

Introduction

Page 2 to 48: two maps on each page, showing input species occupancies and predicted probability of occurrence, for 47 species of bumblebees.

Occupancy maps are based on records available from 1991 to 2012 included, identified to the level of species, and with a spatial accuracy of at least 10-km.

The predicted probability of occurrence must be interpreted as the potential environmental suitability based on the set of environmental predictors, and the input occupancy. Additional records and updated environmental information can lead to different predictions.

Page 49: two maps showing the overall probability of occurrence for those species predicted to be present in each grid cell, and predicted species richness derived there from.

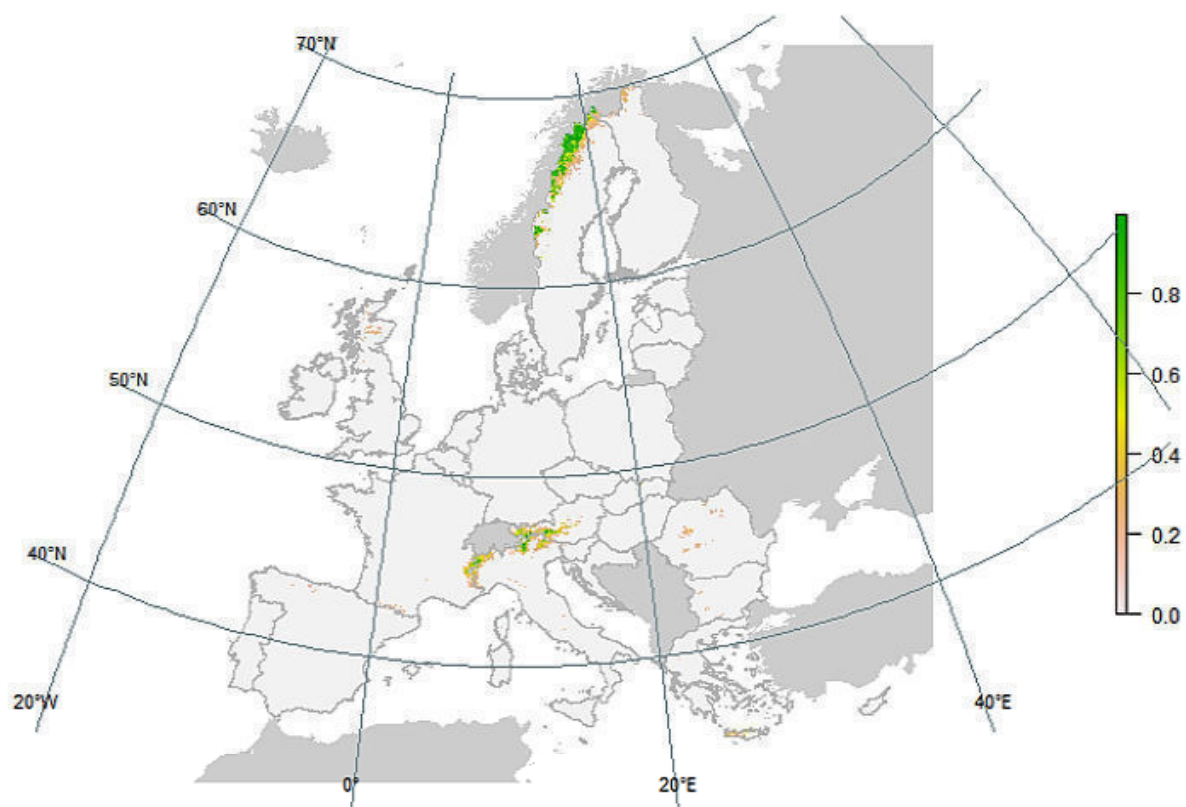
The presence of a species is derived from the predicted probability of occurrence, after applying a threshold to discriminate presence from absence. No common rules exist to choose the threshold. A combination of statistical and ecological criteria might be used. For this study, we adopted 'Minimum training presence' as a threshold rule, which uses the suitability associated with the least suitable training presence record as the threshold. While this rule might lead to optimistic predictions (assigning presence also to areas at the margin of the species' ecological requirements), it also shows the potential suitability of the environment for the species. This information can be used, for instance, to select target areas for specific pollinator-friendly measures aiming at improving local environmental suitability.

See main text for additional details and for the data sources.

B. alpinus occupancy



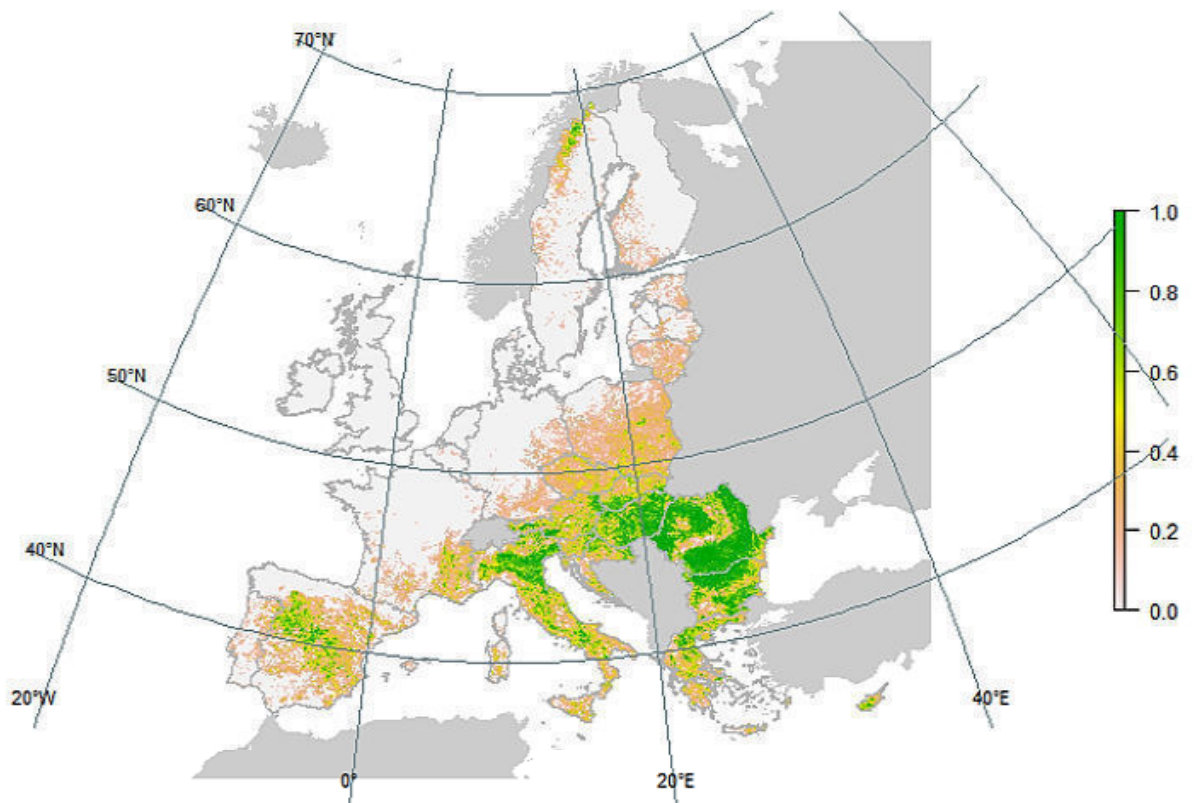
B. alpinus probability of occurrence



B. argillaceus occupancy



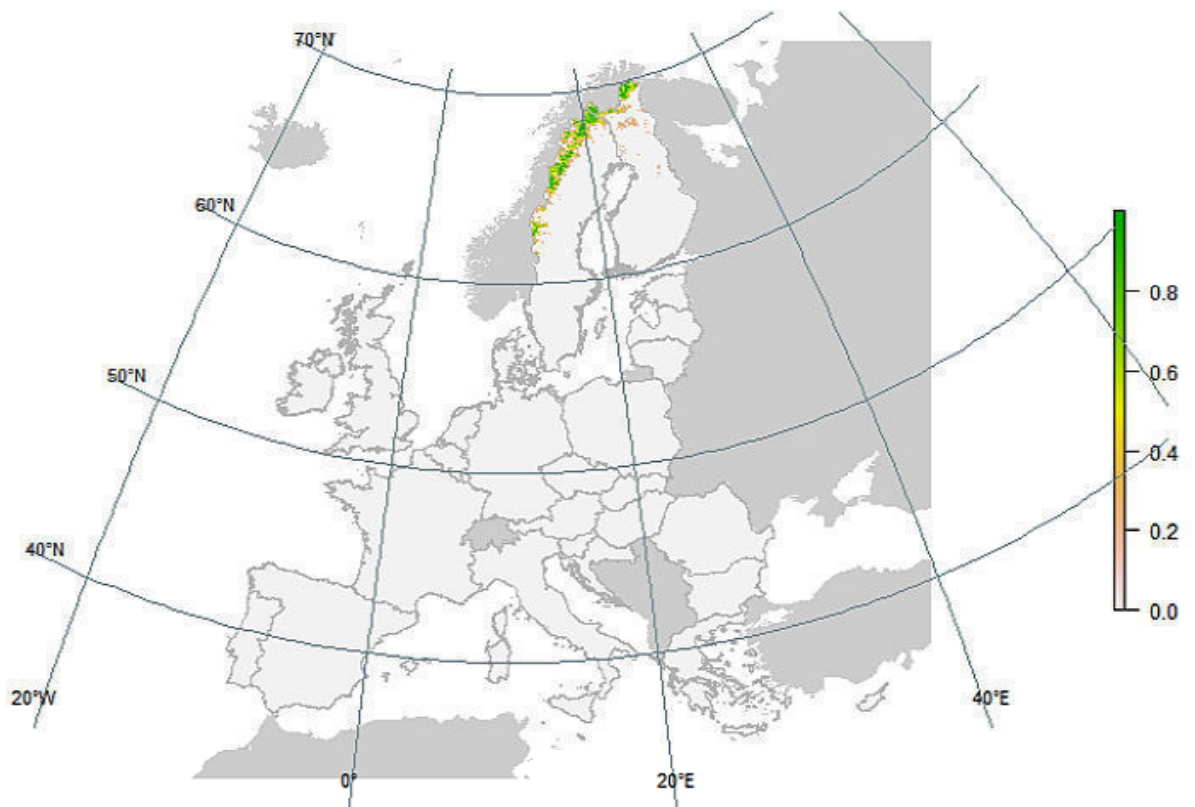
B. argillaceus probability of occurrence



B. balteatus occupancy



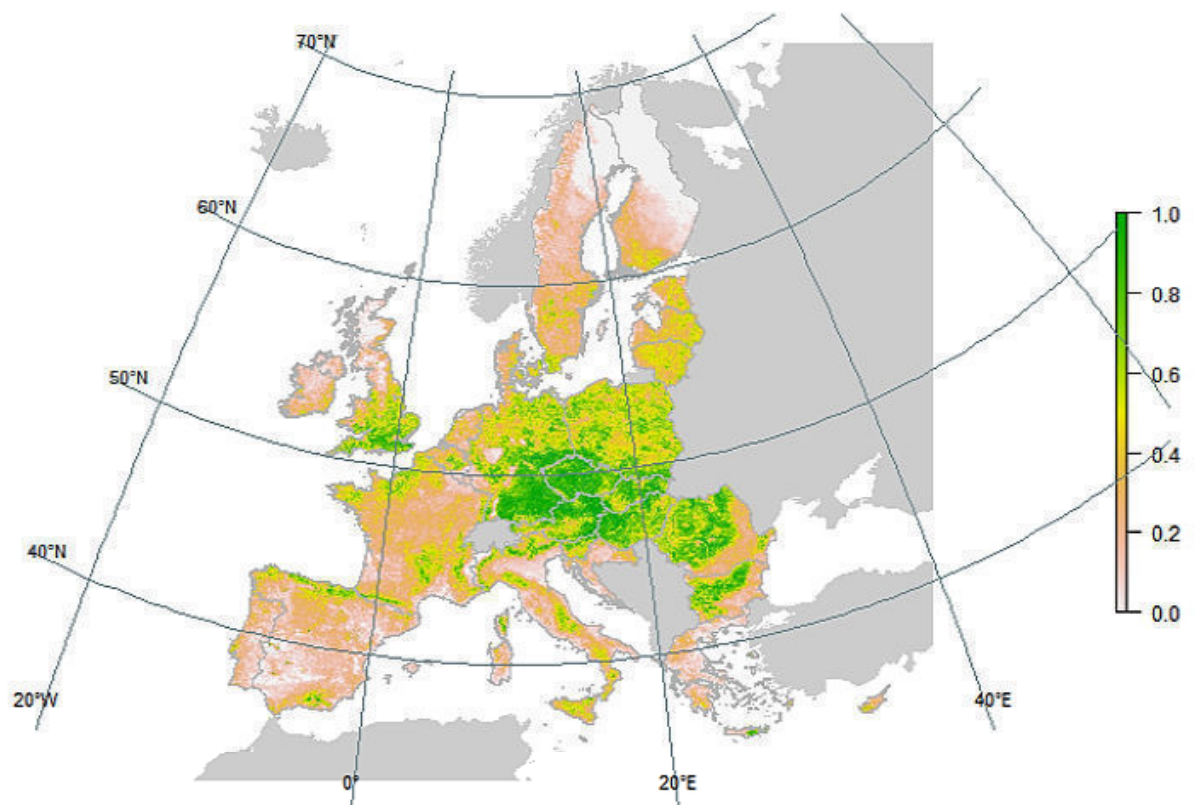
B. balteatus probability of occurrence



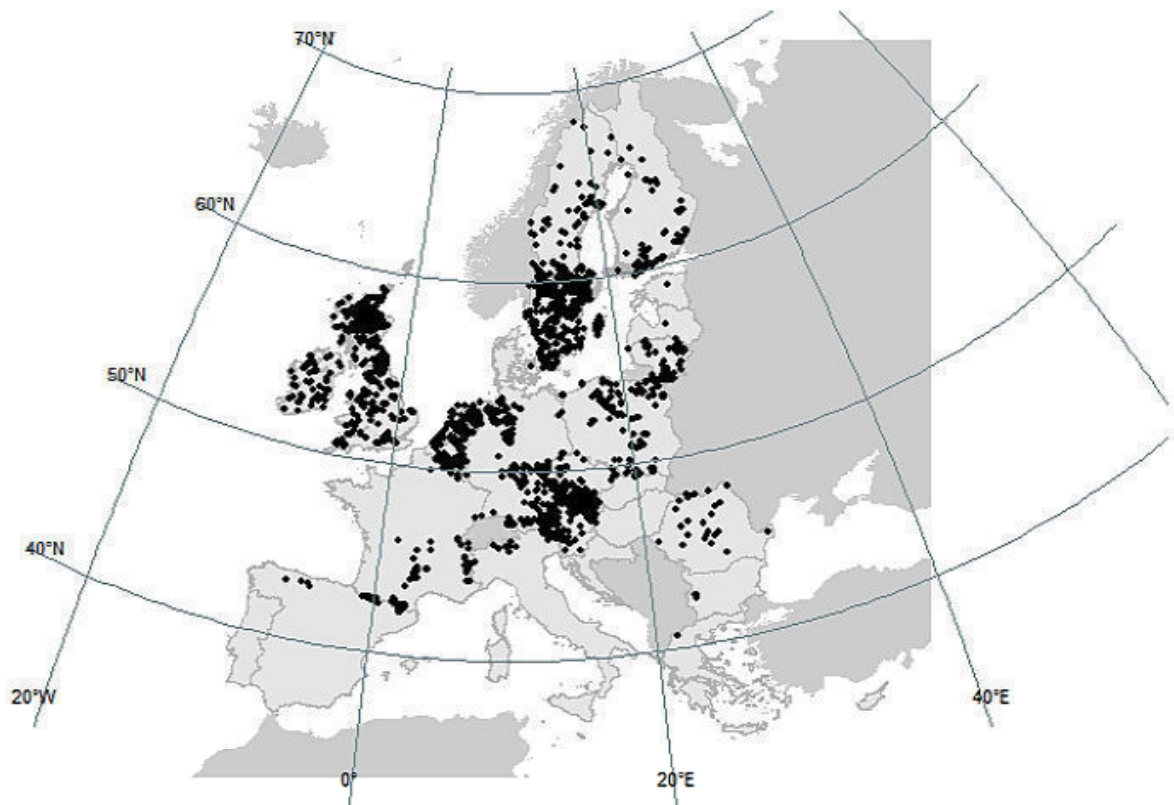
B. barbutellus occupancy



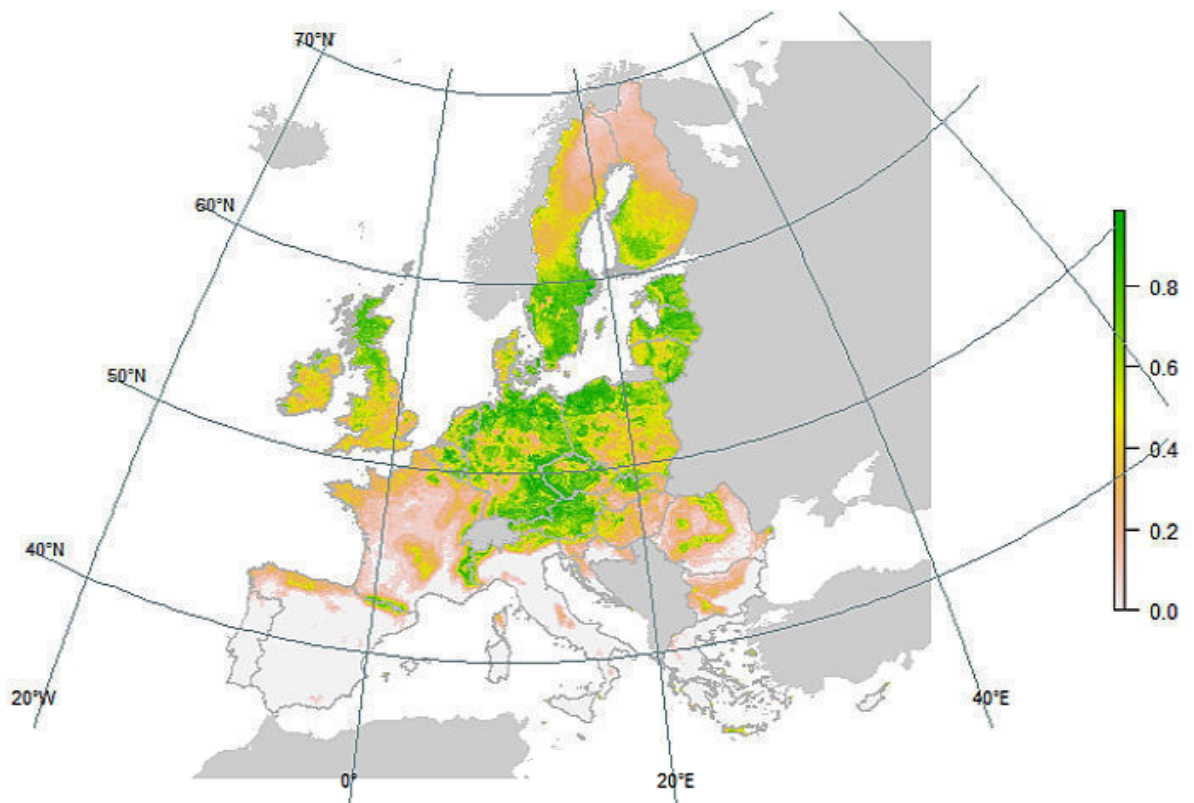
B. barbutellus probability of occurrence



B. bohemicus occupancy



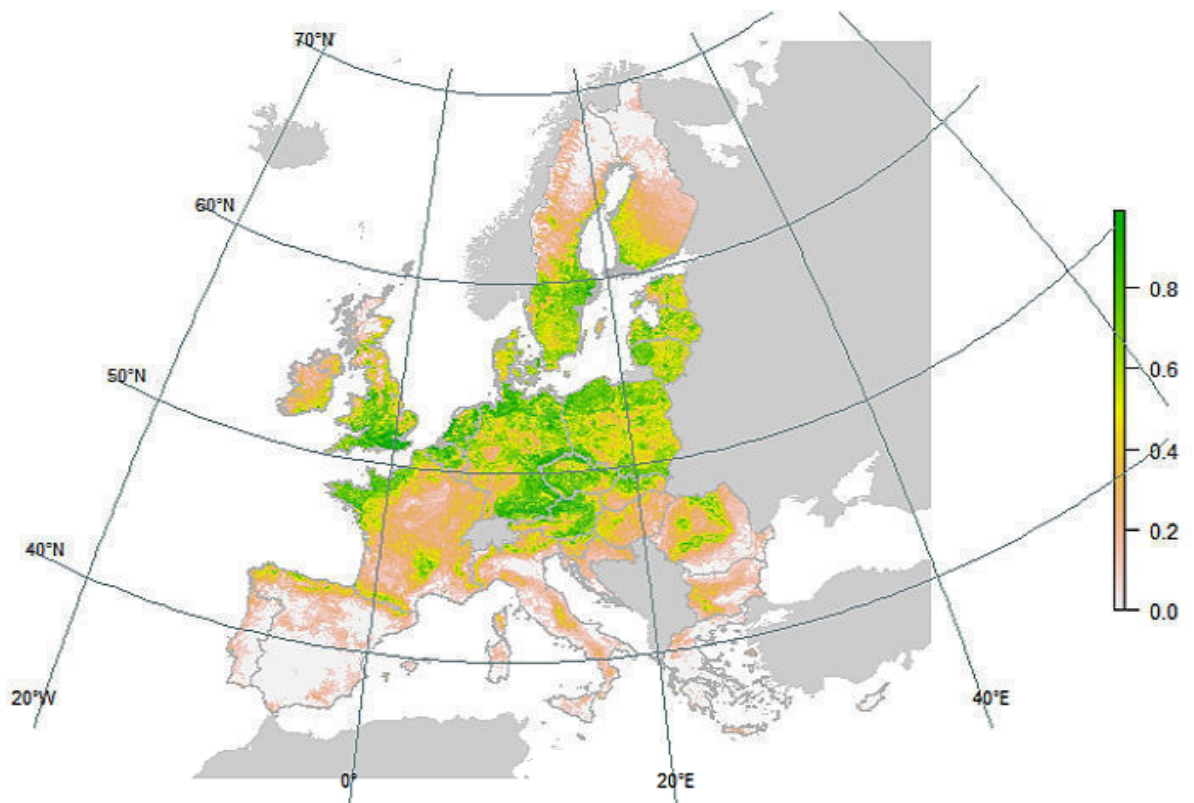
B. bohemicus probability of occurrence



B. campestris occupancy



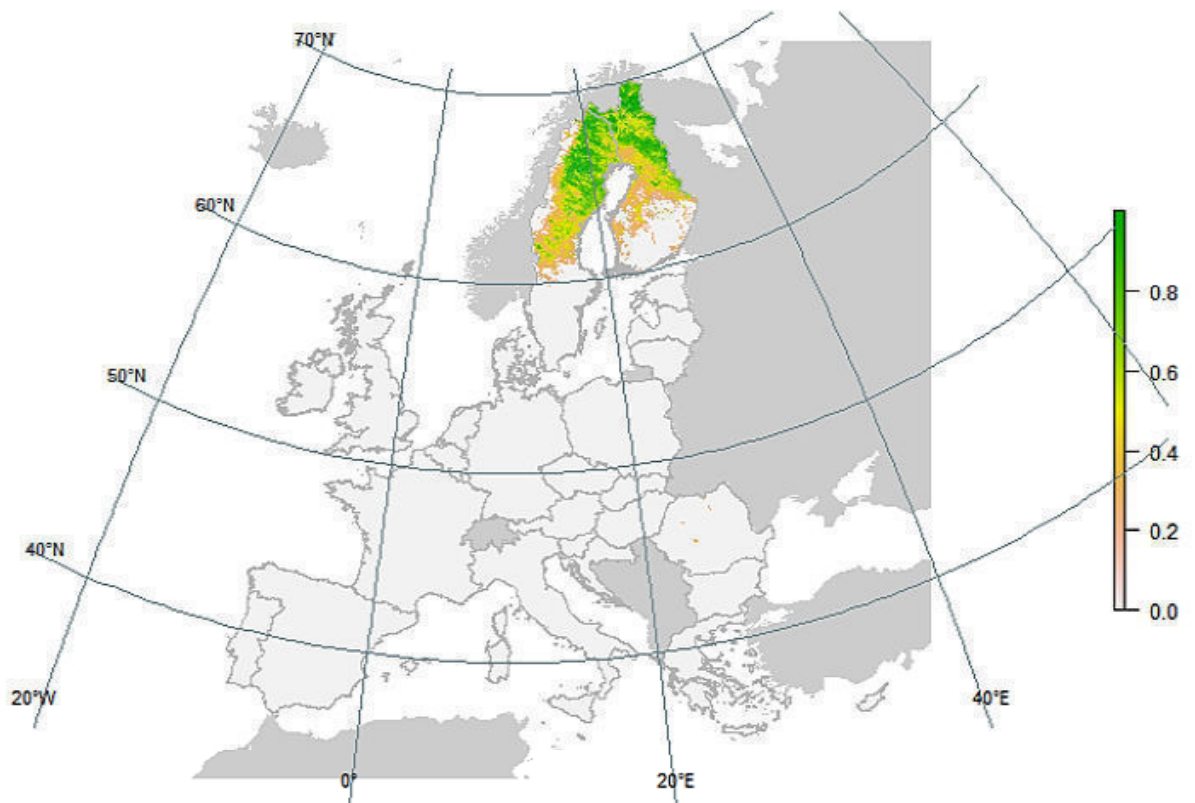
B. campestris probability of occurrence



B. cingulatus occupancy



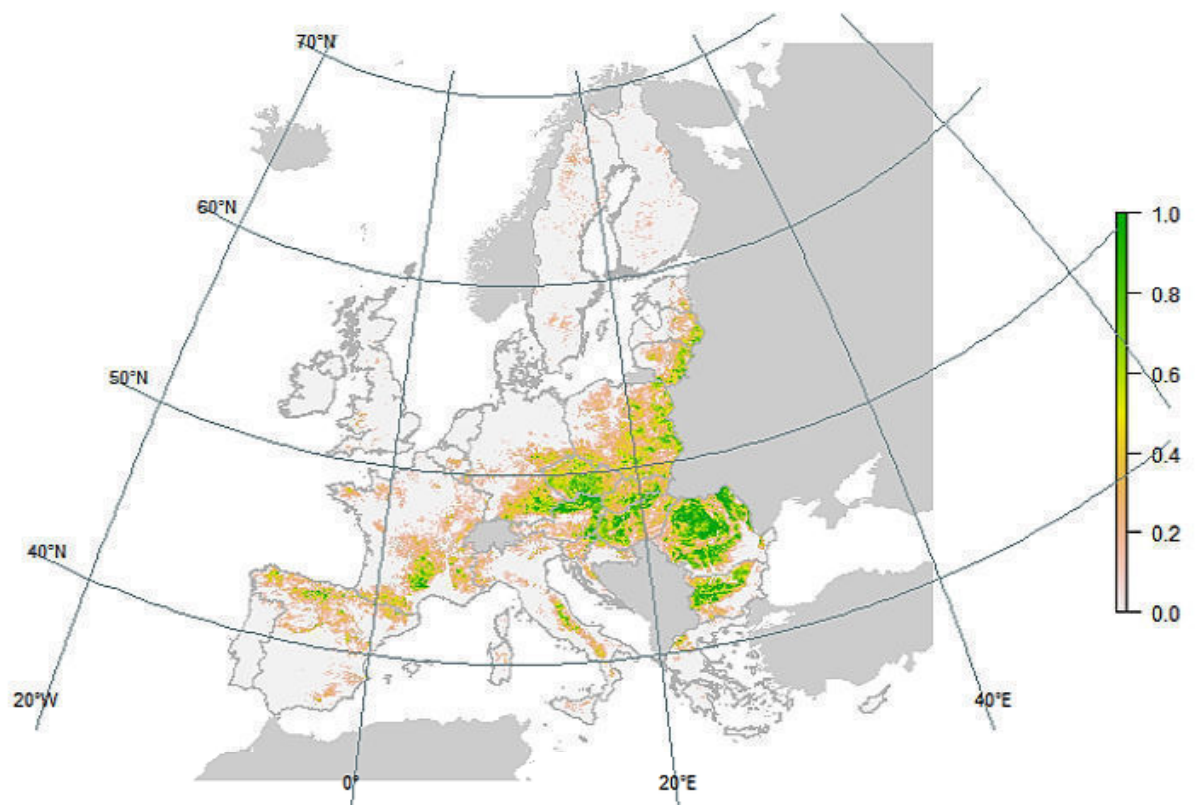
B. cingulatus probability of occurrence



B. confusus occupancy



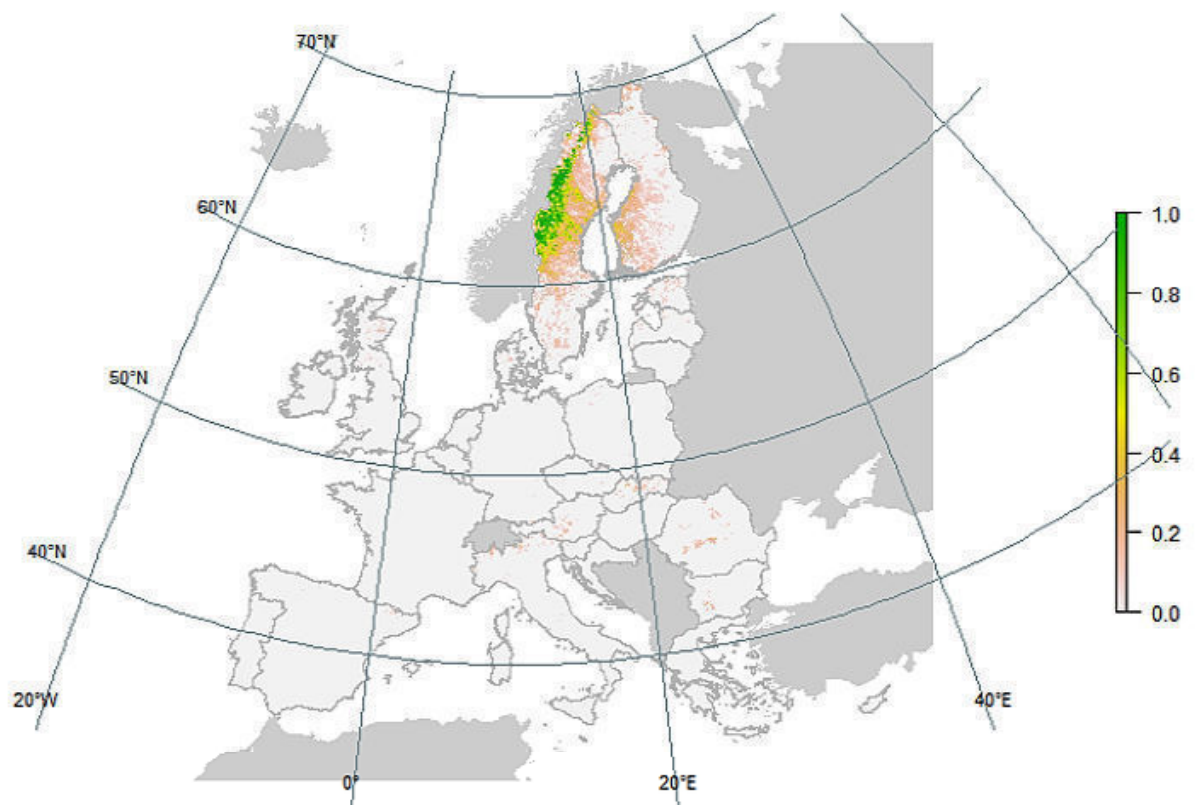
B. confusus probability of occurrence



B. consobrinus occupancy



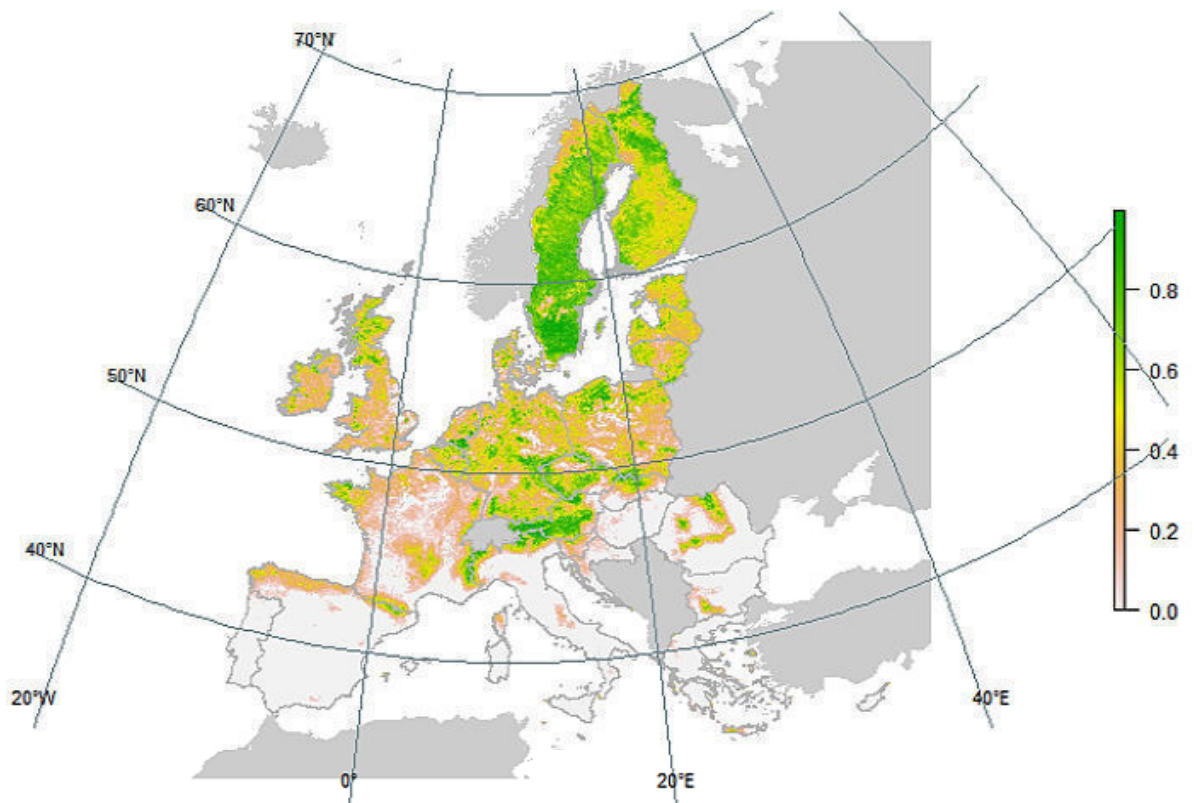
B. consobrinus probability of occurrence



B. cryptarum occupancy



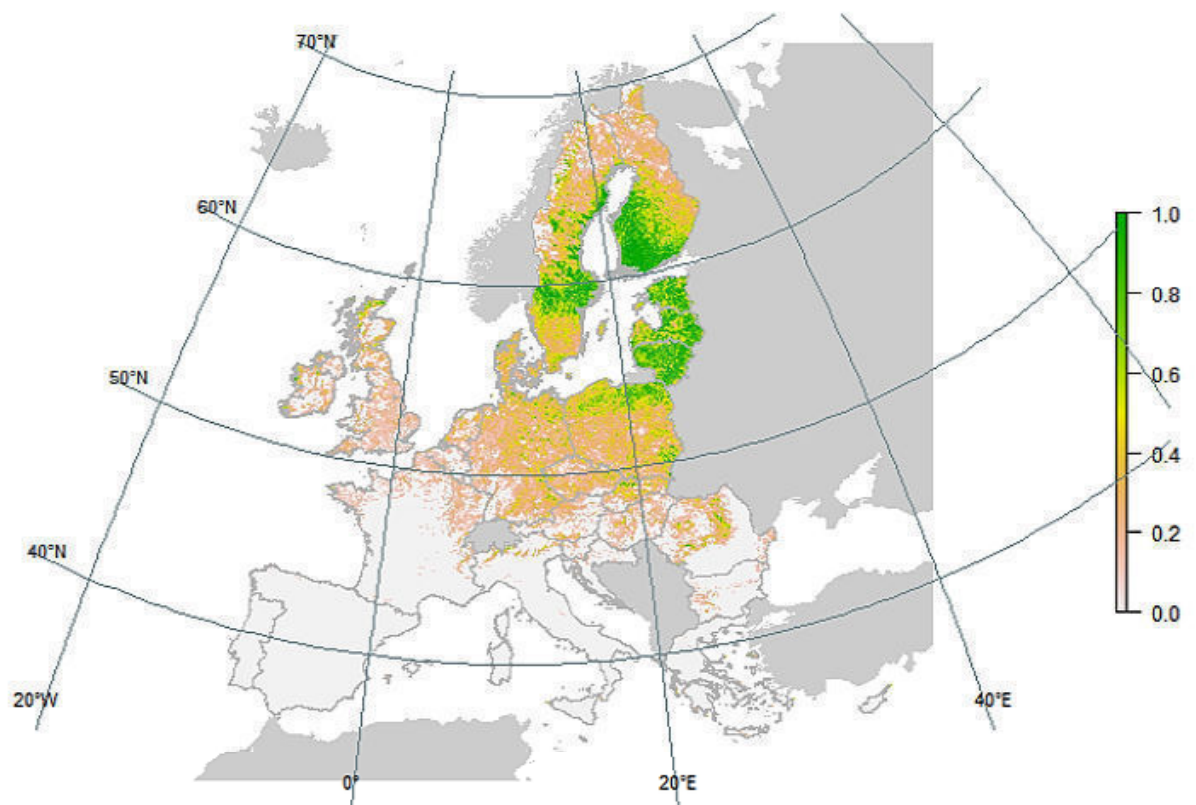
B. cryptarum probability of occurrence



B. distinguendus occupancy



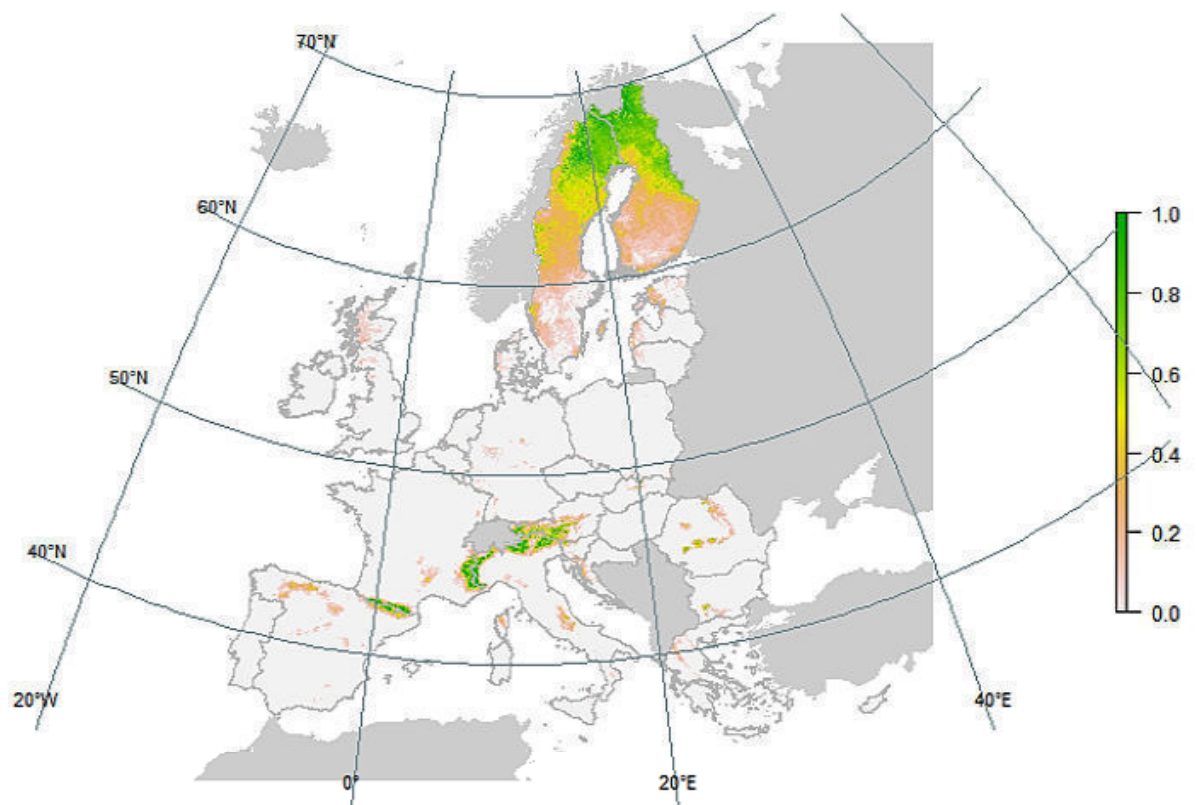
B. distinguendus probability of occurrence



B. flavidus occupancy



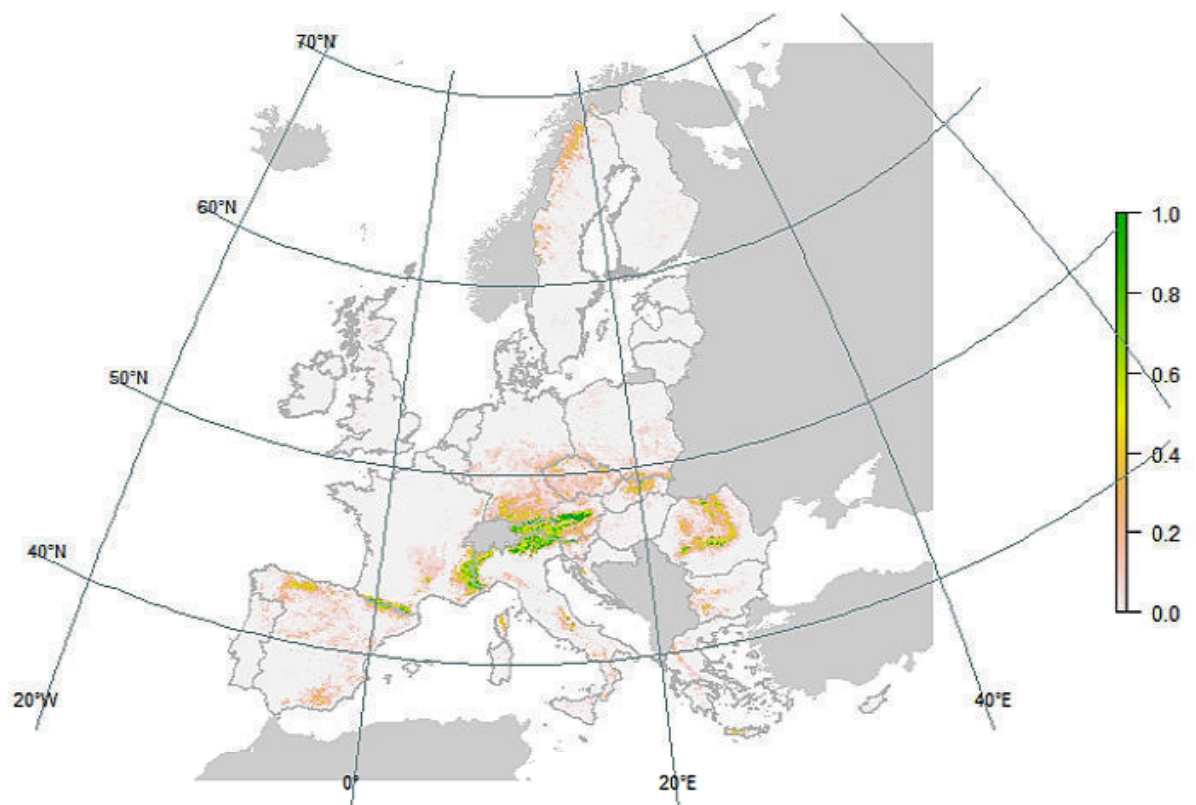
B. flavidus probability of occurrence



B. gerstaeckeri occupancy



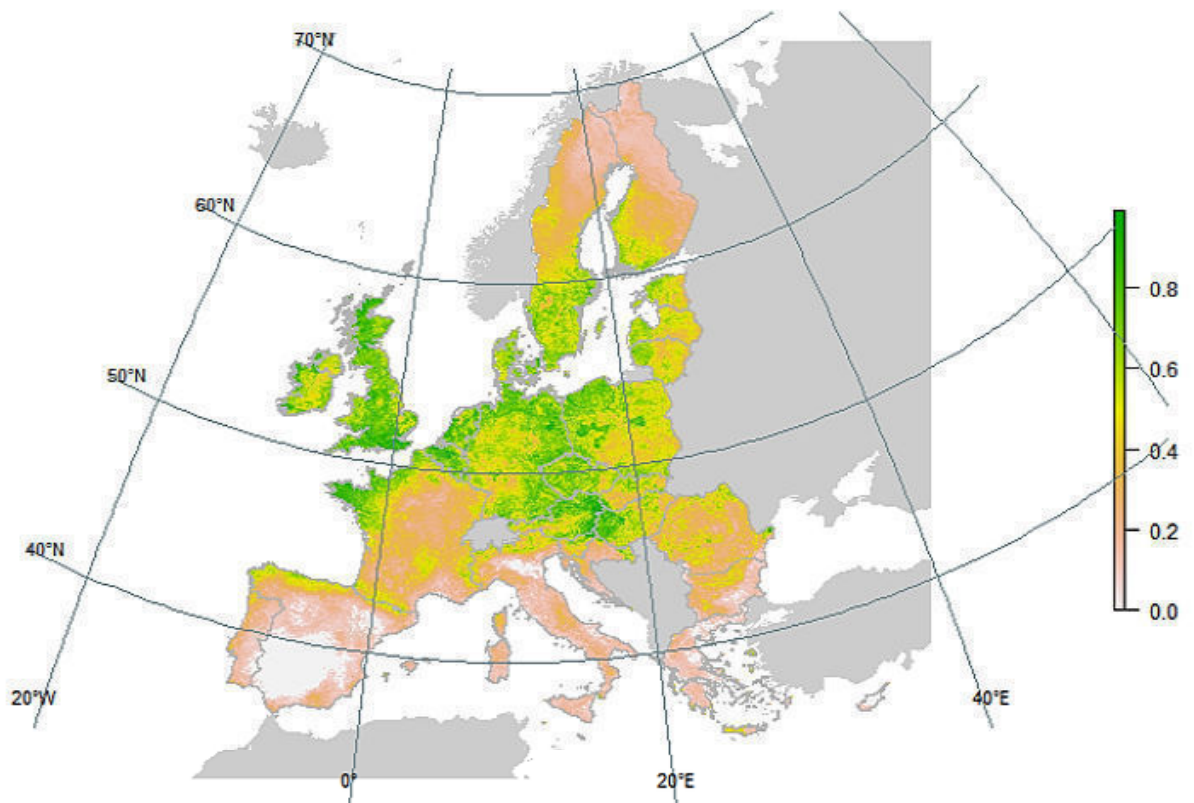
B. gerstaeckeri probability of occurrence



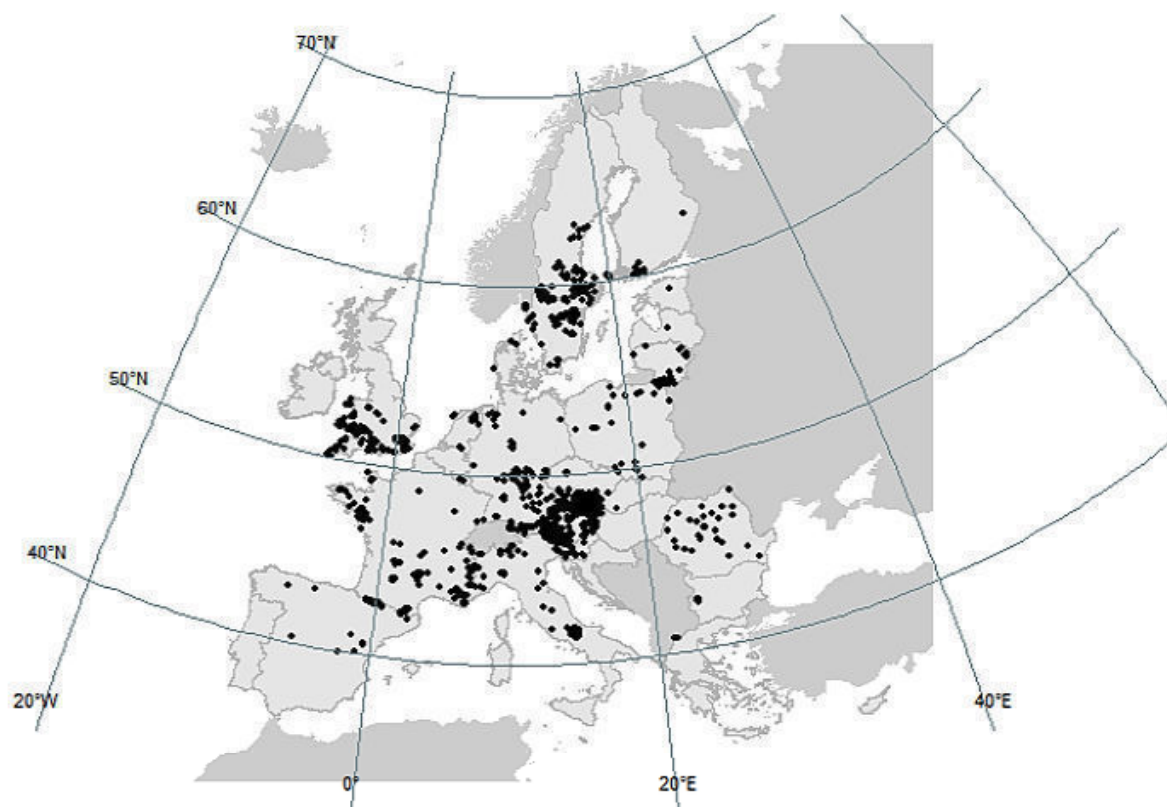
B. hortorum occupancy



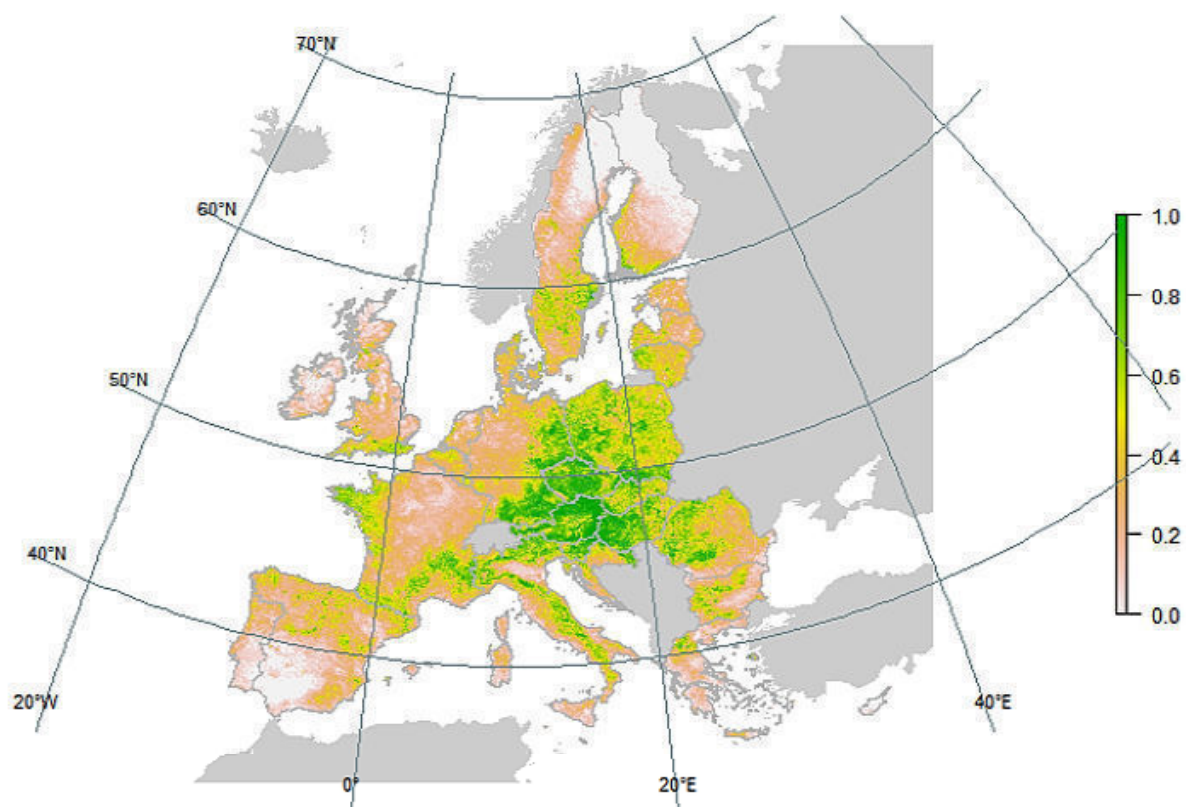
B. hortorum probability of occurrence



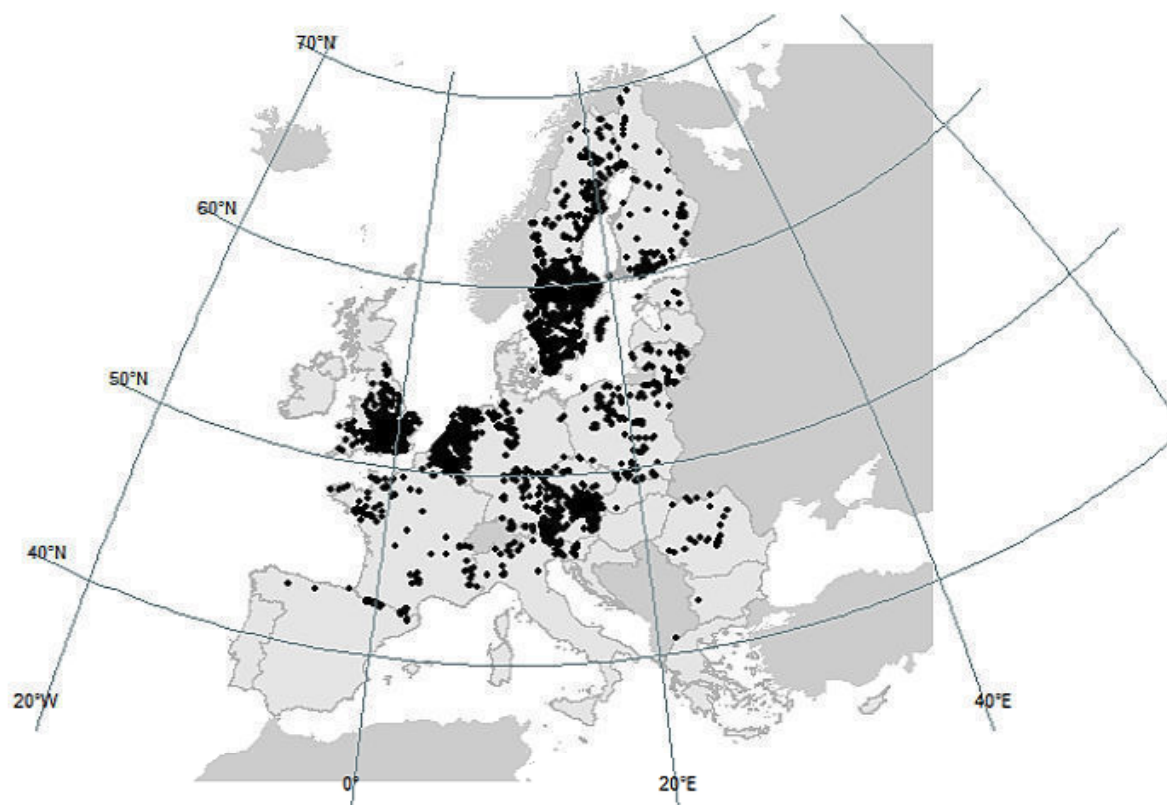
B. humilis occupancy



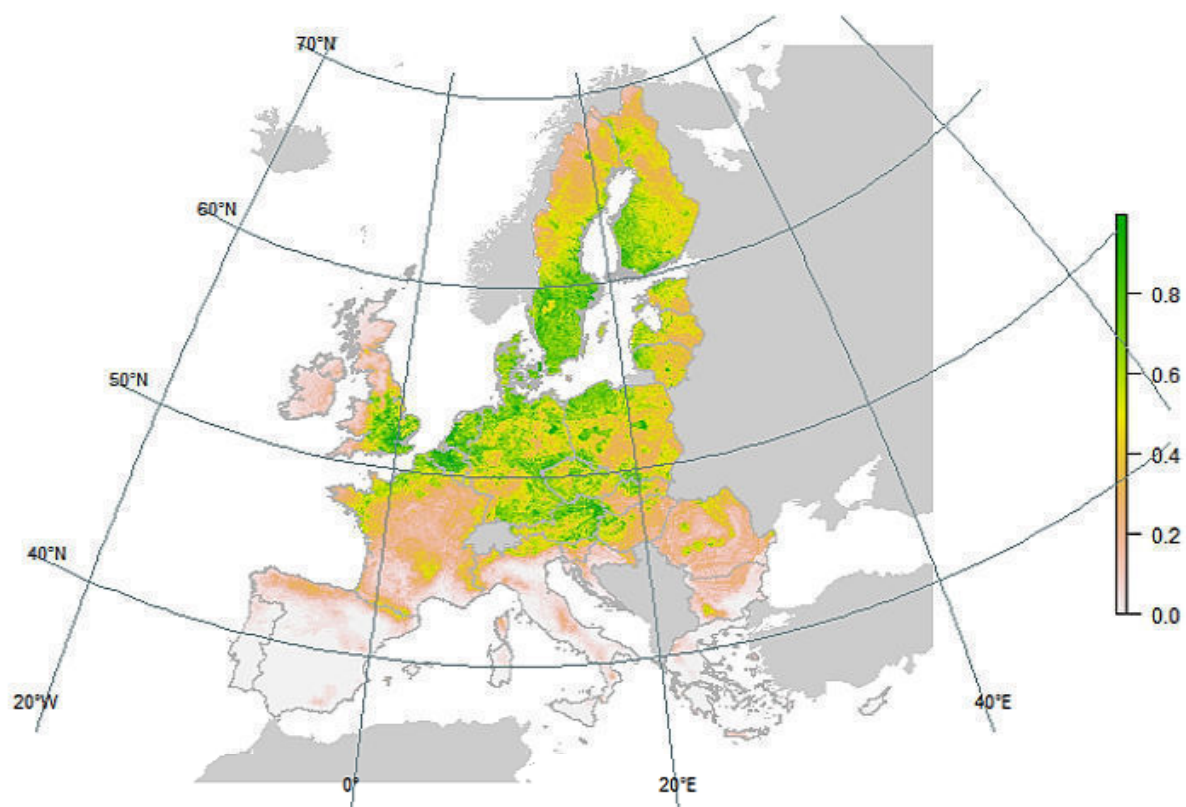
B. humilis probability of occurrence



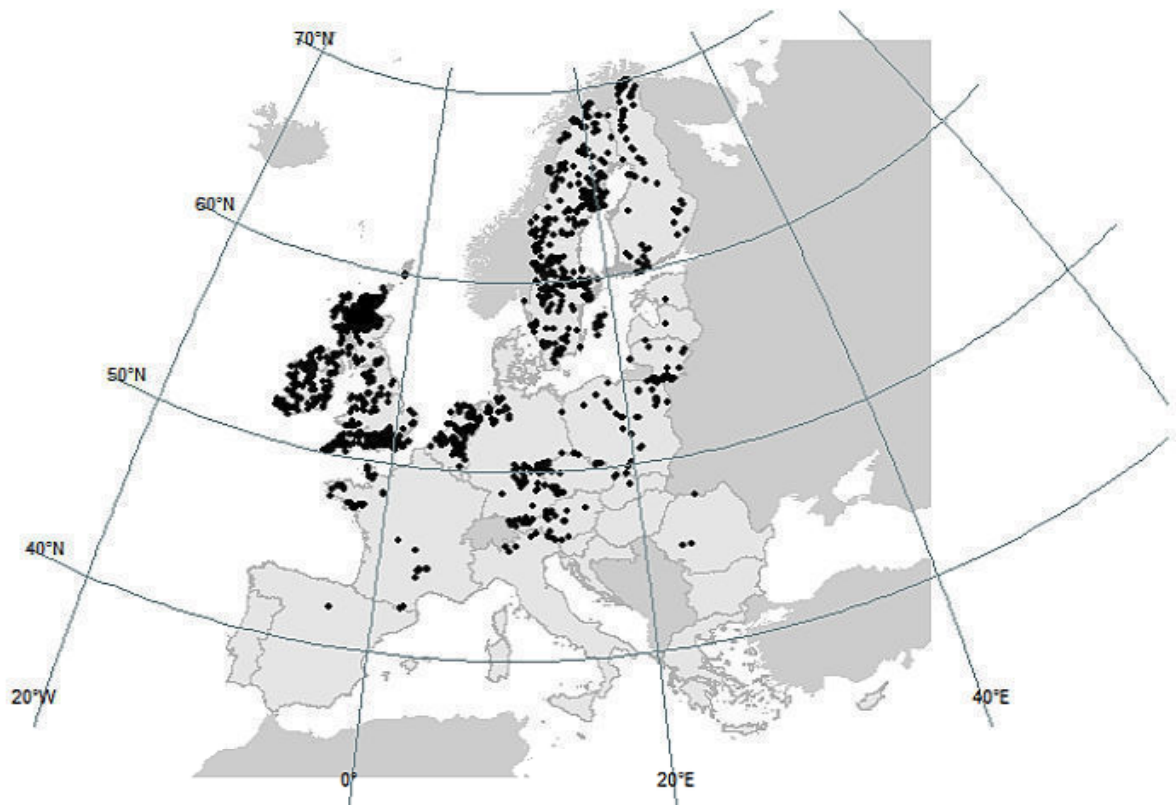
B. hypnorum occupancy



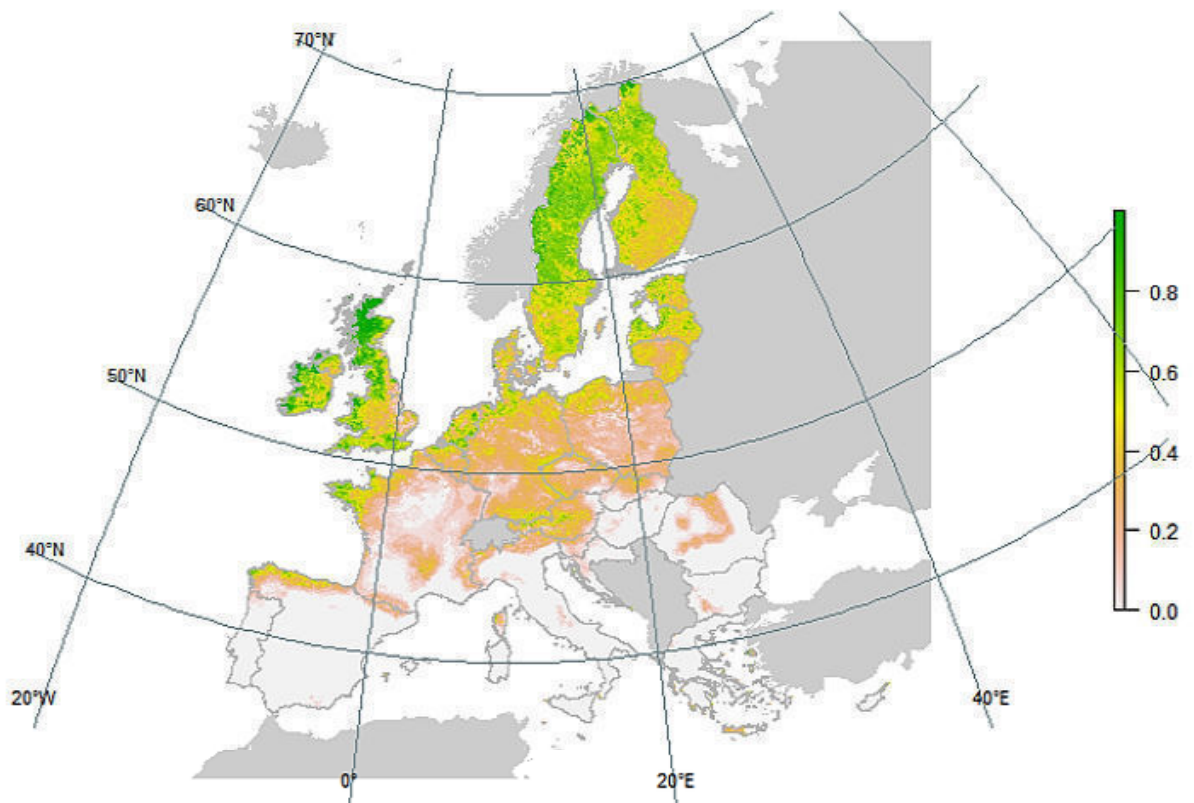
B. hypnorum probability of occurrence



B. jonellus occupancy



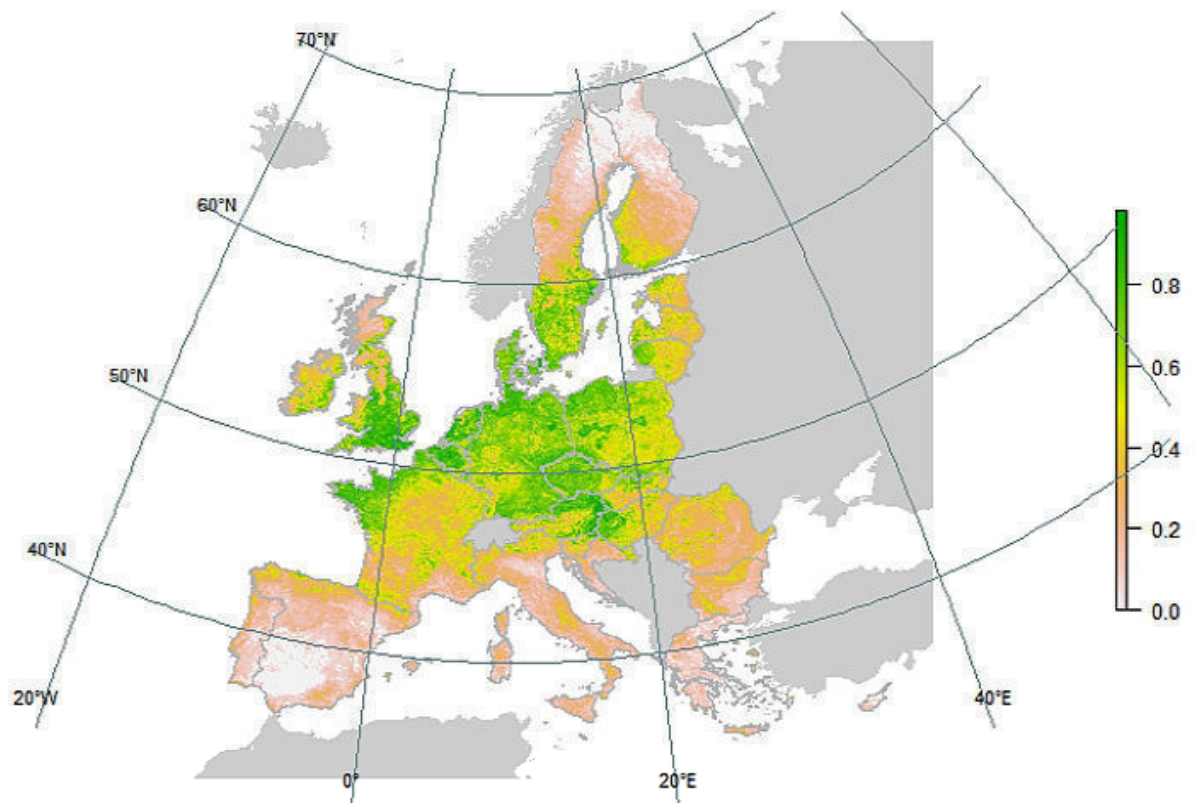
B. jonellus probability of occurrence



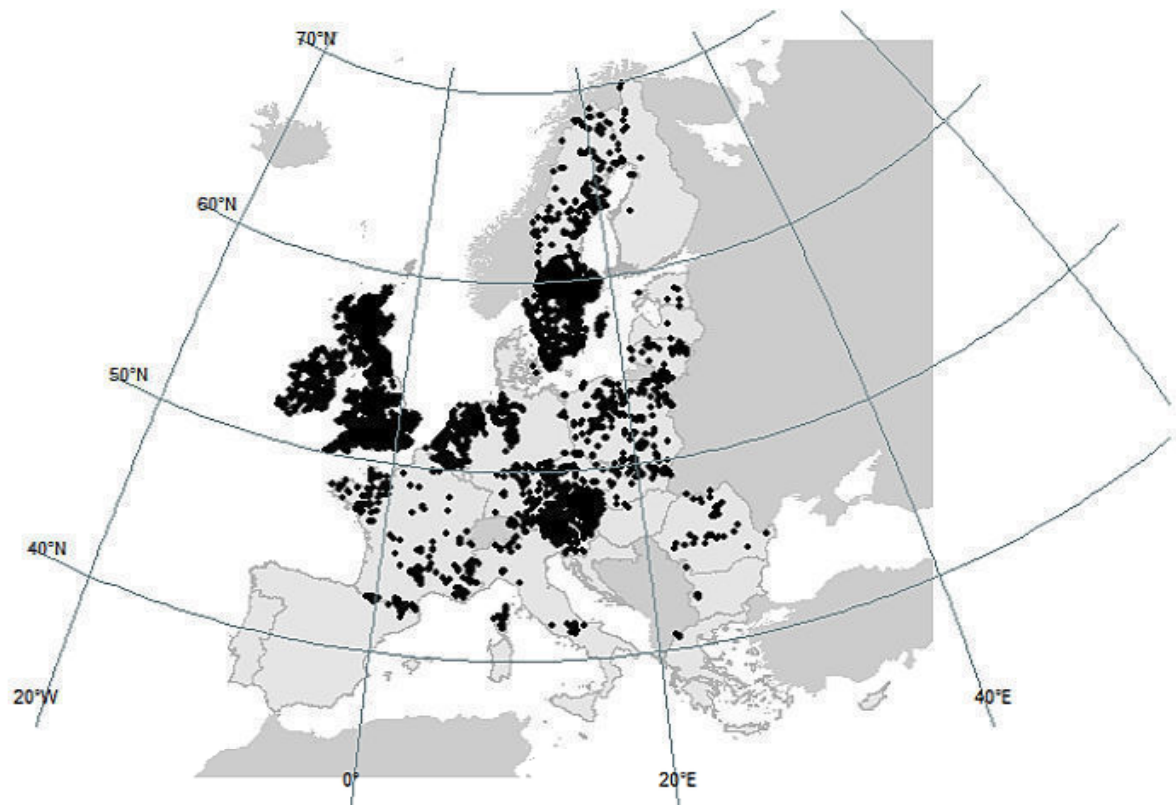
B. lapidarius occupancy



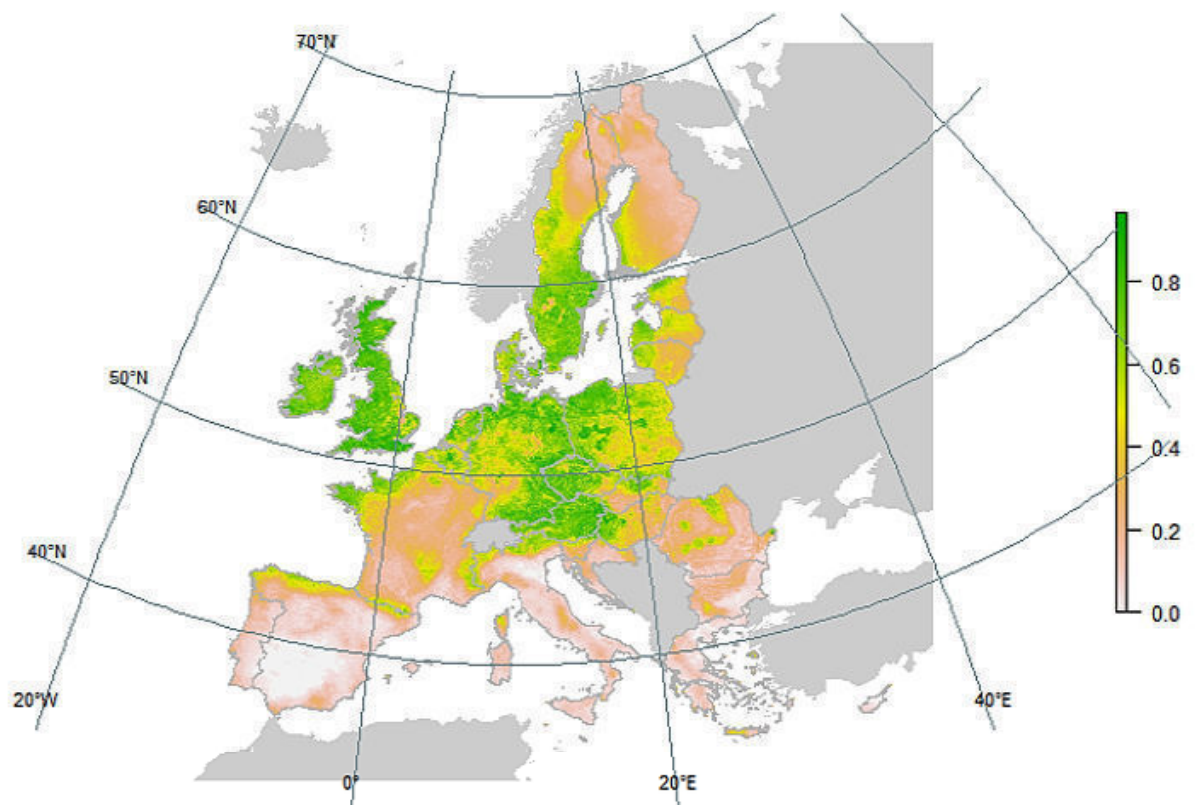
B. lapidarius probability of occurrence



B. lucorum occupancy



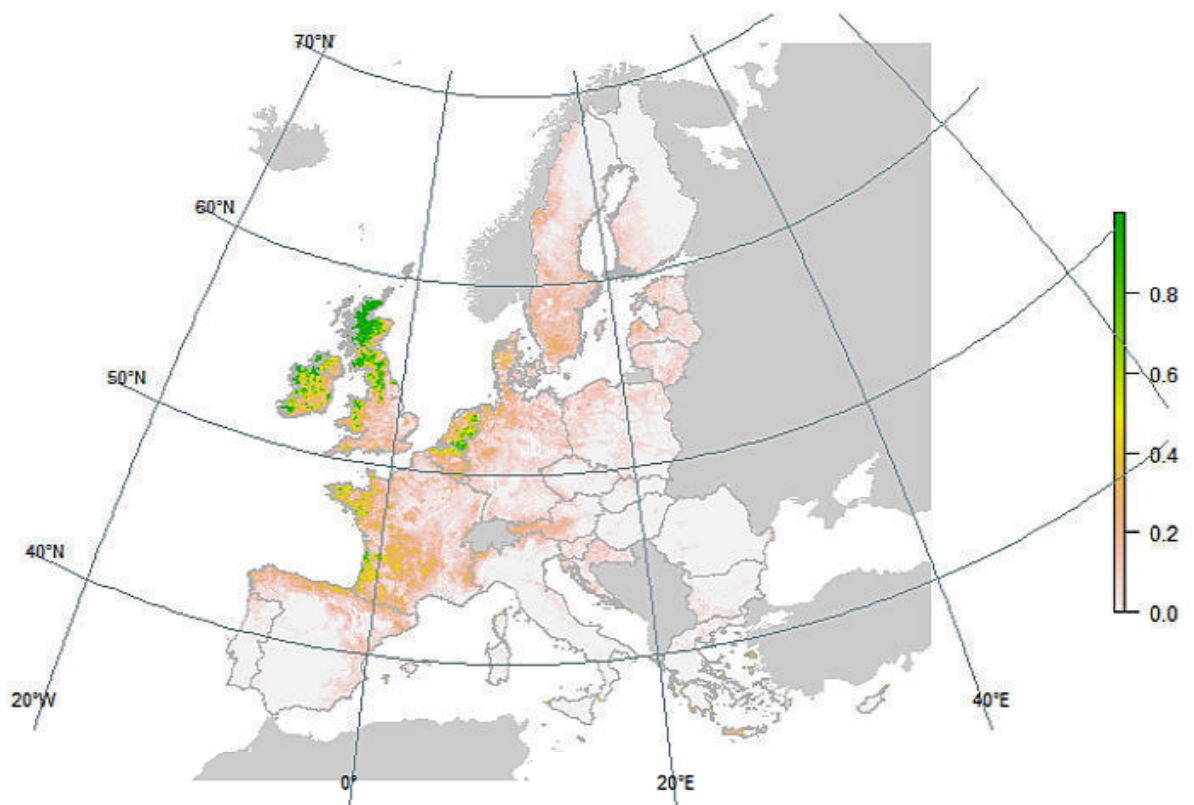
B. lucorum probability of occurrence



B. magnus occupancy



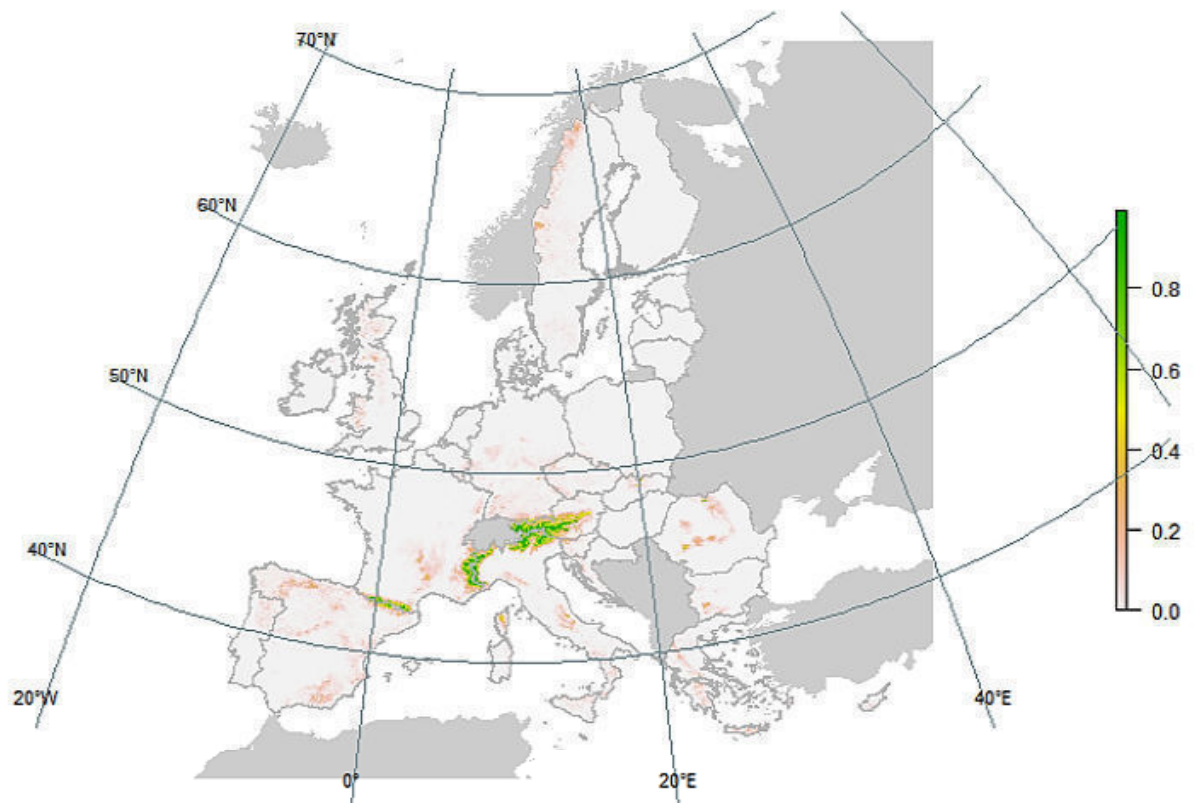
B. magnus probability of occurrence



B. mendax occupancy



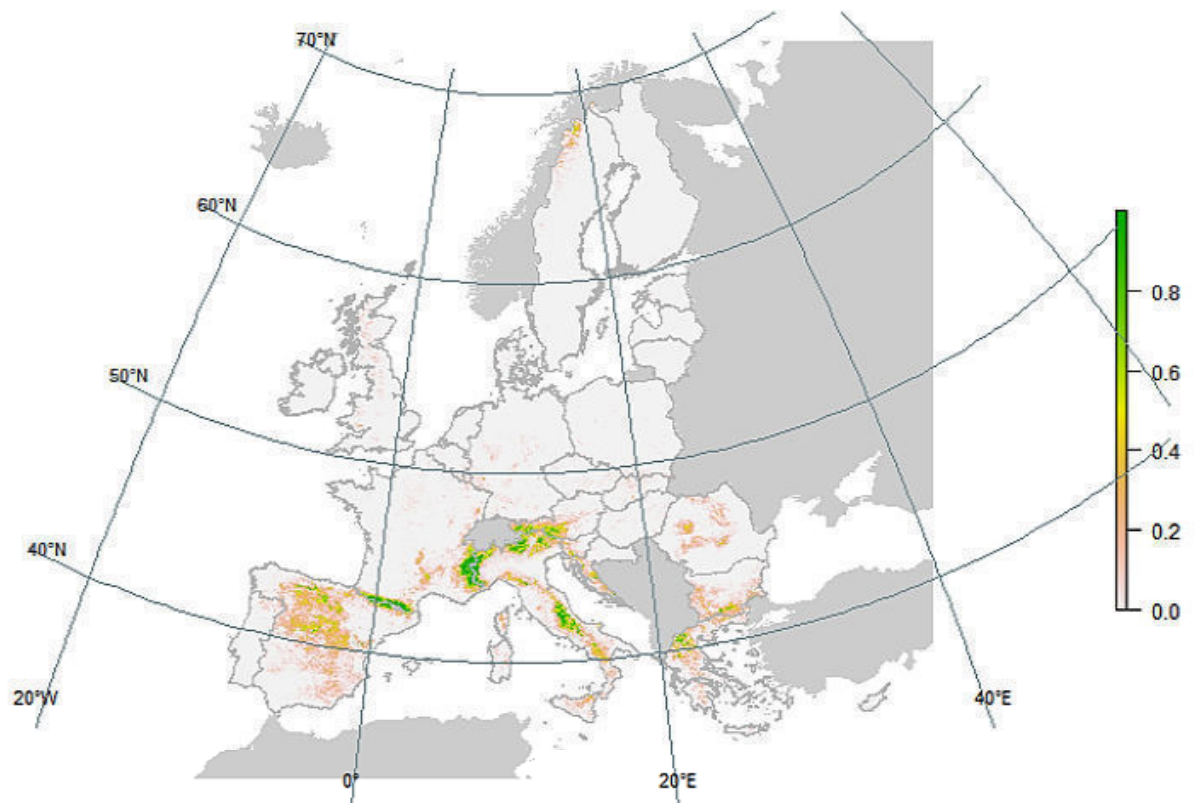
B. mendax probability of occurrence



B. mesomelas occupancy



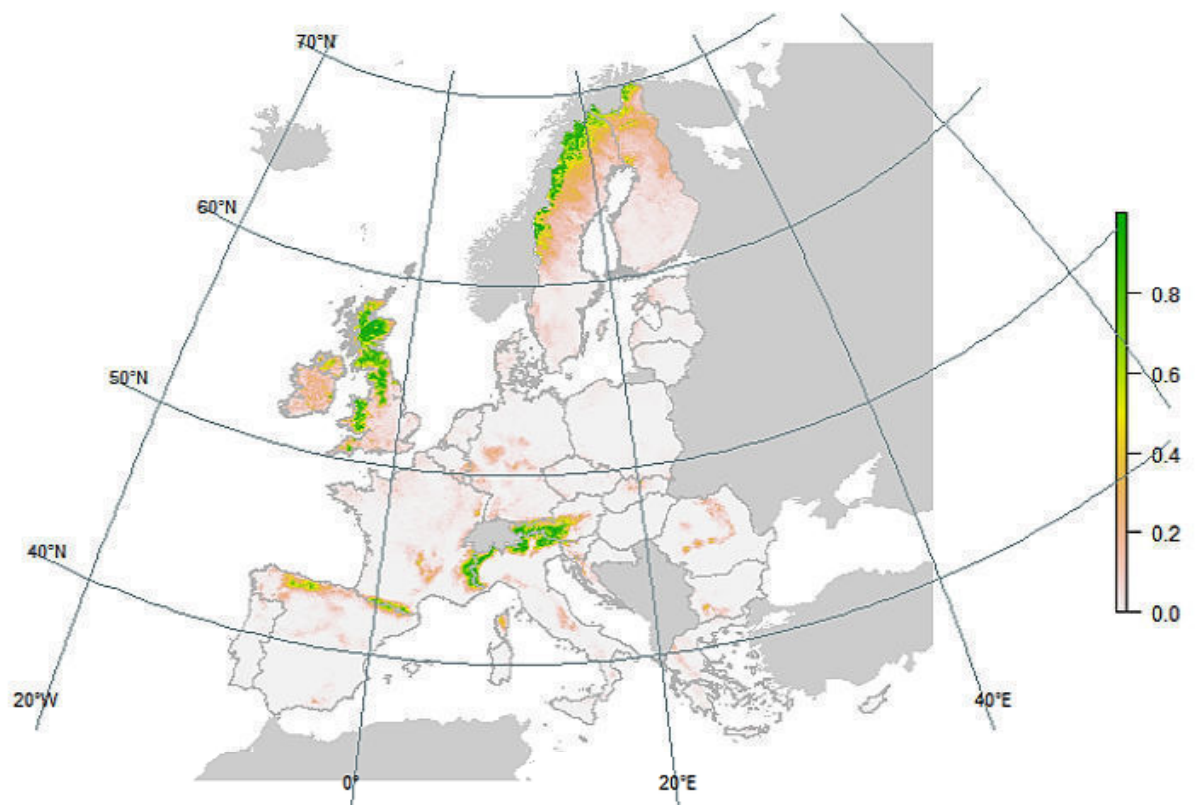
B. mesomelas probability of occurrence



B. monticola occupancy



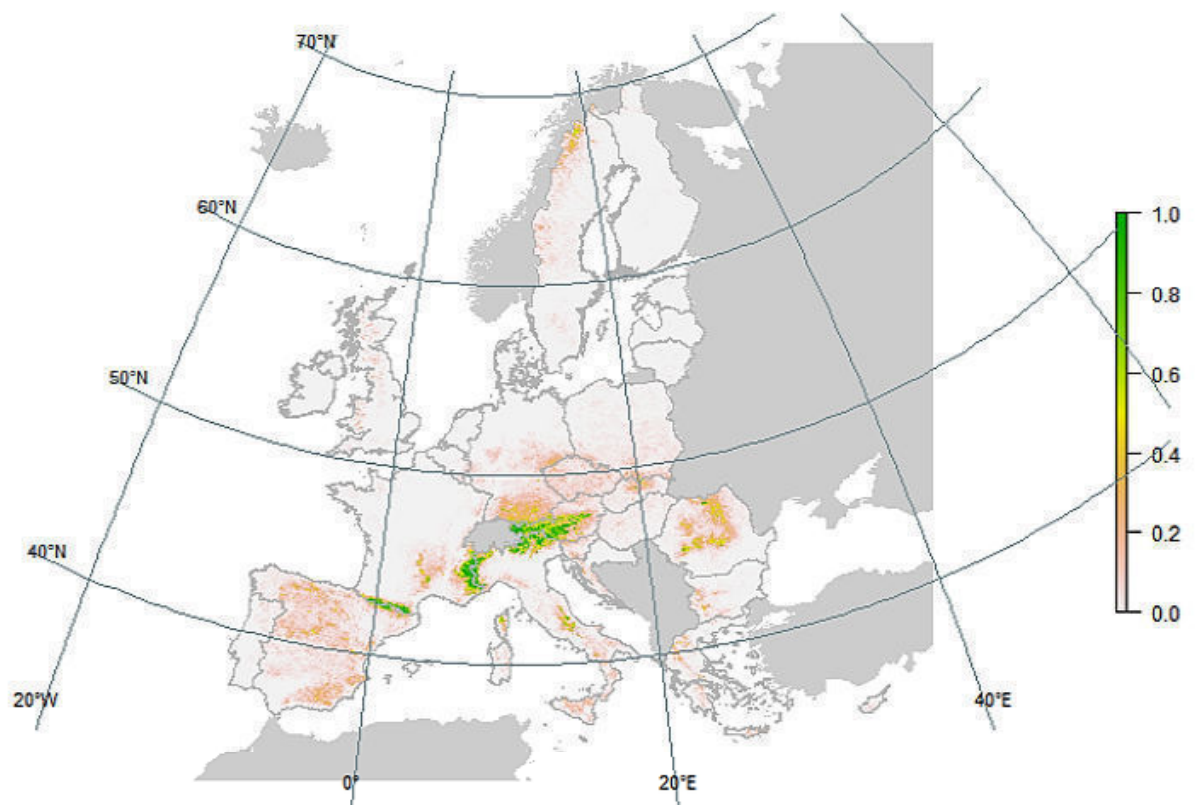
B. monticola probability of occurrence



B. mucidus occupancy



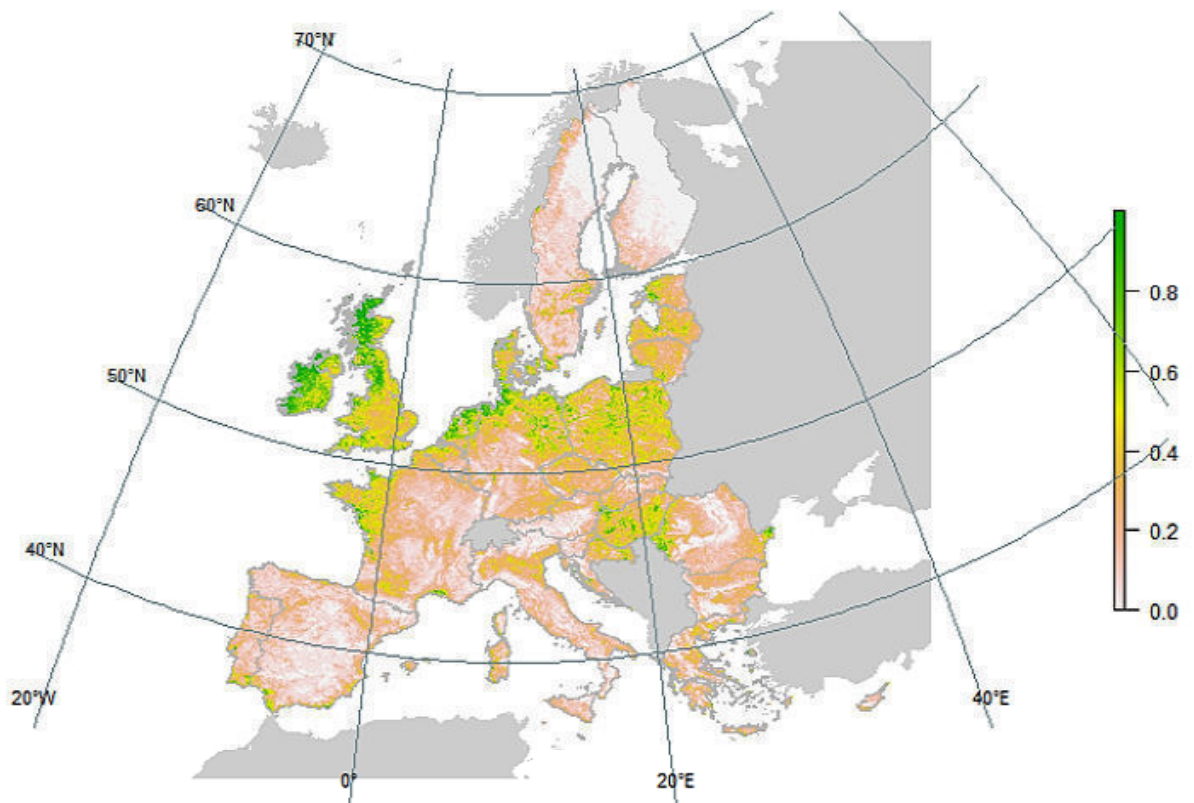
B. mucidus probability of occurrence



B. muscorum occupancy



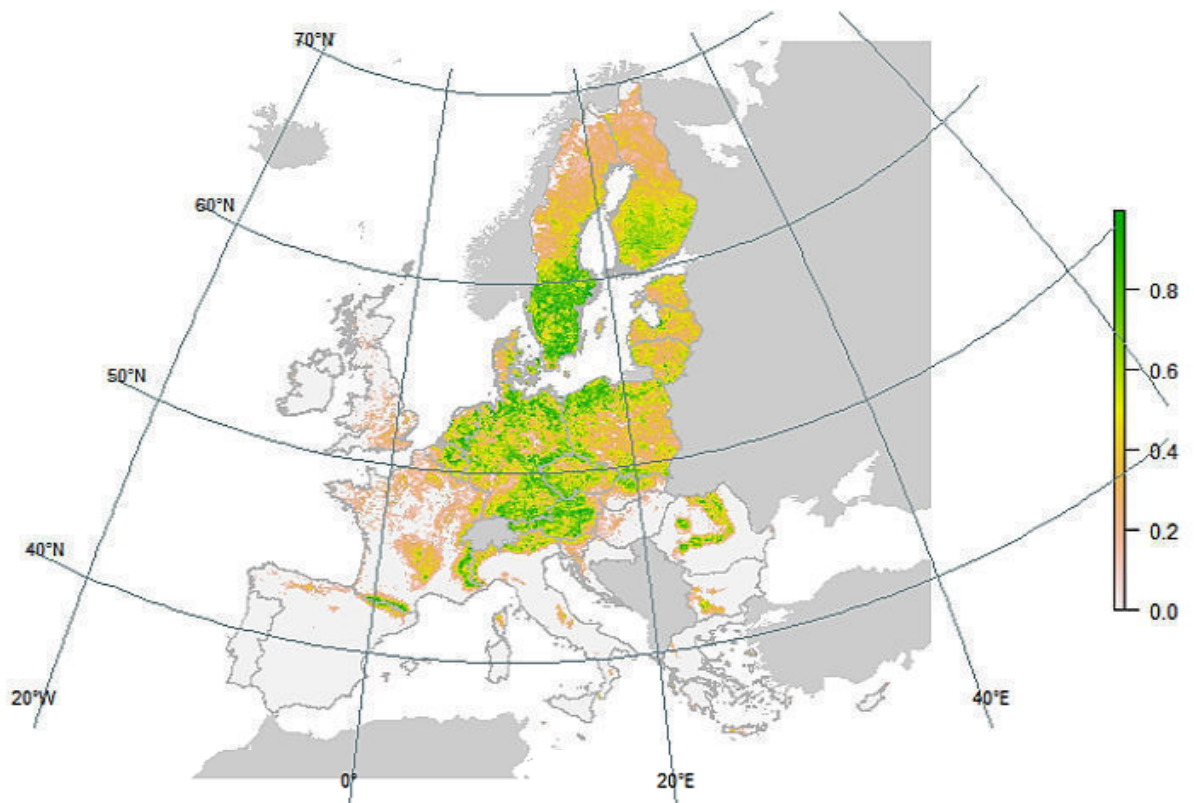
B. muscorum probability of occurrence



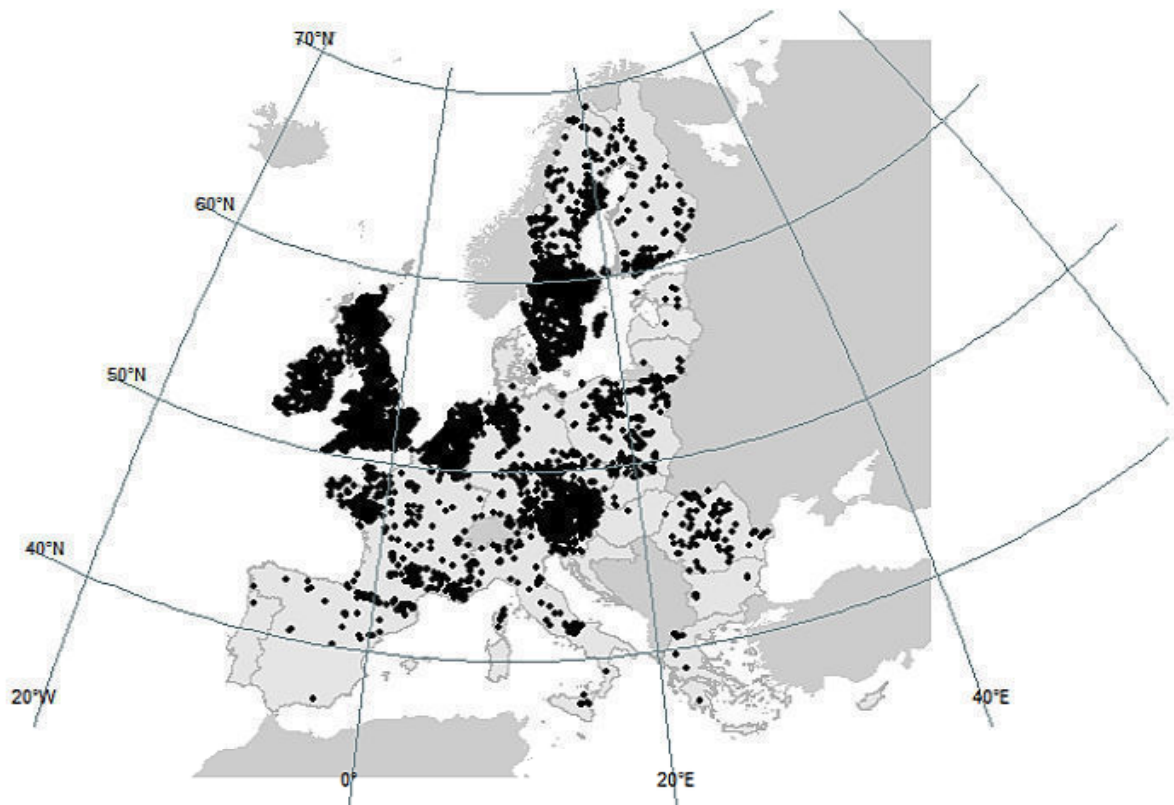
B. norvegicus occupancy



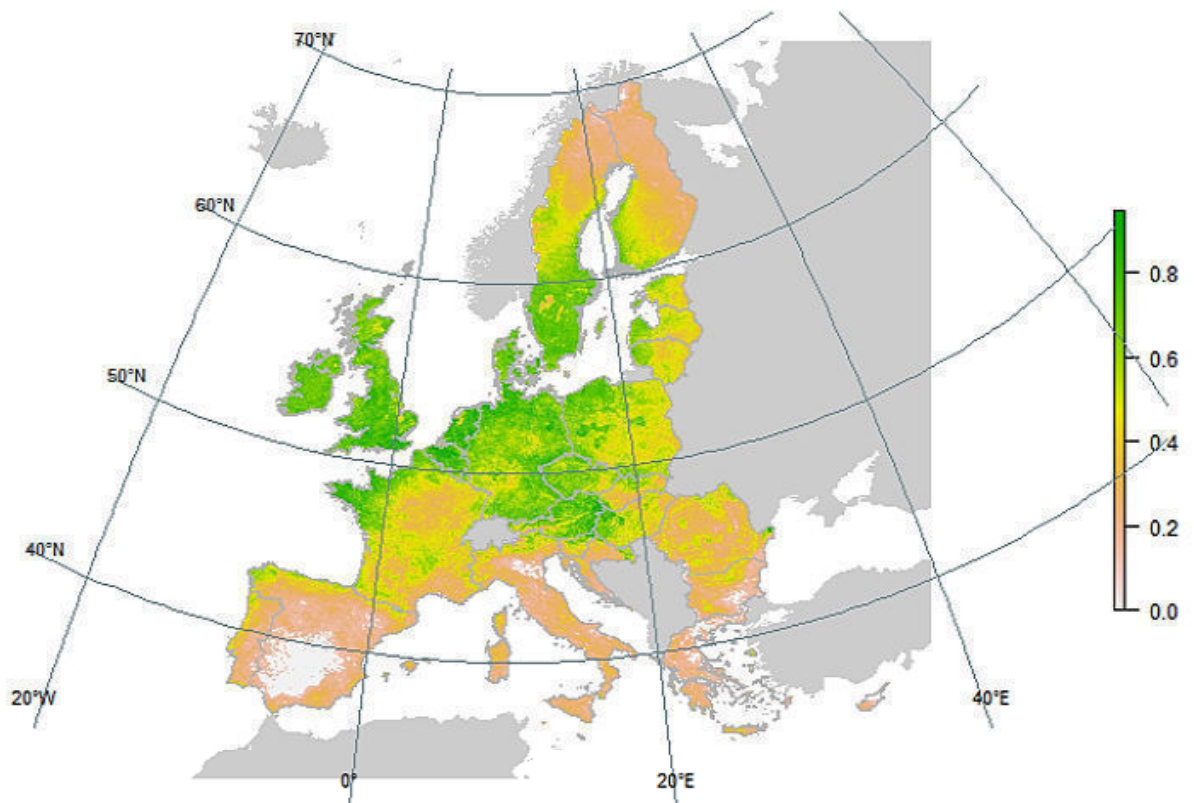
B. norvegicus probability of occurrence



B. pascuorum occupancy



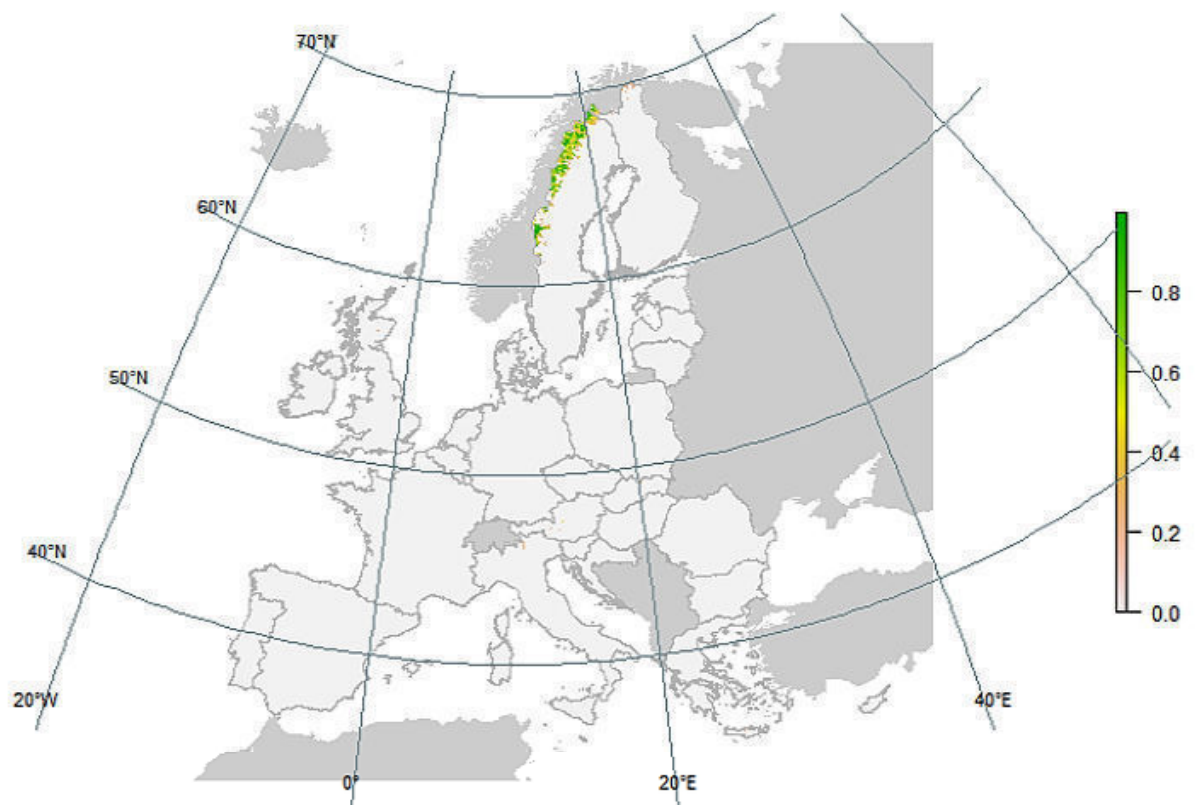
B. pascuorum probability of occurrence



B. polaris occupancy



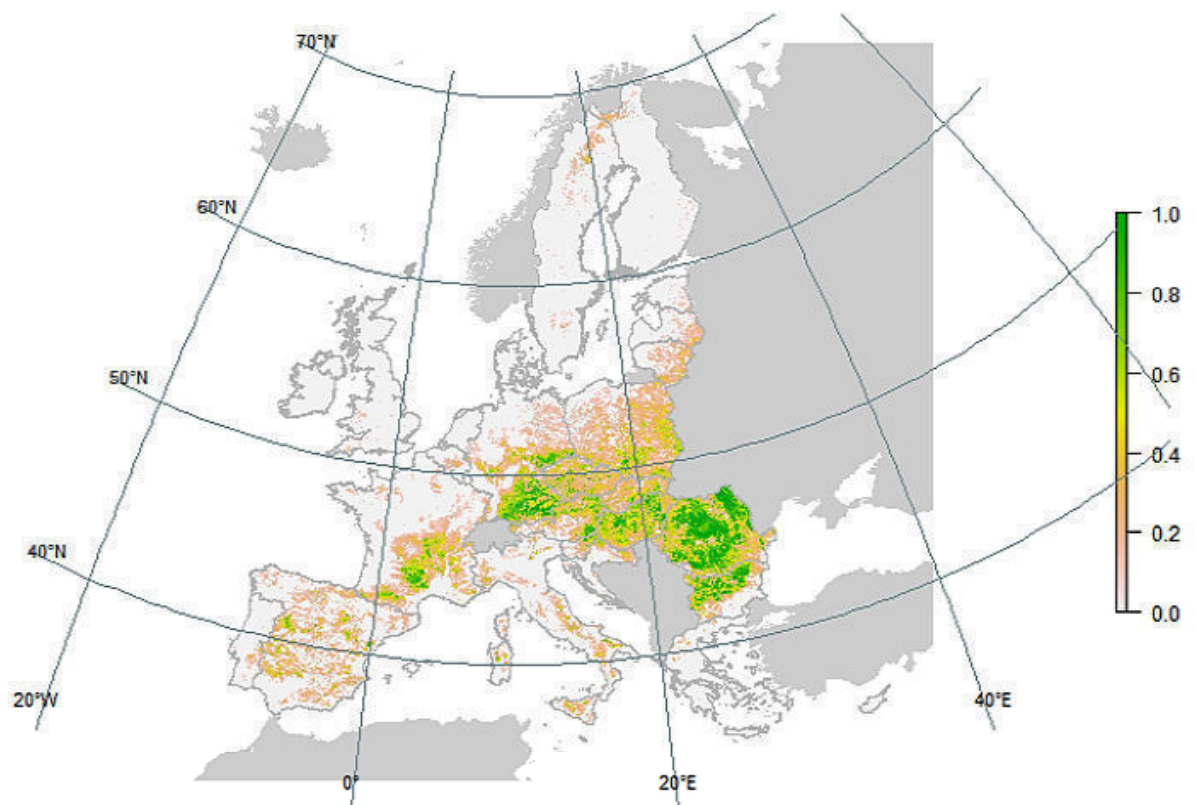
B. polaris probability of occurrence



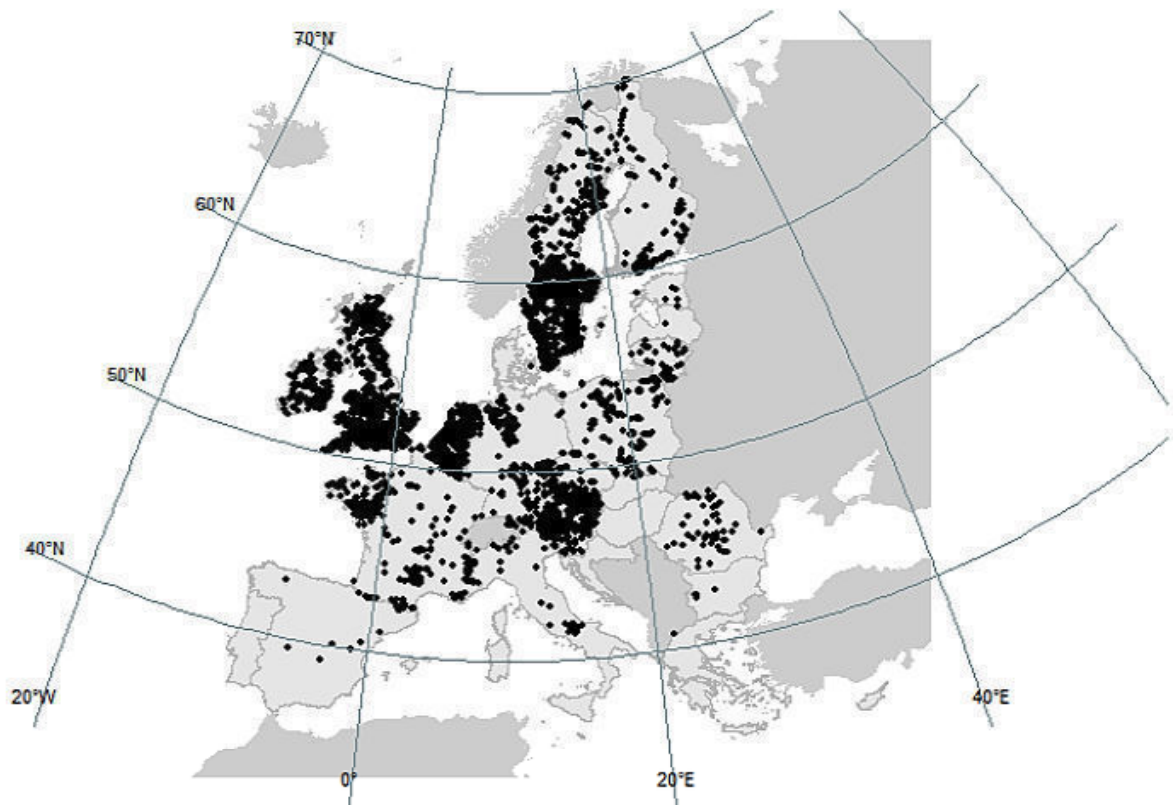
B. pomorum occupancy



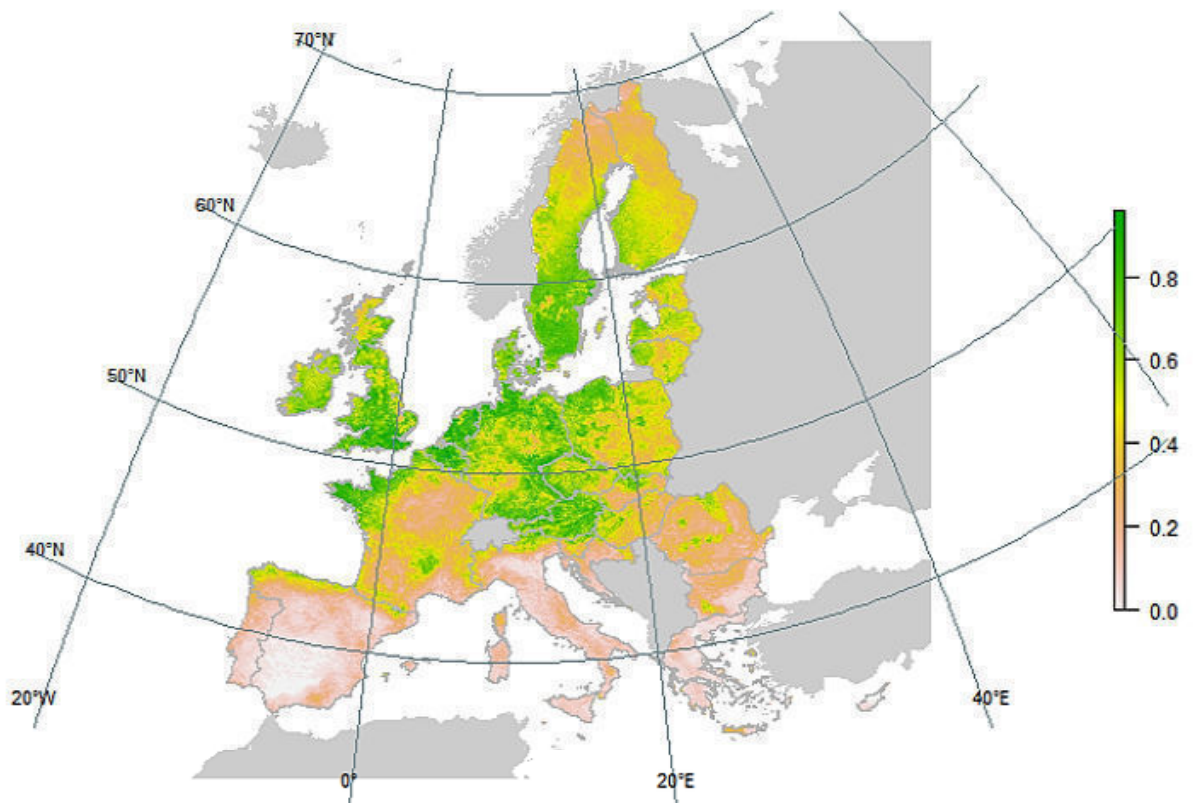
B. pomorum probability of occurrence



B. pratorum occupancy



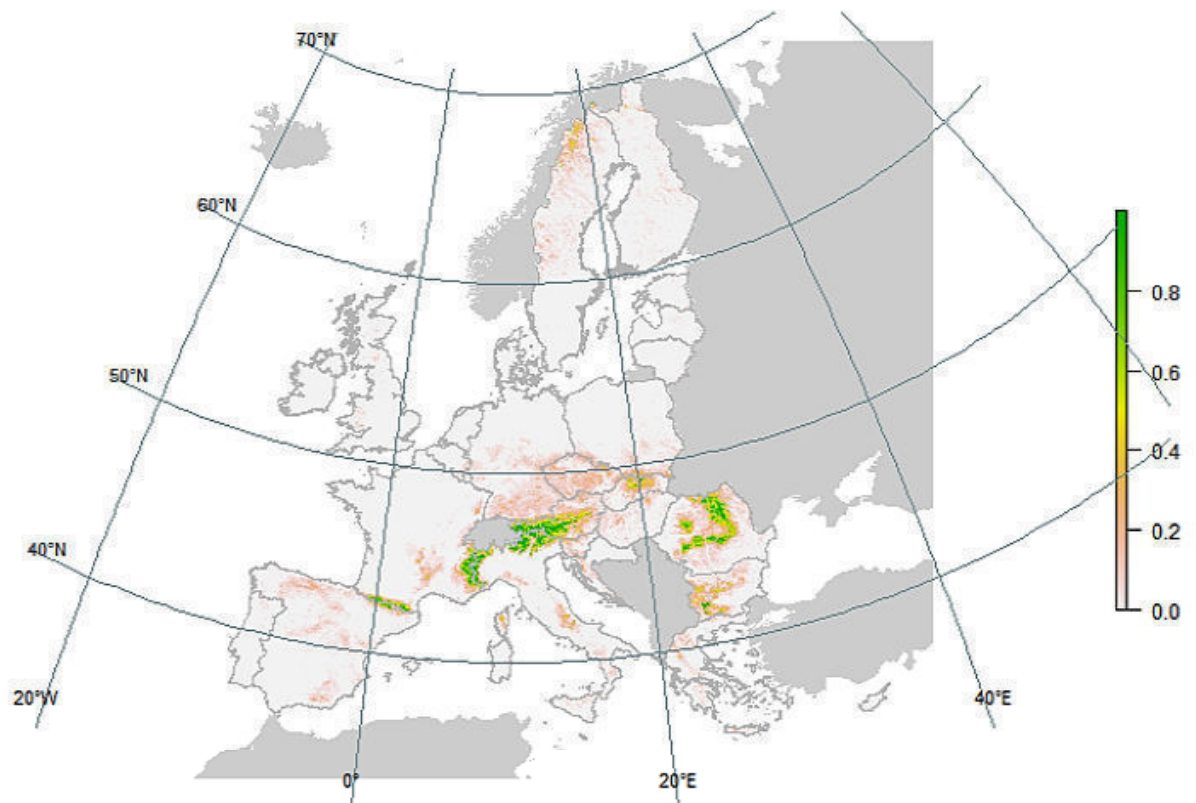
B. pratorum probability of occurrence



B. pyrenaeus occupancy



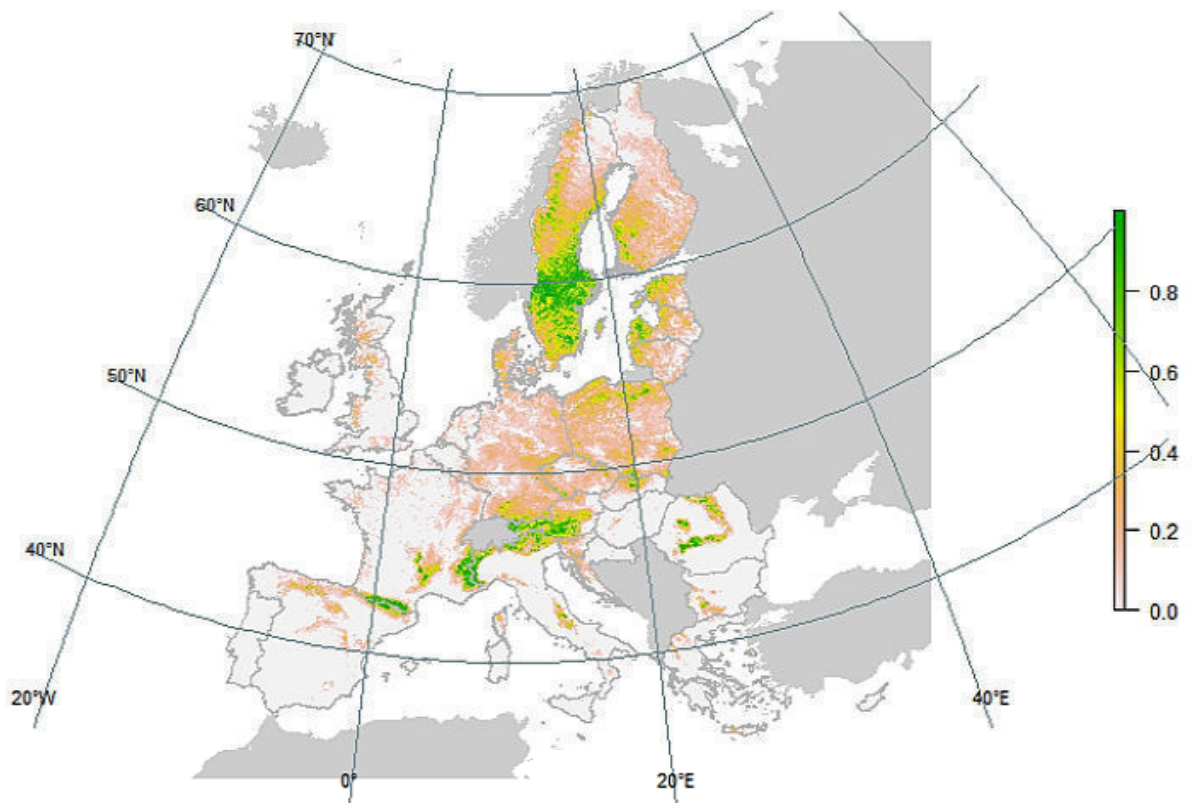
B. pyrenaeus probability of occurrence



B. quadricolor occupancy



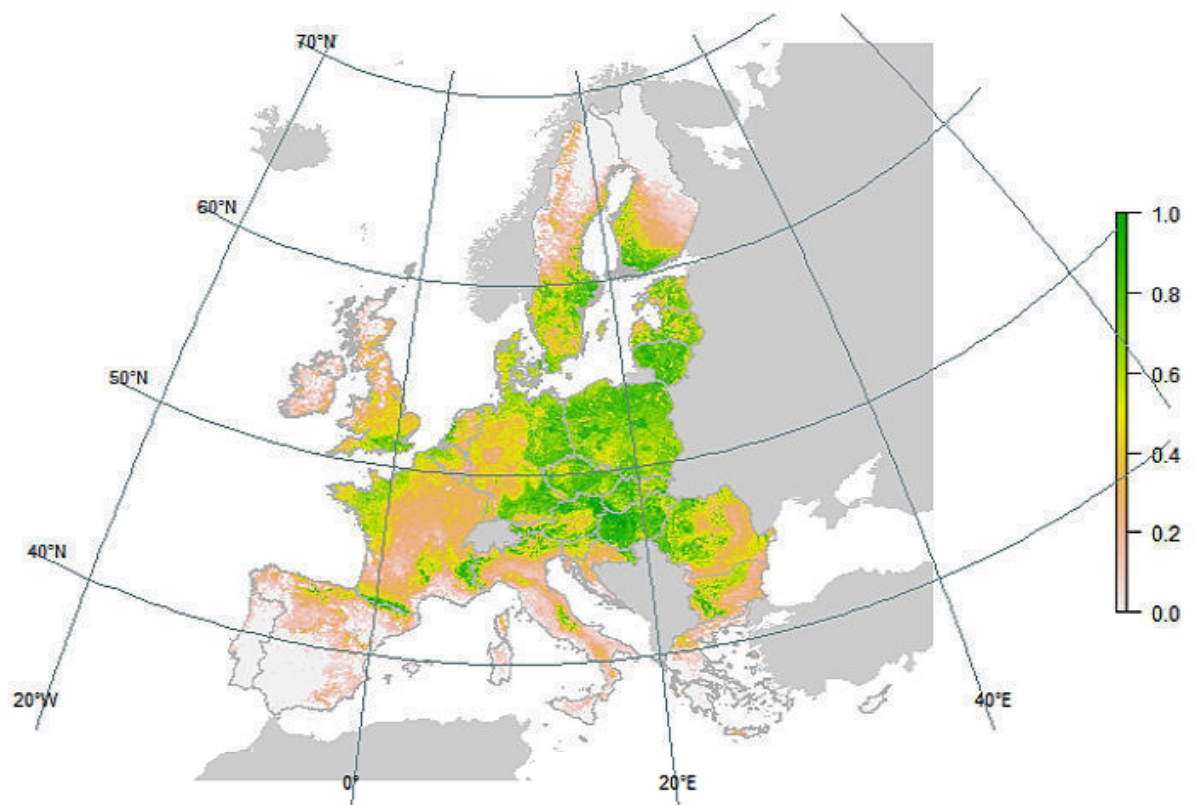
B. quadricolor probability of occurrence



B. ruderarius occupancy



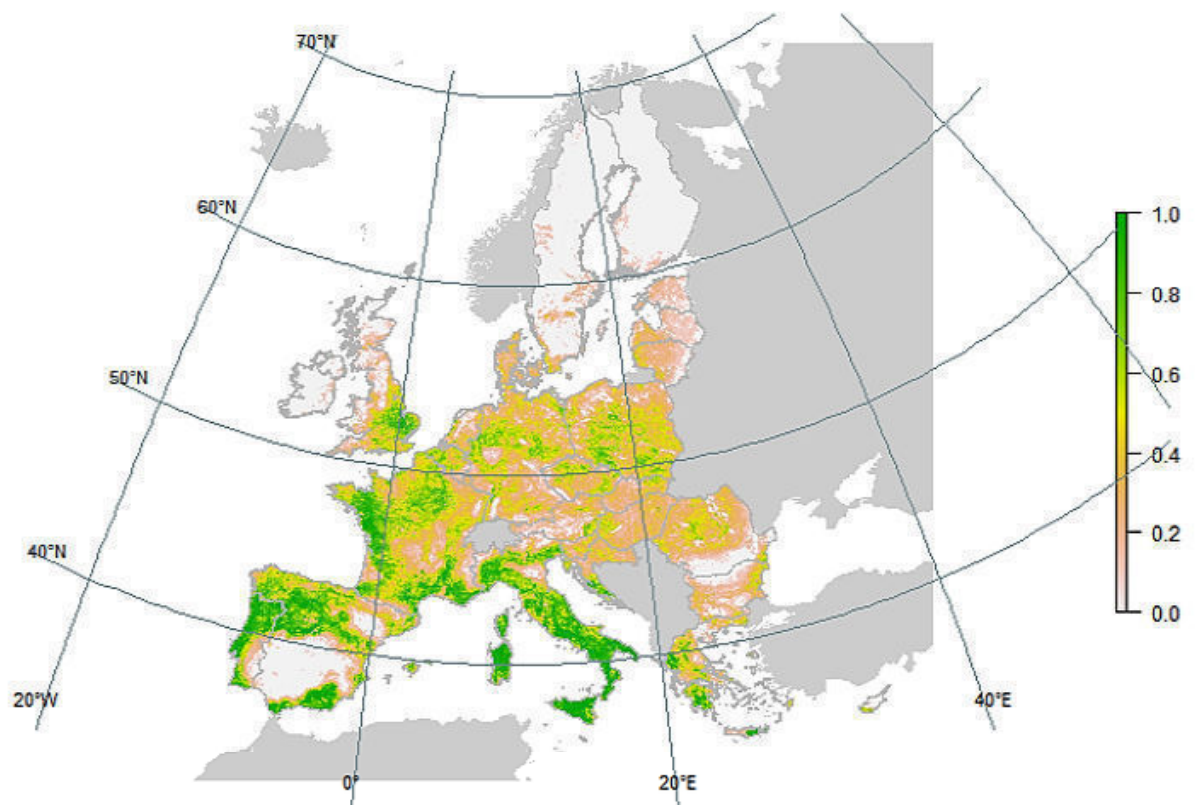
B. ruderarius probability of occurrence



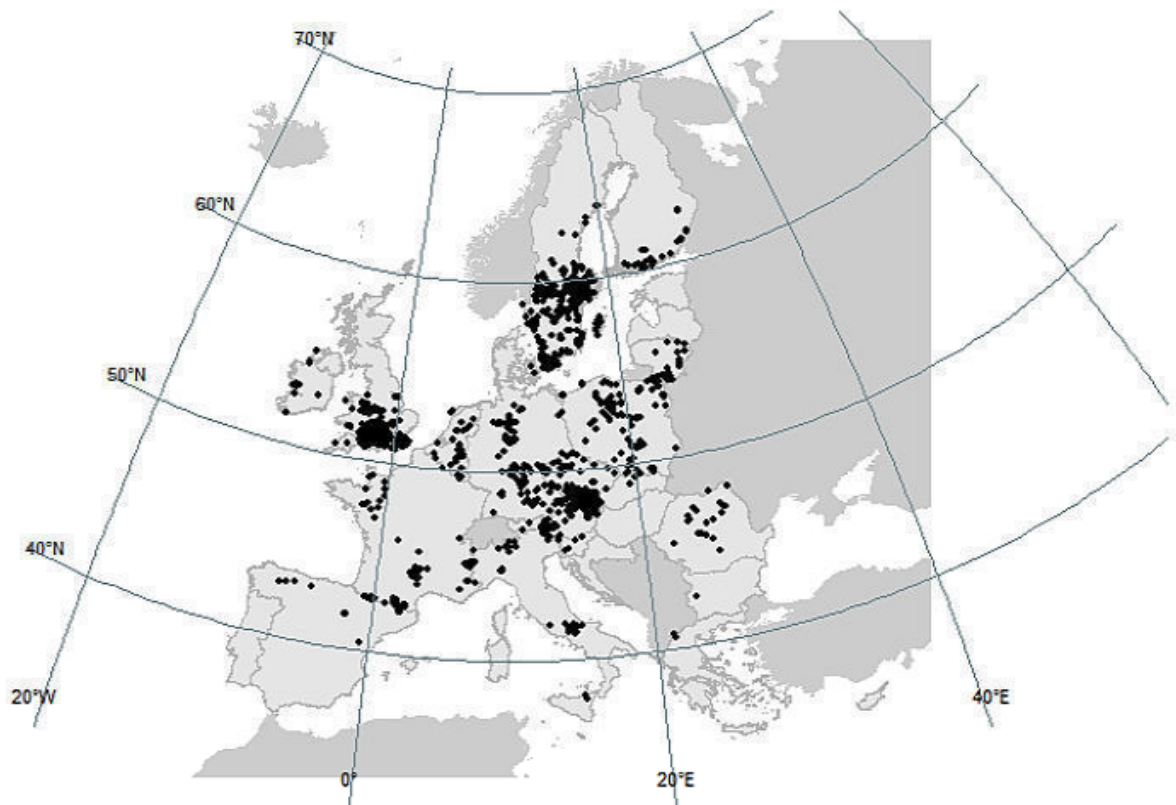
B. ruderatus occupancy



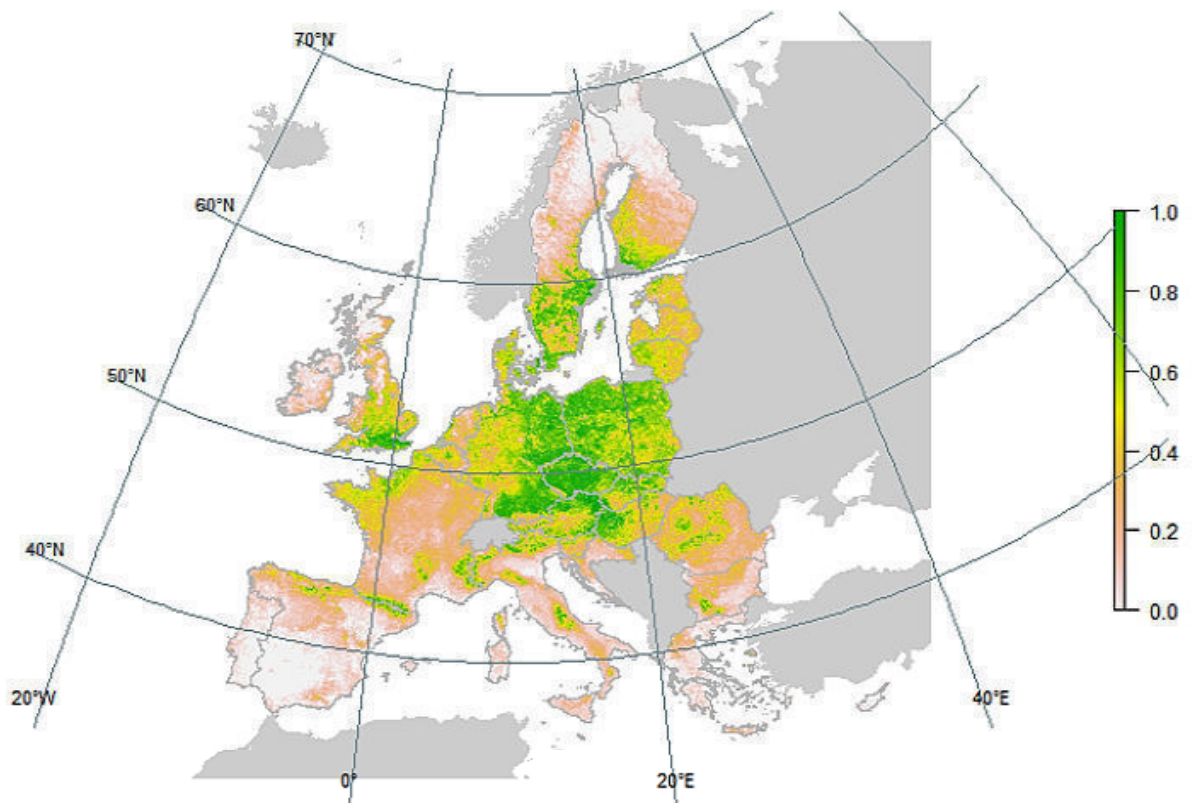
B. ruderatus probability of occurrence



B. rupestris occupancy



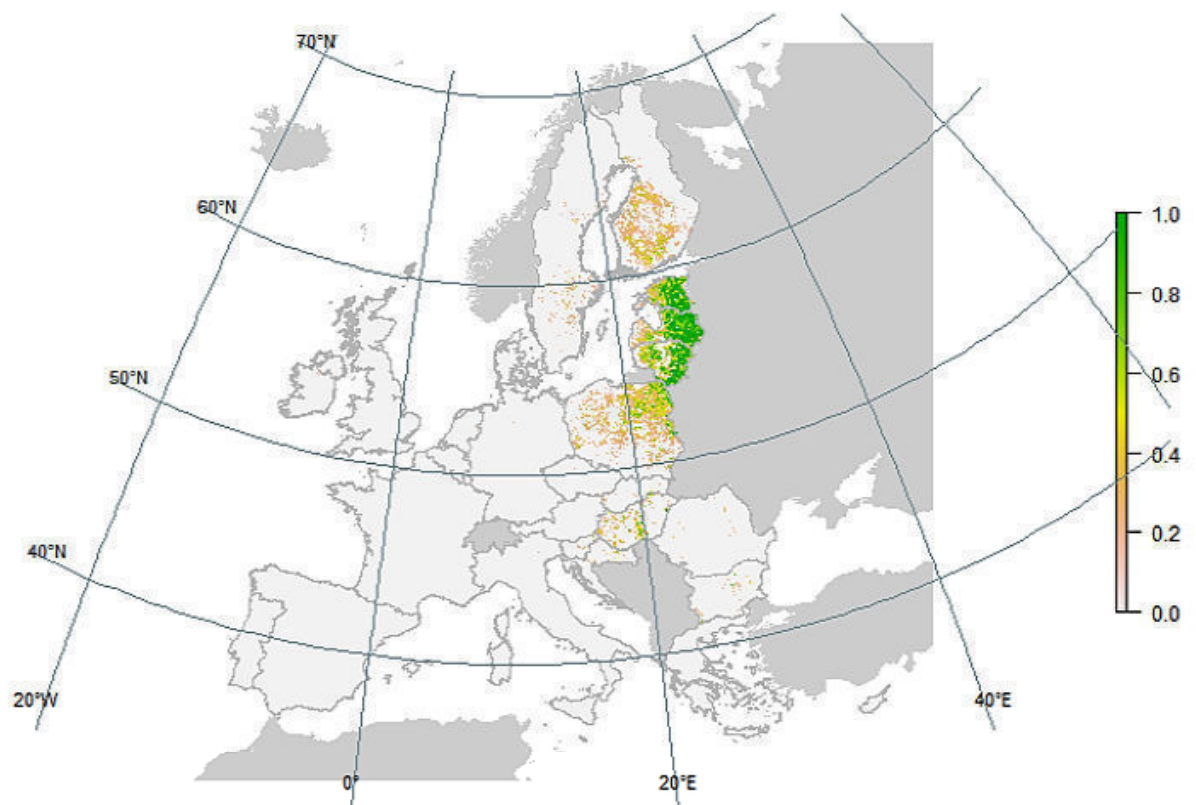
B. rupestris probability of occurrence



B. schrencki occupancy



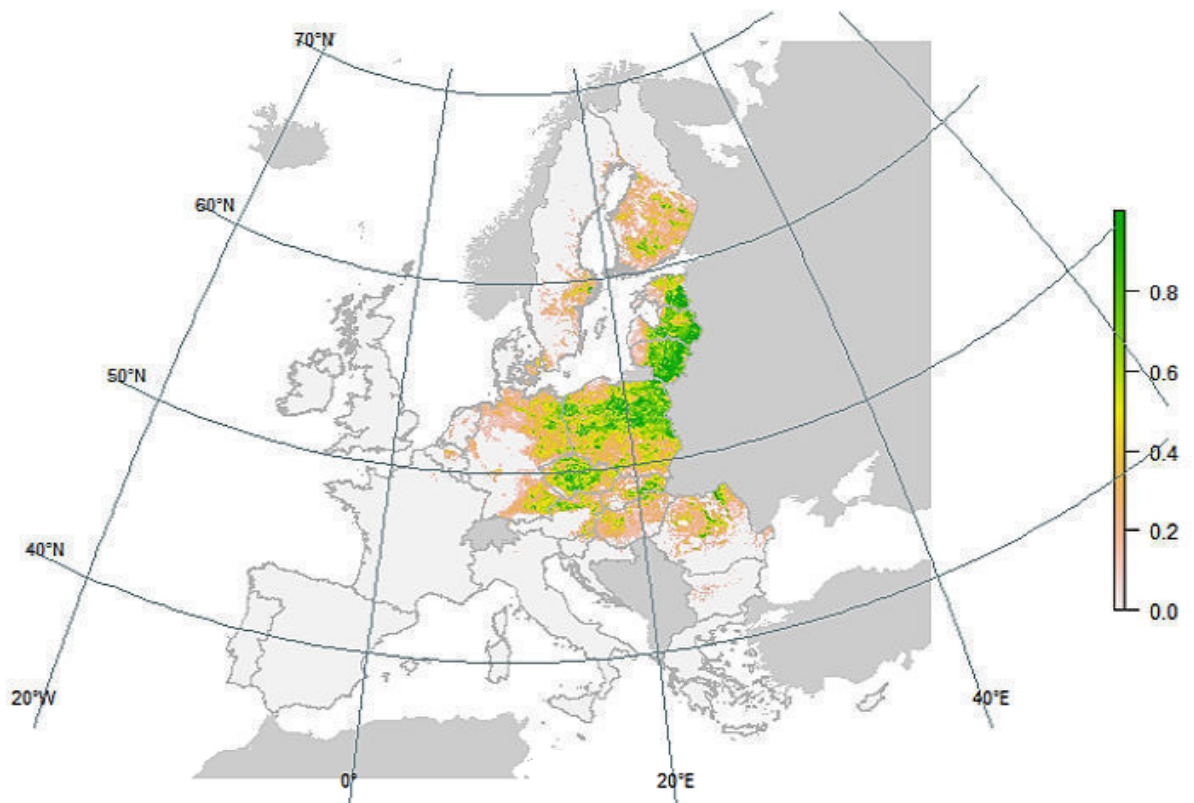
B. schrencki probability of occurrence



B. semenoviellus occupancy



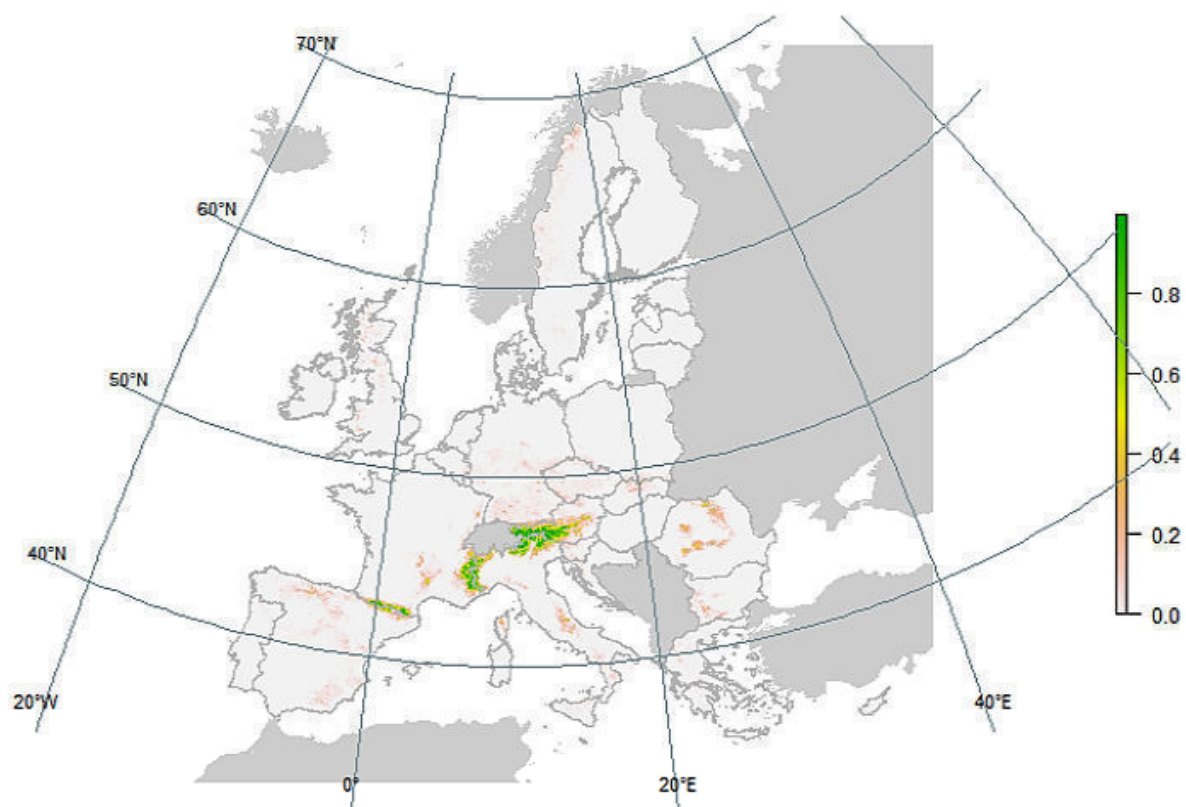
B. semenoviellus probability of occurrence



B. sichelii occupancy



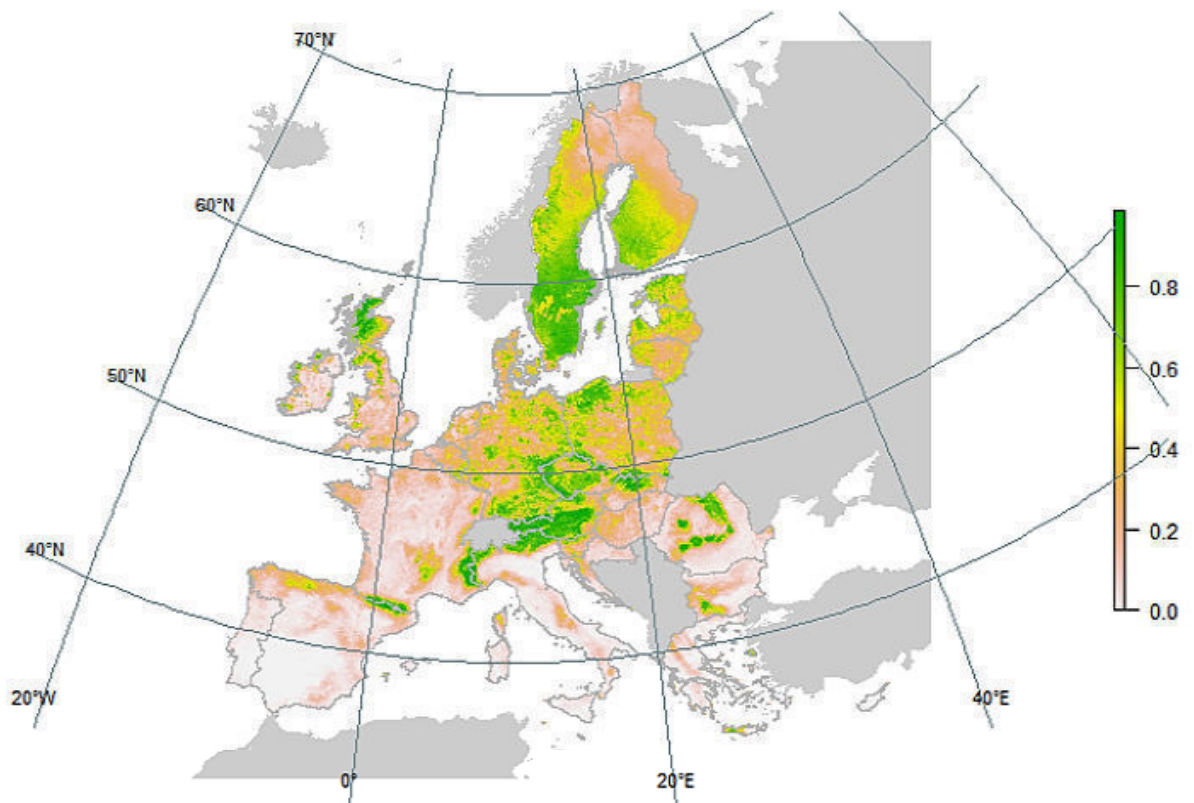
B. sichelii probability of occurrence



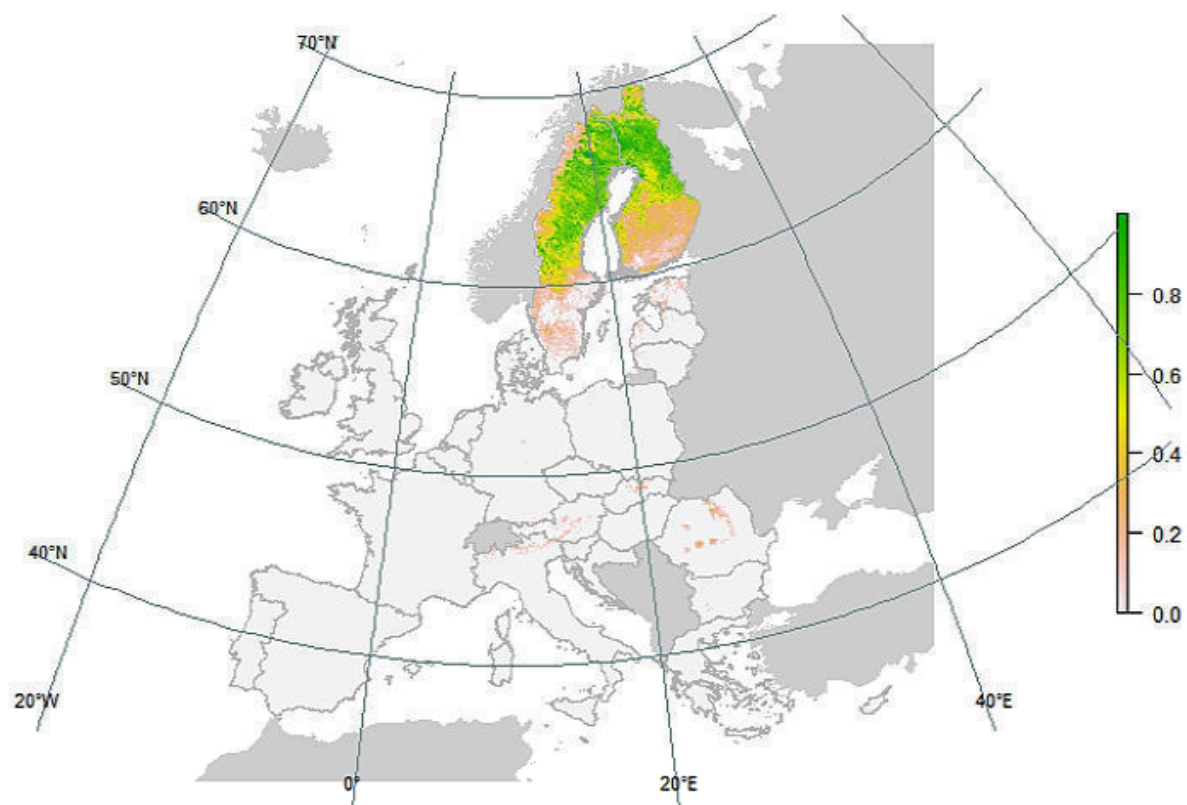
B. soroeensis occupancy



B. soroeensis probability of occurrence



B. sporadicus probability of occurrence



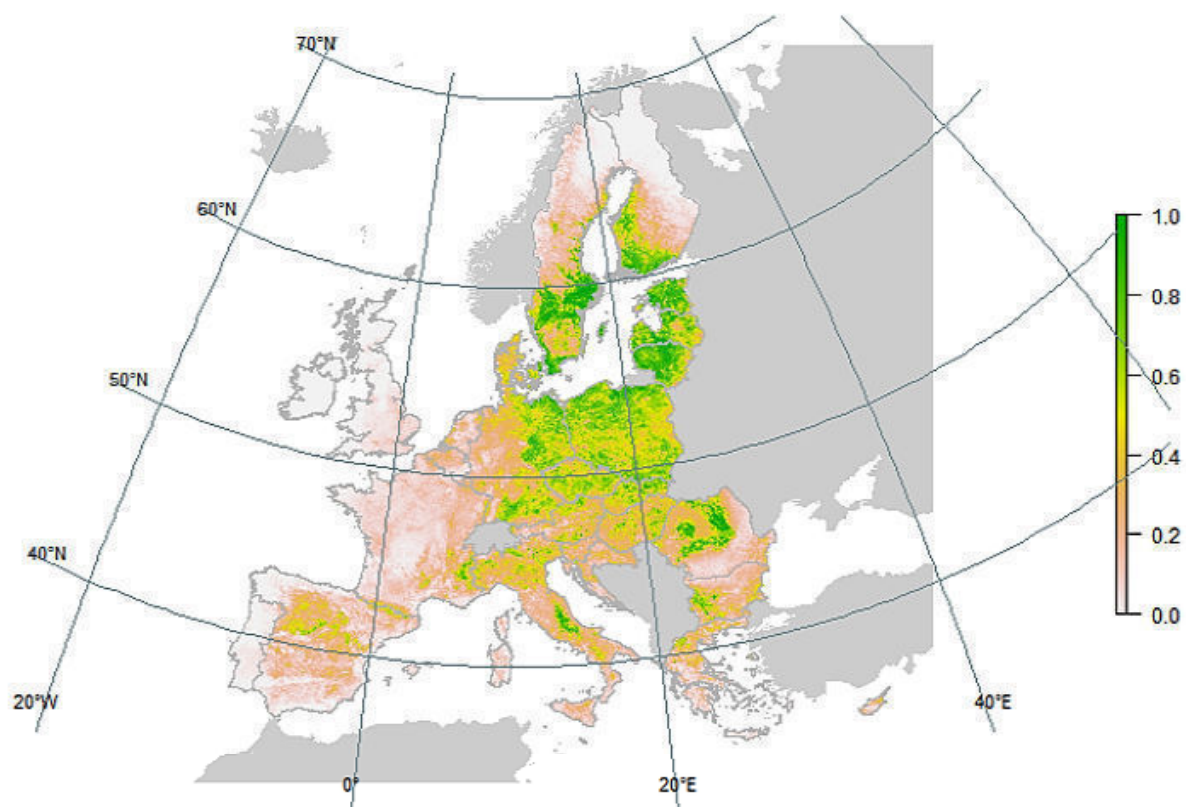
B. sporadicus occupancy



B. subterraneus occupancy



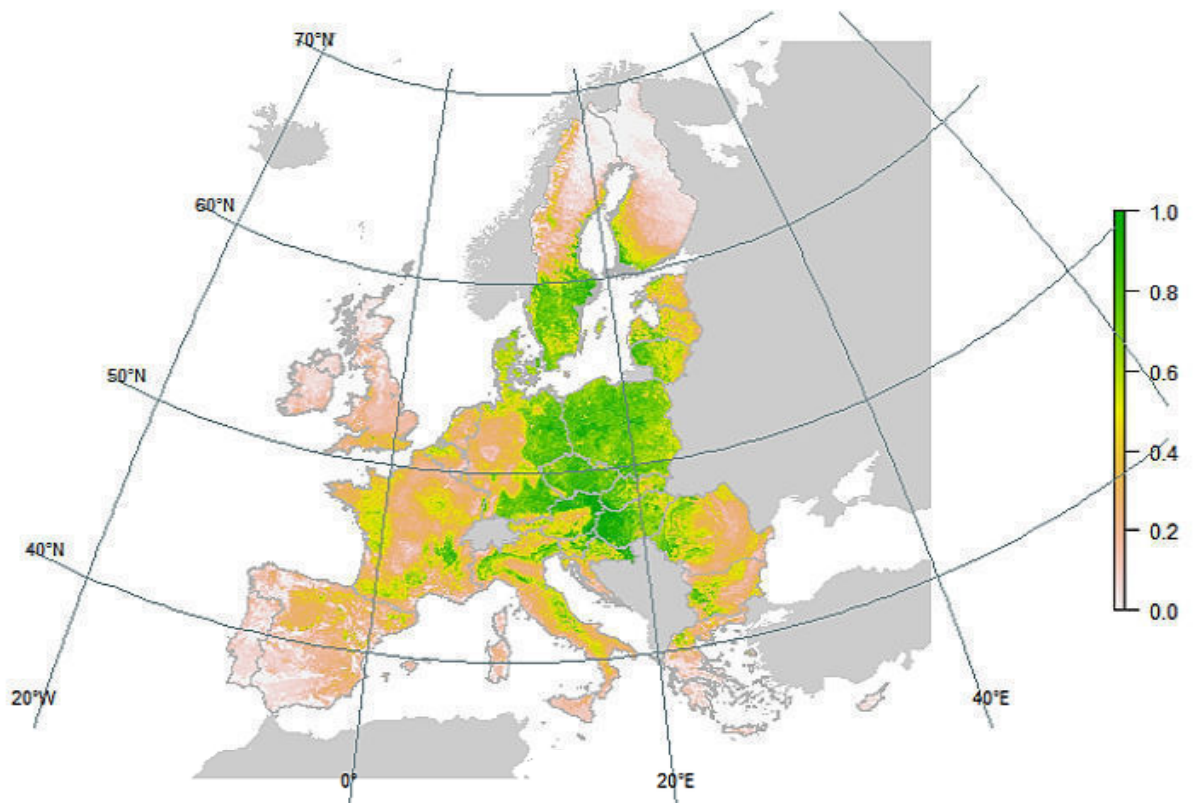
B. subterraneus probability of occurrence



B. sylvarum occupancy



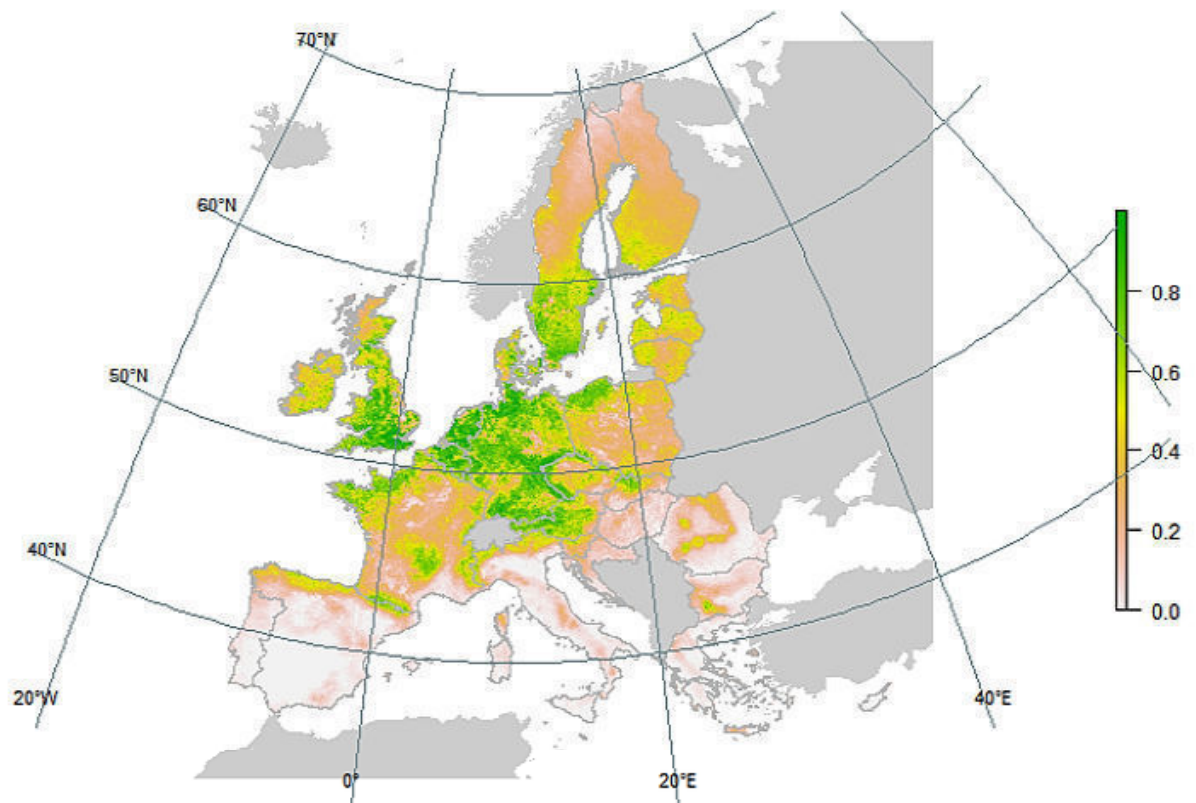
B. sylvarum probability of occurrence



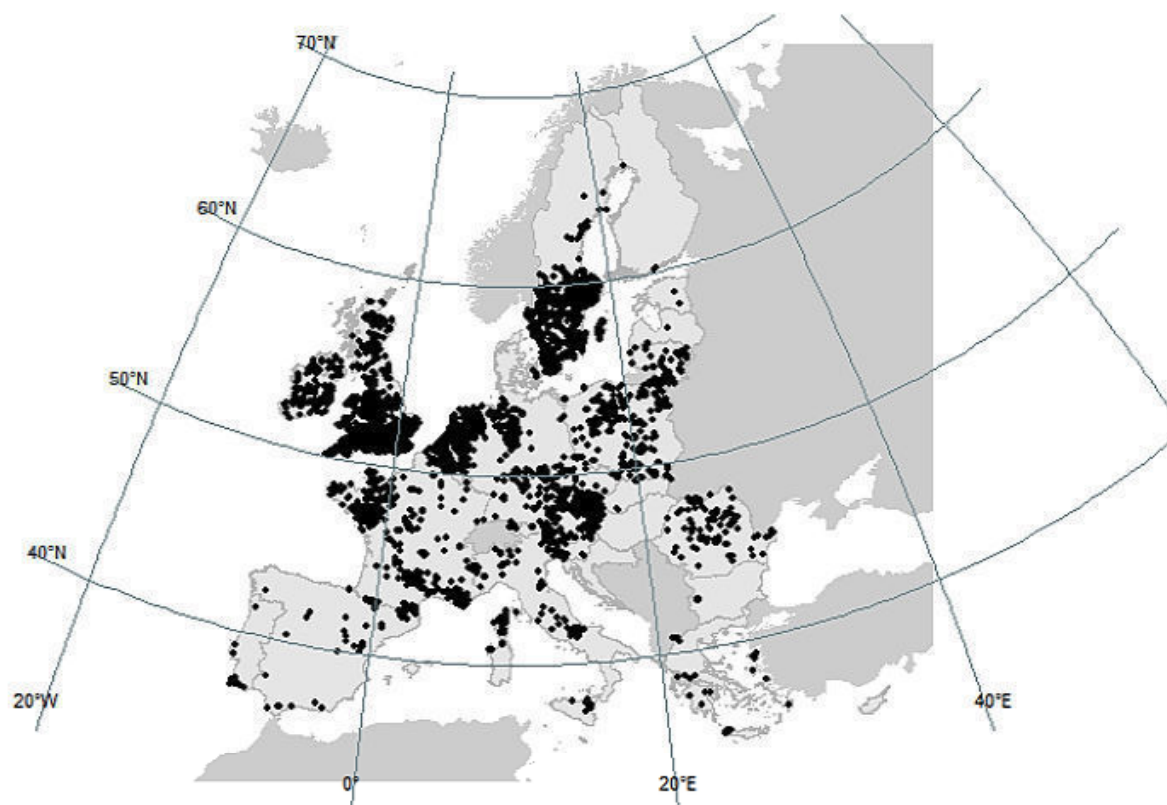
B. sylvestris occupancy



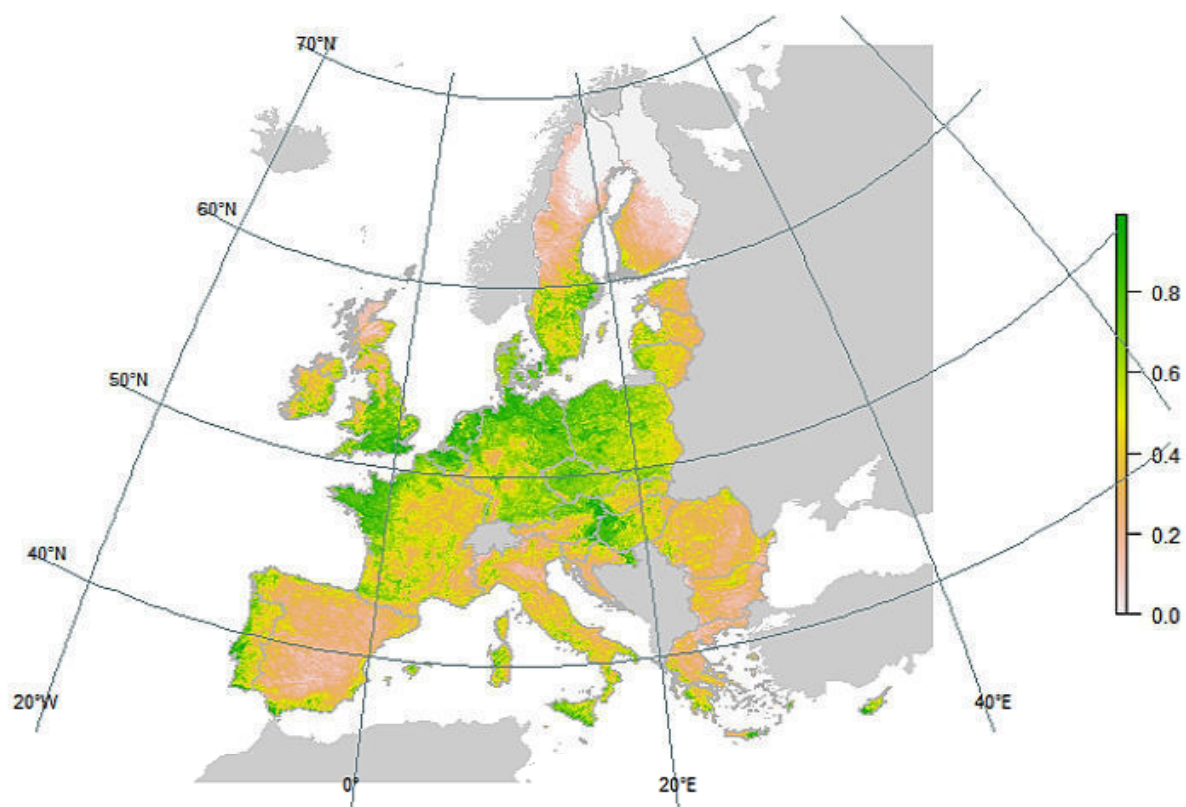
B. sylvestris probability of occurrence



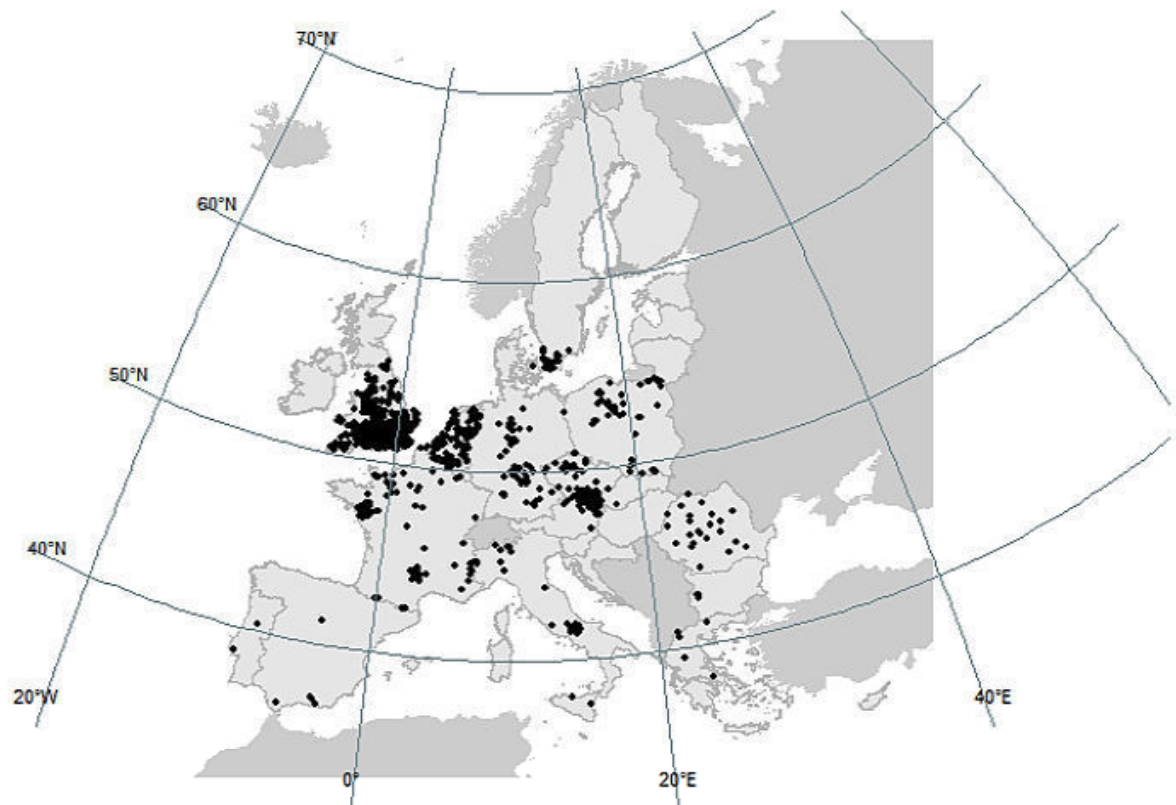
B. terrestris occupancy



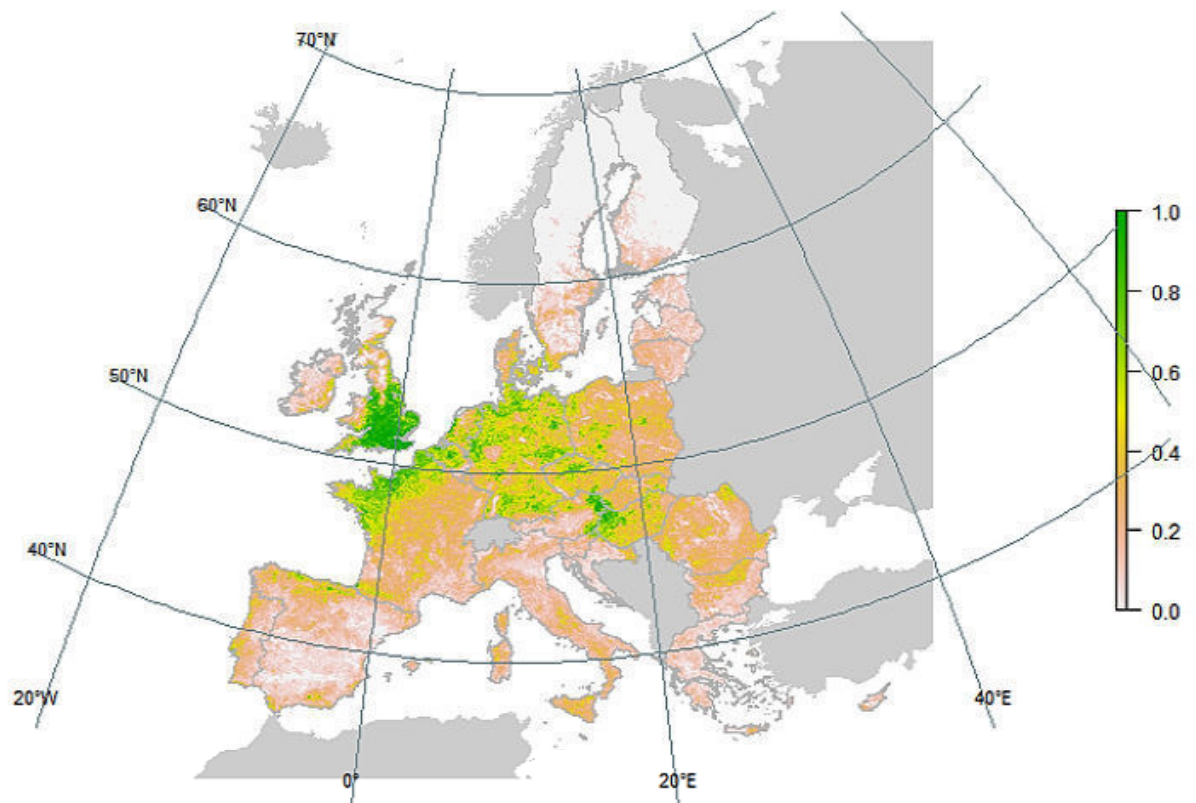
B. terrestris probability of occurrence



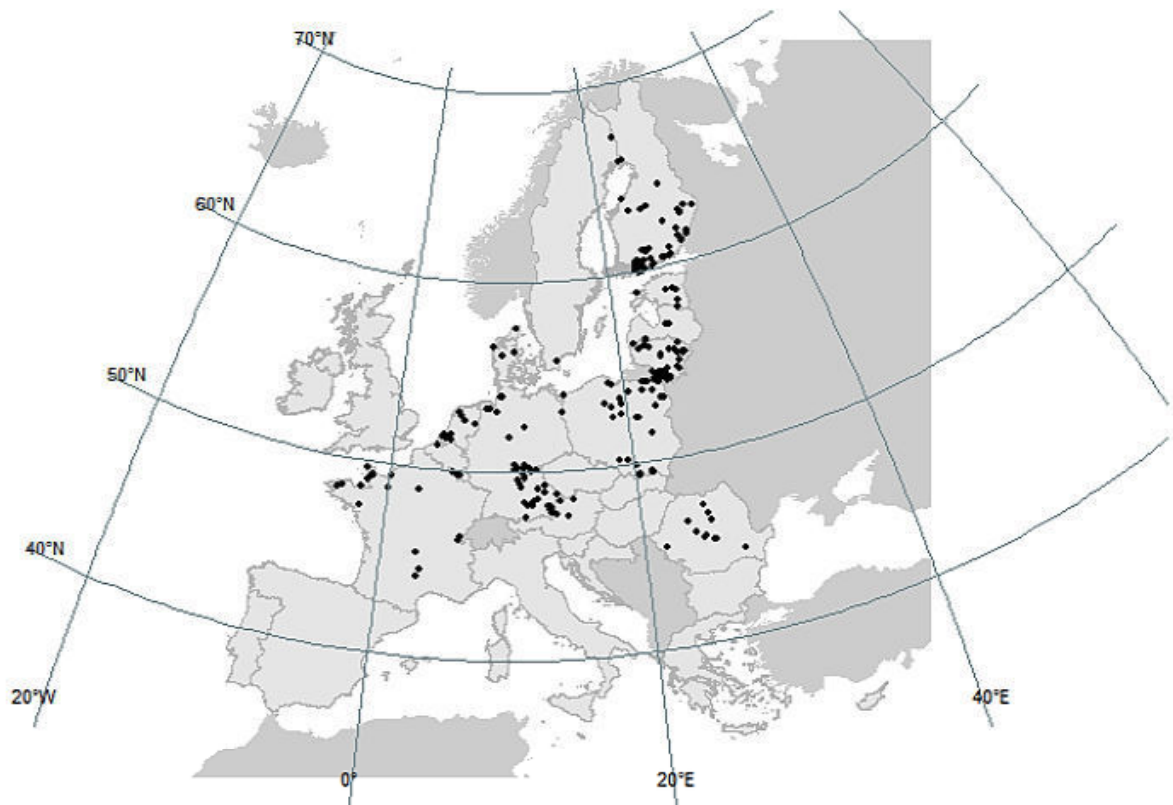
B. vestalis occupancy



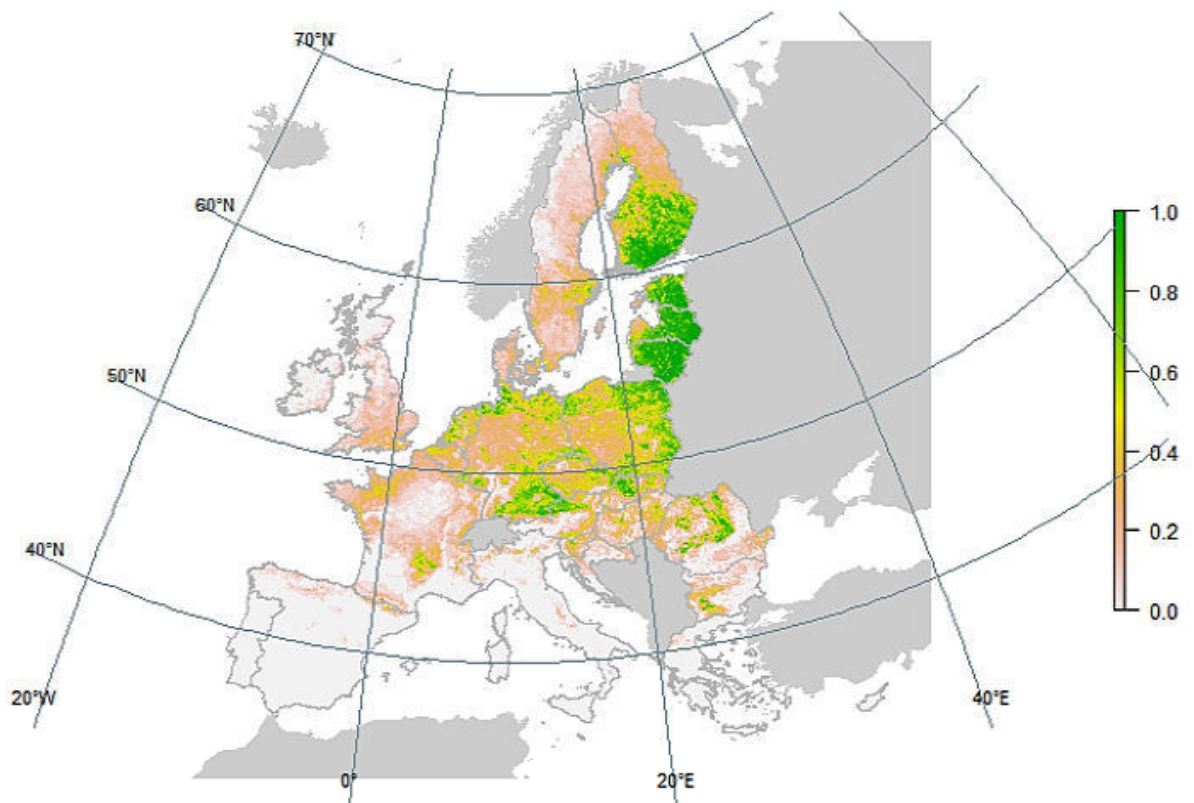
B. vestalis probability of occurrence



B. veteranus occupancy



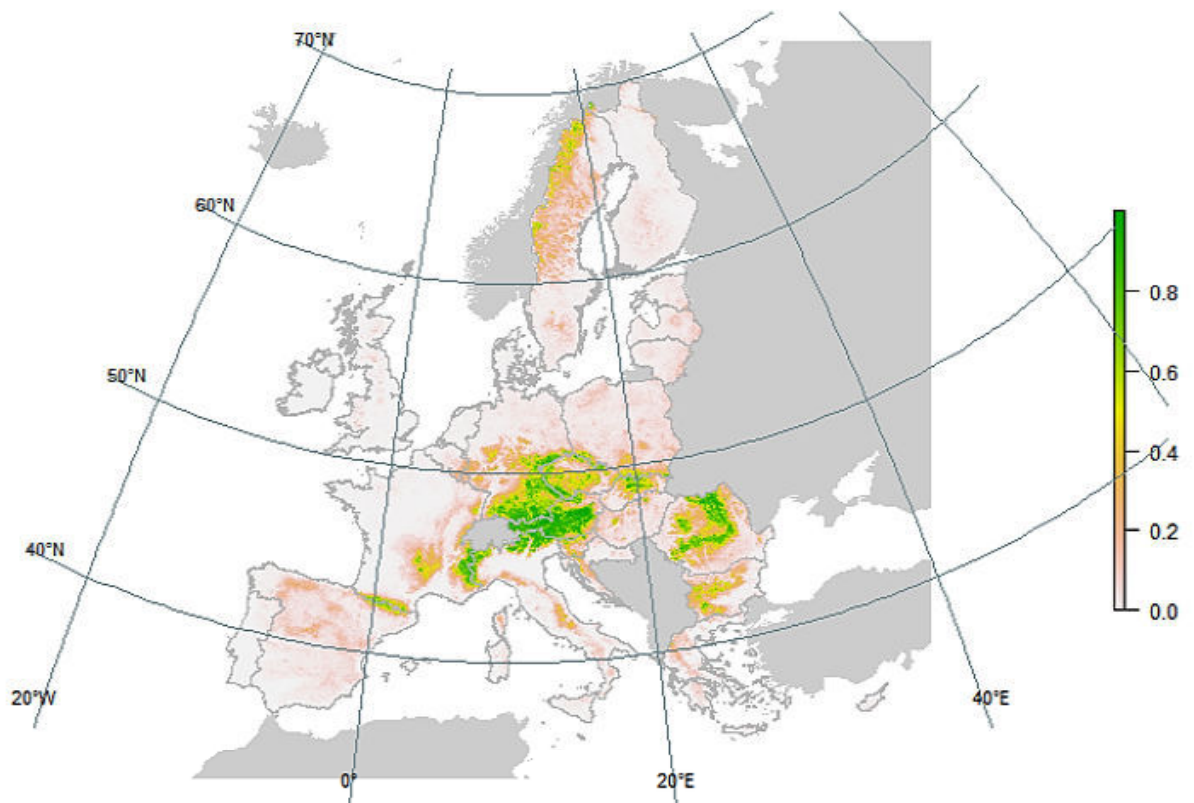
B. veteranus probability of occurrence



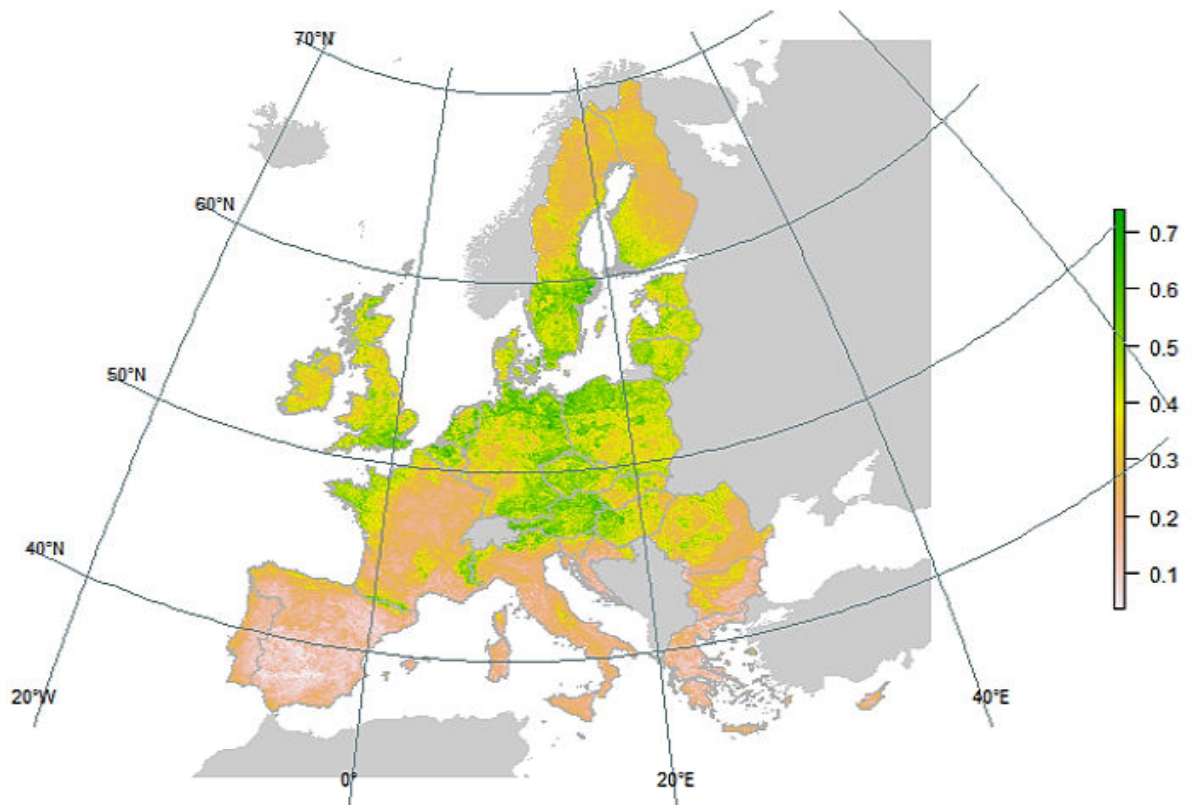
B. wurflenii occupancy



B. wurflenii probability of occurrence



Composite probability



Bumblebee species richness

