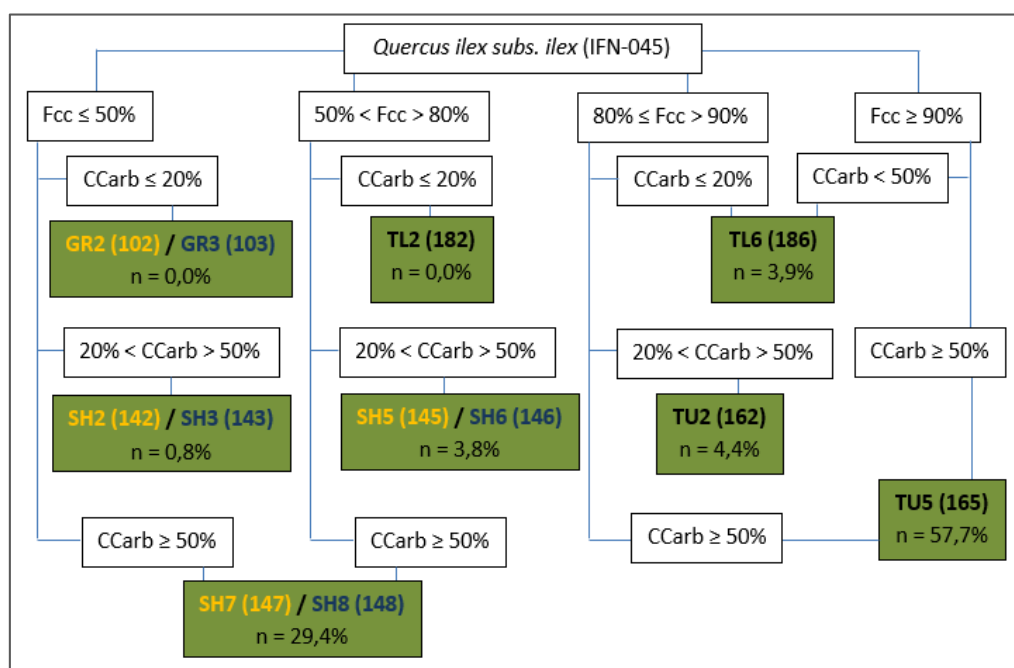
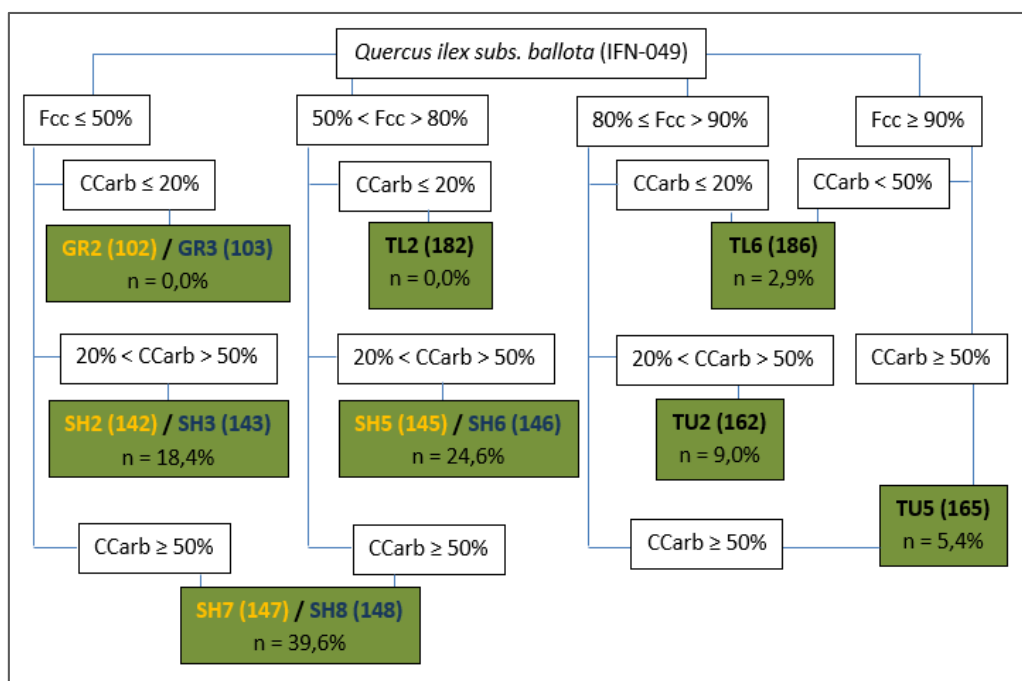Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Pinus pinea*

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Pinus pinaster*
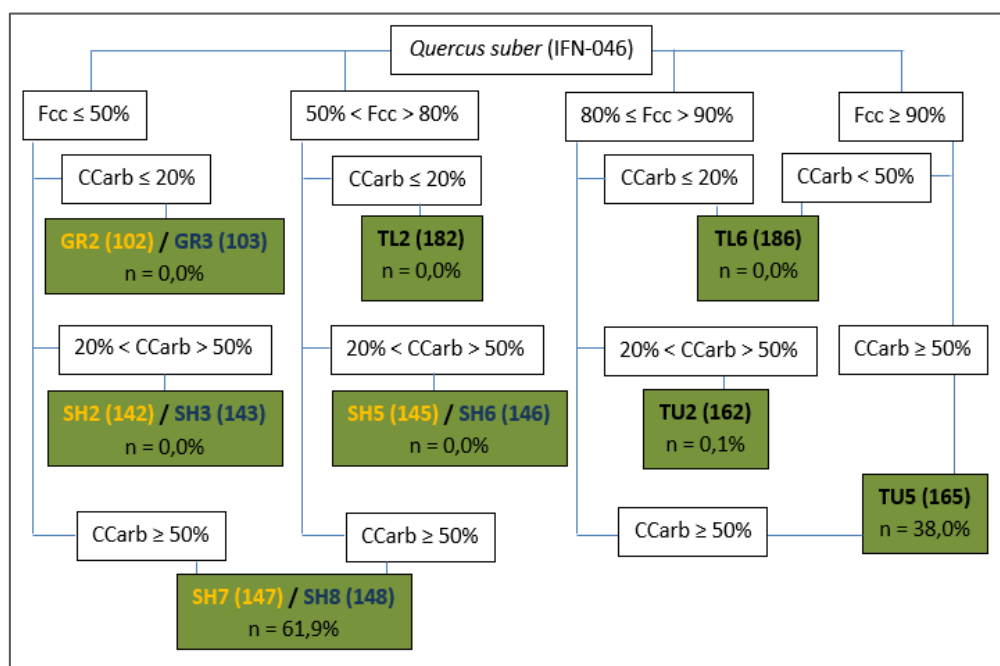
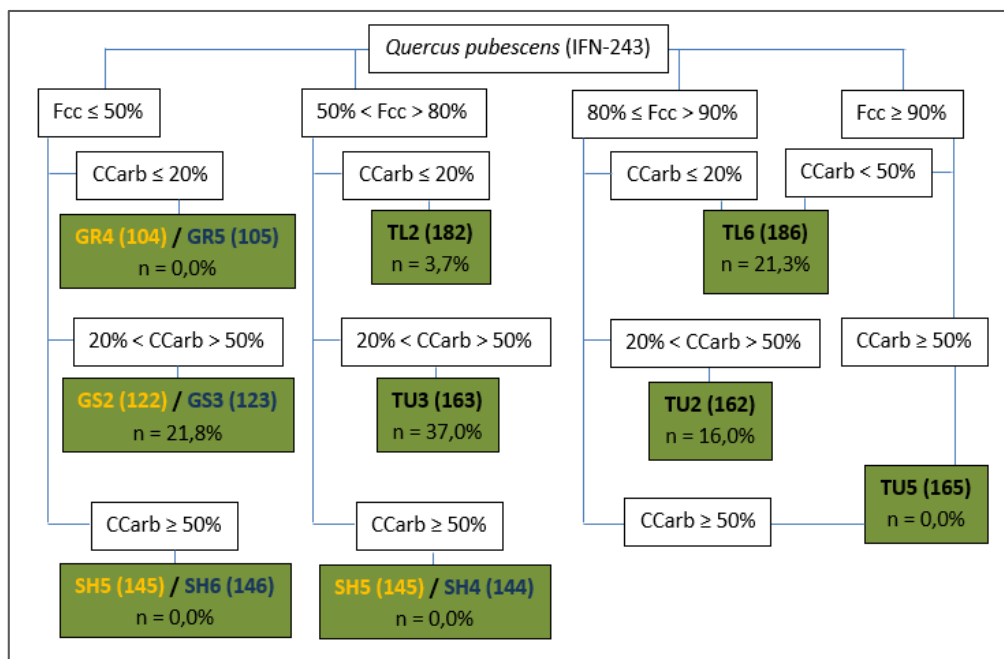Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Pinus uncinata*

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Quercus ilex ilex*
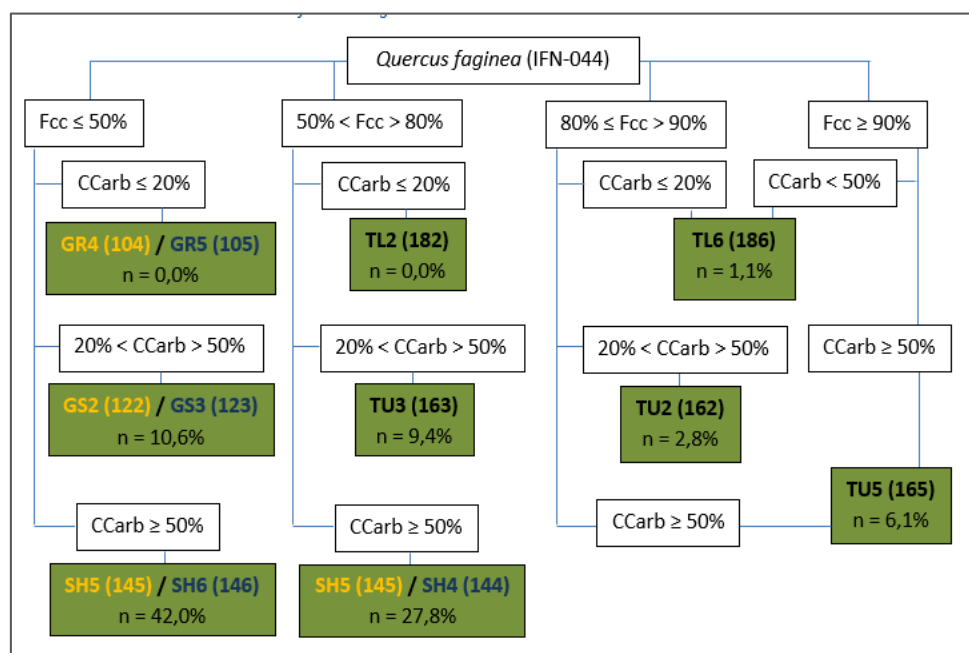
Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Quercus ilex ballota*
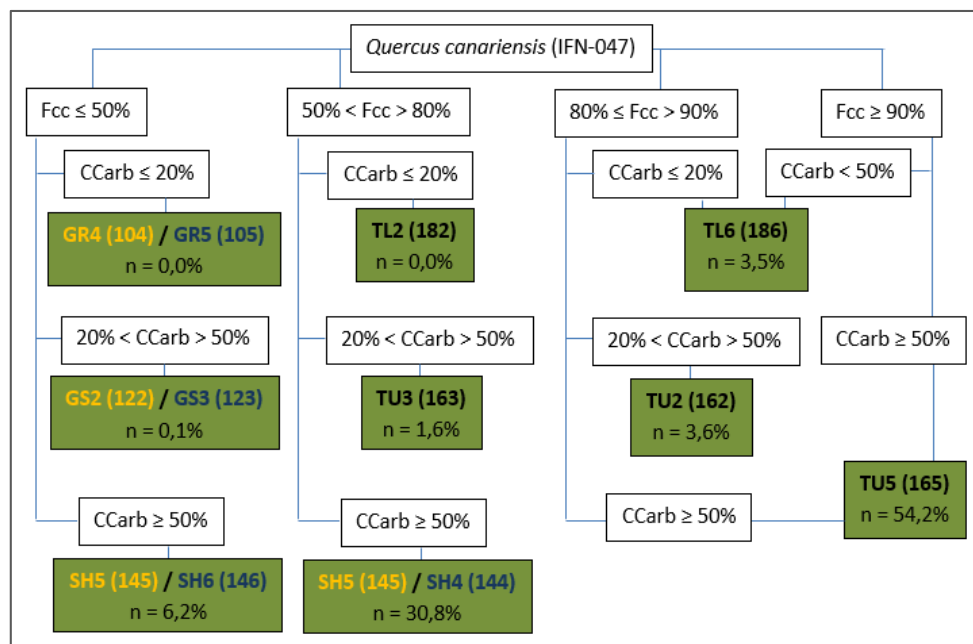

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Quercus suber*
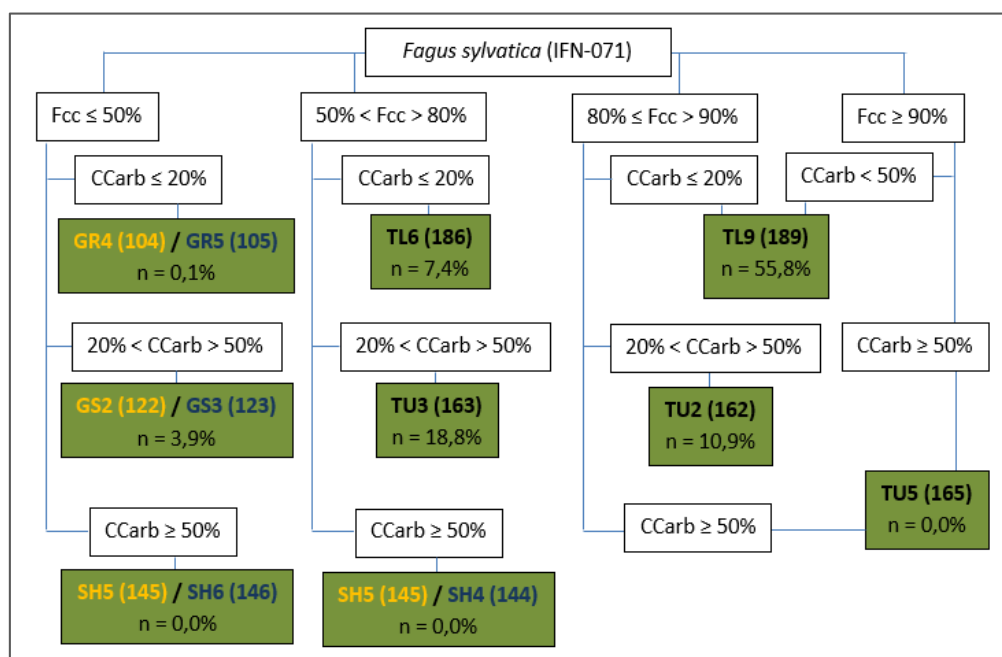
Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Quercus pubescens*
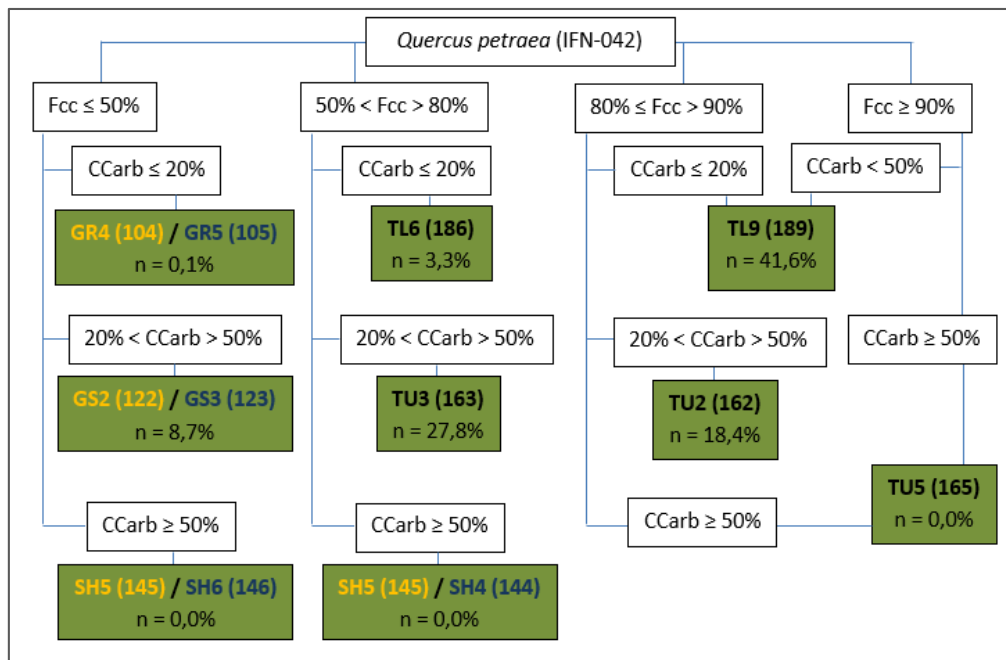

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Quercus faginea*
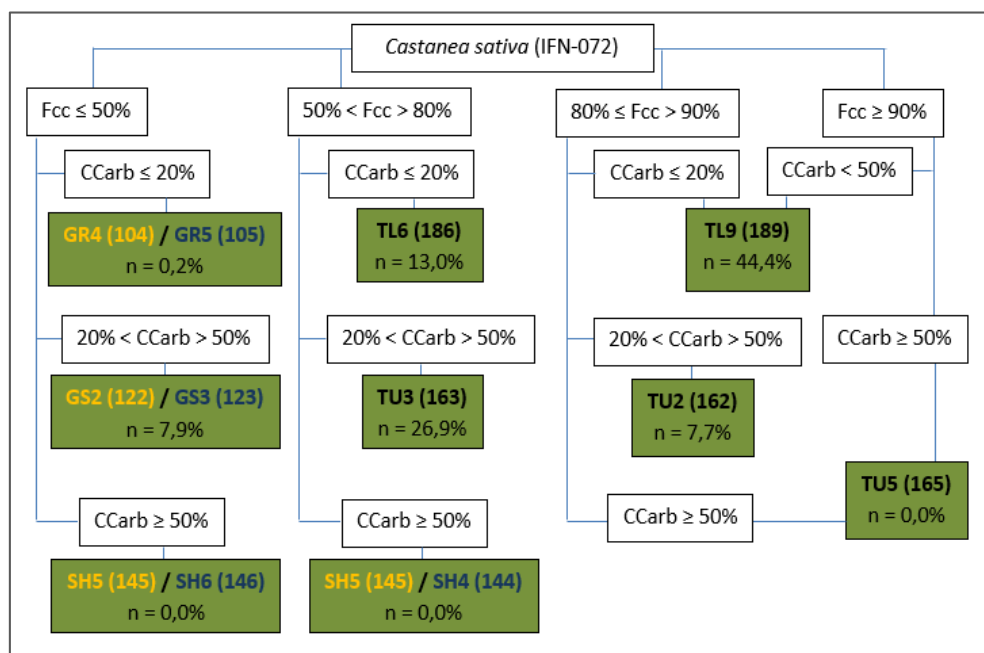
Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Quercus canariensis*
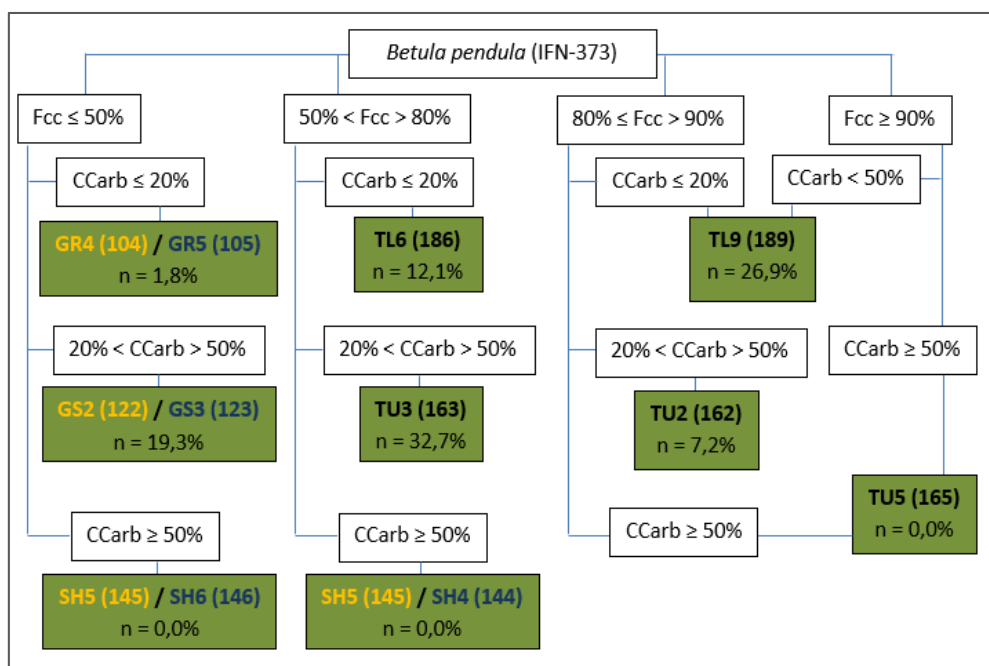

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Fagus sylvatica*
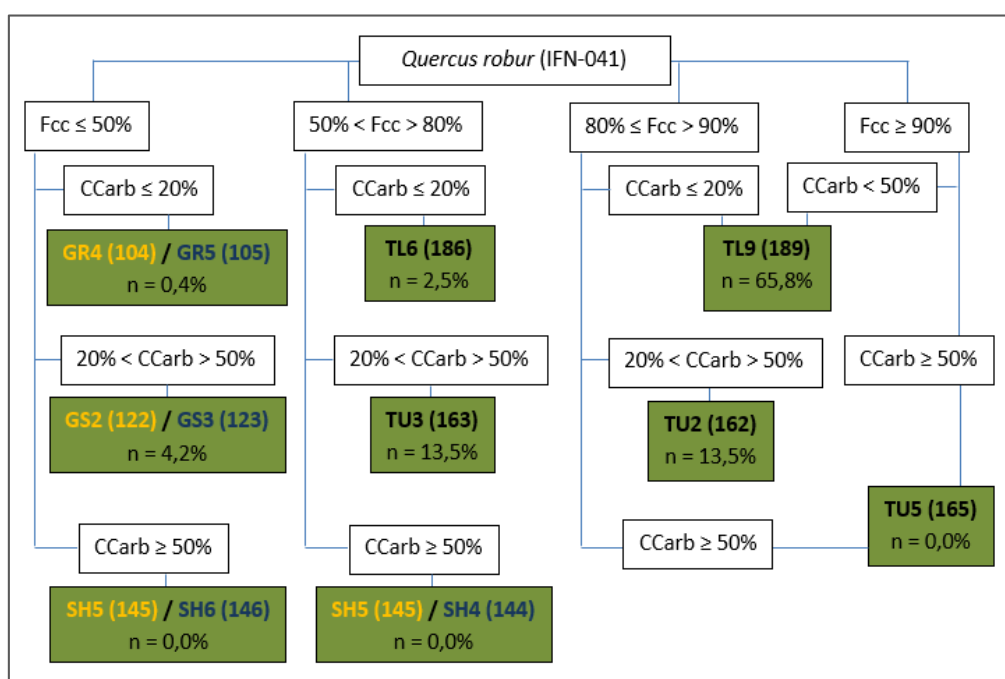
Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Quercus petranea*
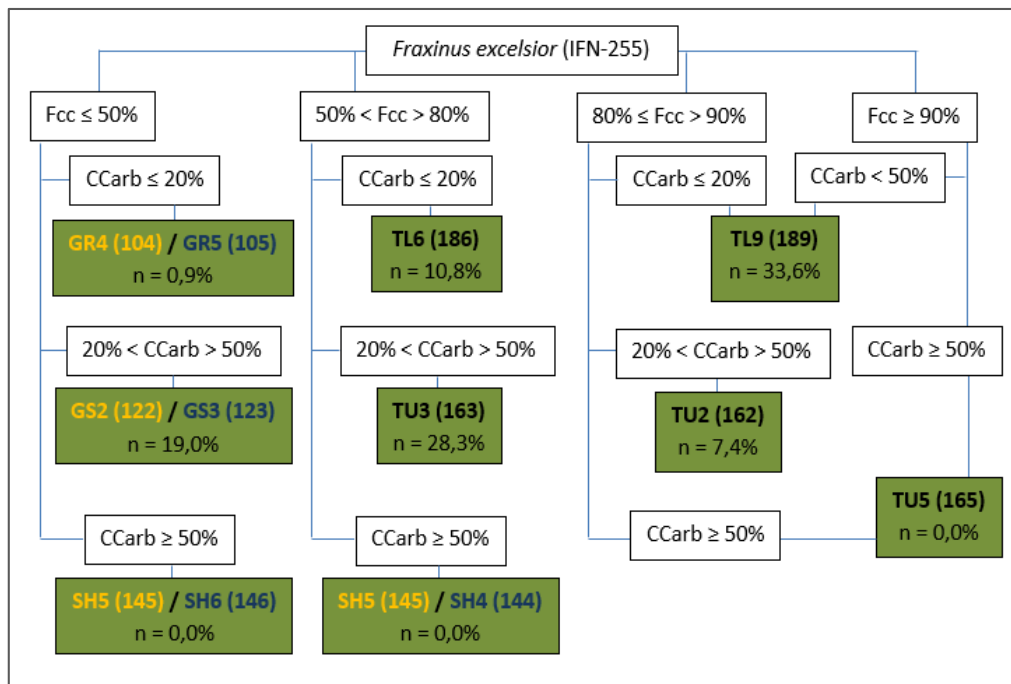

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Castanea sativa*
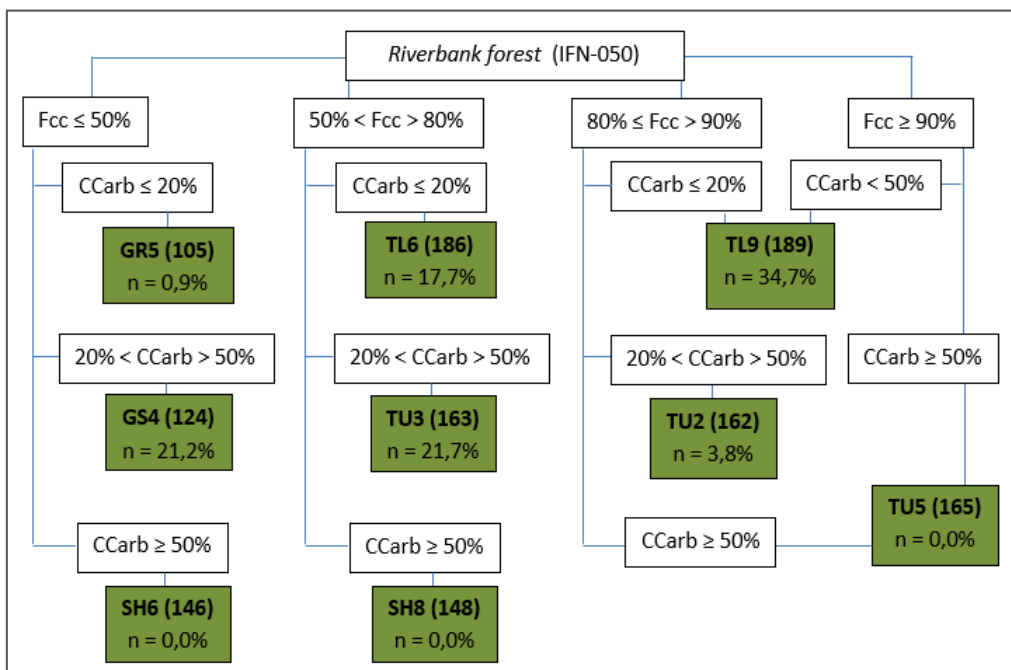
Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Betula pendula*
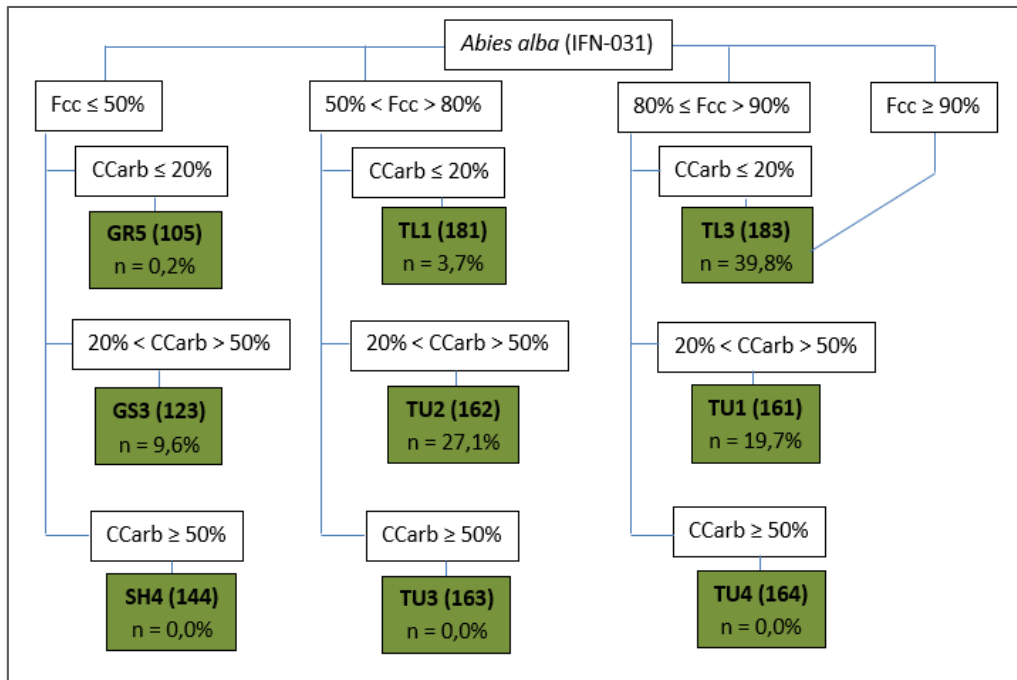

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Quercus robur*
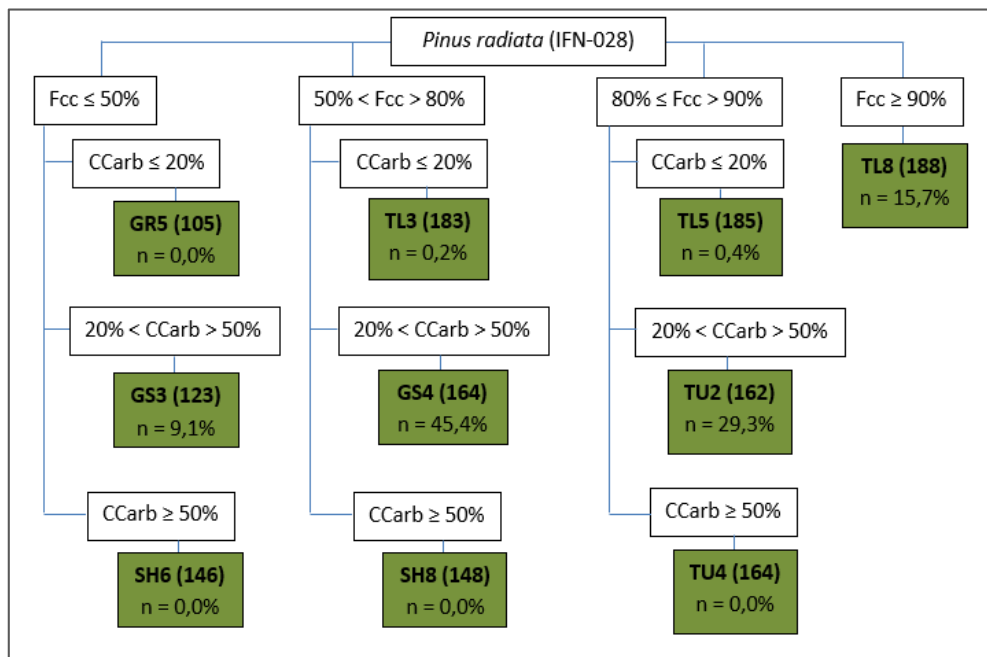
Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Fraxinus excelsior*
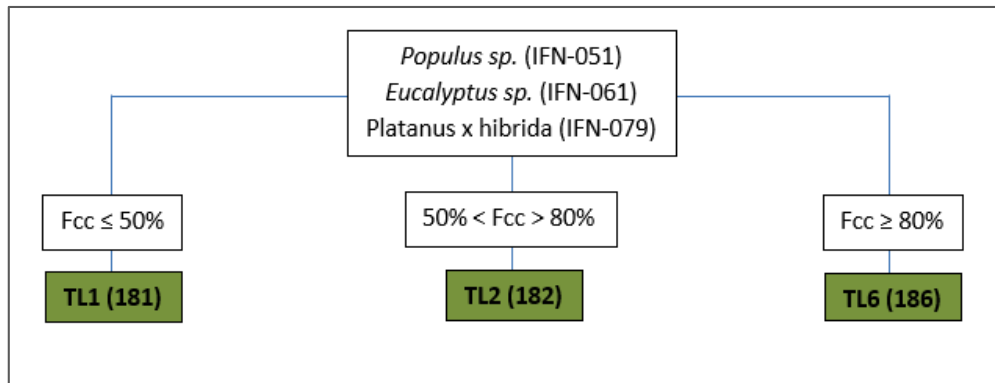

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by riverbank forest
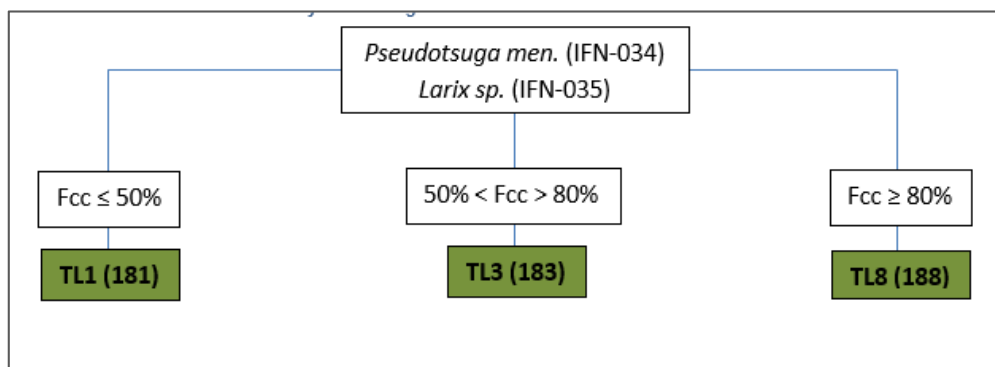
Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Abies alba*

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Pinus radiata*
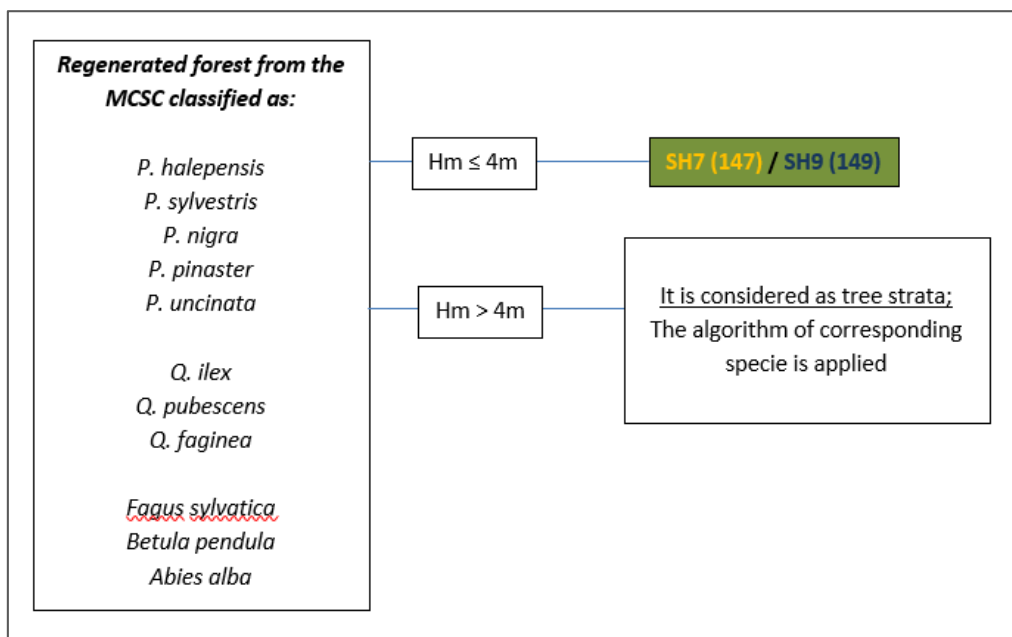
Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Populus sp.,* *Eucalyptus sp.* or *Platanus x hibrida*
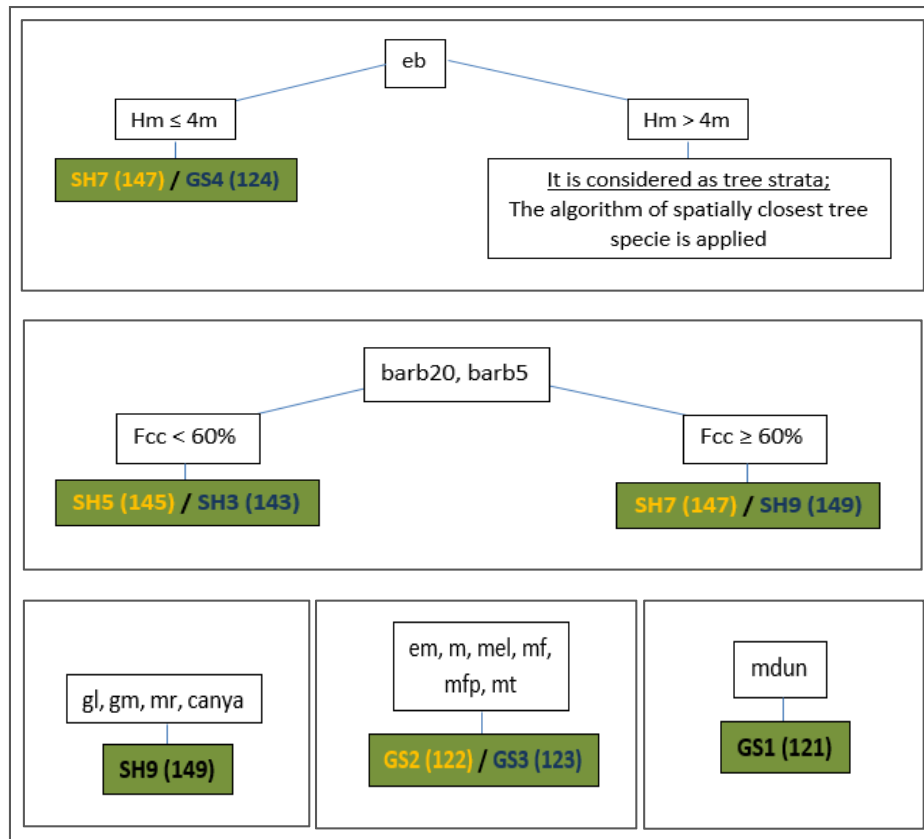

Algorithm used for assignation of the Scott and Burgan [62] model to stands populated by *Pseudotsuga men.* or *Larix sp.*
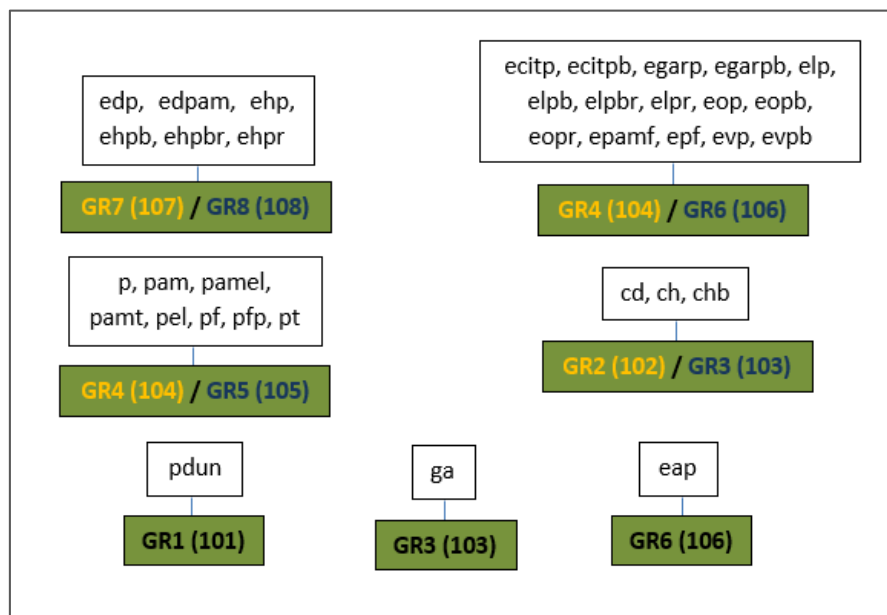
2. Regenerated forest

Algorithm used for assignation of the Scott and Burgan [62] model to the regenerated forest stands
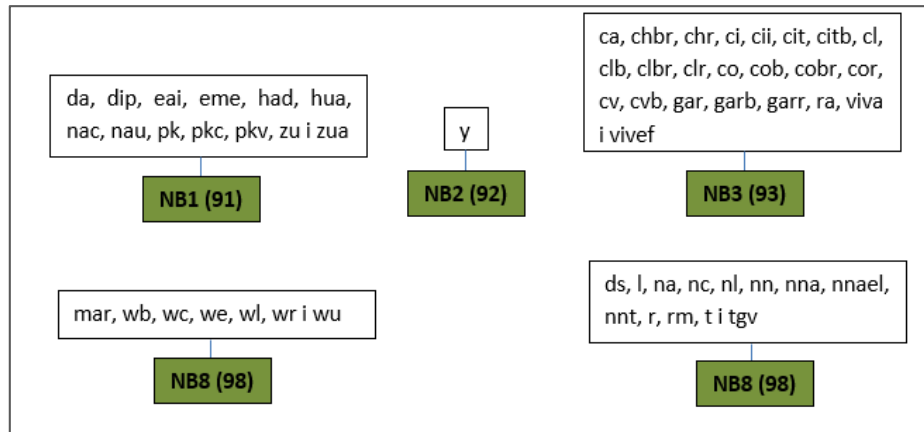
3. Scrubland

Algorithm used for assignation of the Scott and Burgan [62] model to stands predominantly populated by shrubs; model abbreviations correspond to the Land Cover Map of Catalonia nomenclature

4. Grassland

Algorithm used for assignation of the Scott and Burgan [62] model to areas predominately covered by herbs; model abbreviations correspond to the Land Cover Map of Catalonia nomenclature

5. Non-burnable

Algorithm used for assignation of the Scott and Burgan [62] model to non-burnable areas; model abbreviations correspond to the Land Cover Map of Catalonia nomenclature