

SEEMLA approach development: the GIS application for MagL types availability

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SEEMLA Final Event
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Sustainable exploitation of biomass for bioenergy from marginal lands in Europe

Project coordinator



Partner



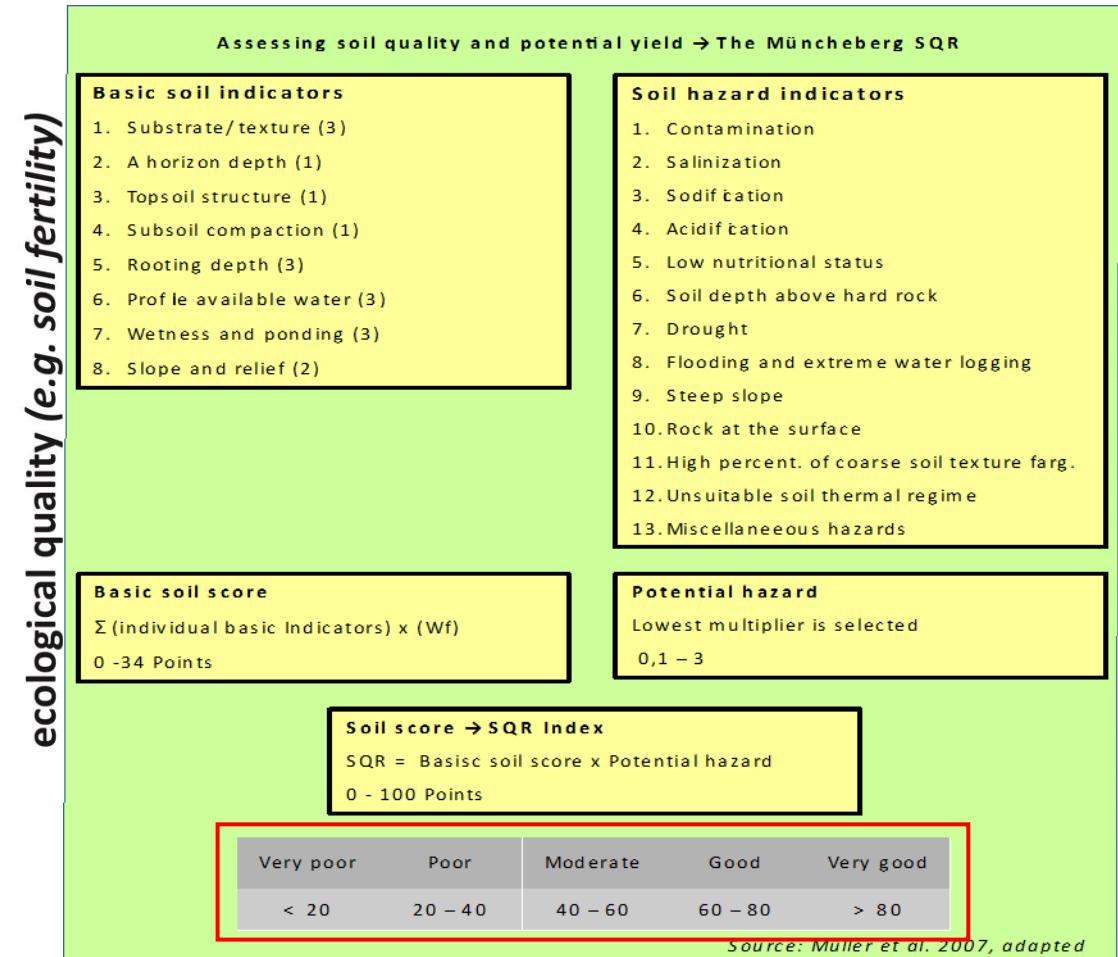
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Marginal Land and bioenergy production



The SEEMLA GIS tool concept

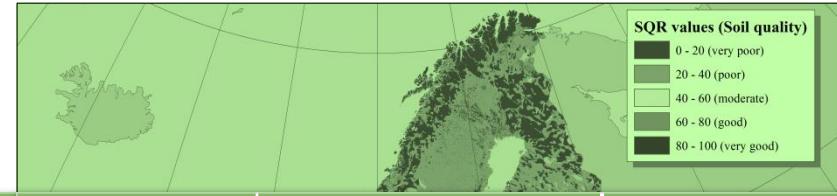
1. MagL Definition



Dauber et al. 2012, adapted by BTU

The SEEMLA GIS tool concept

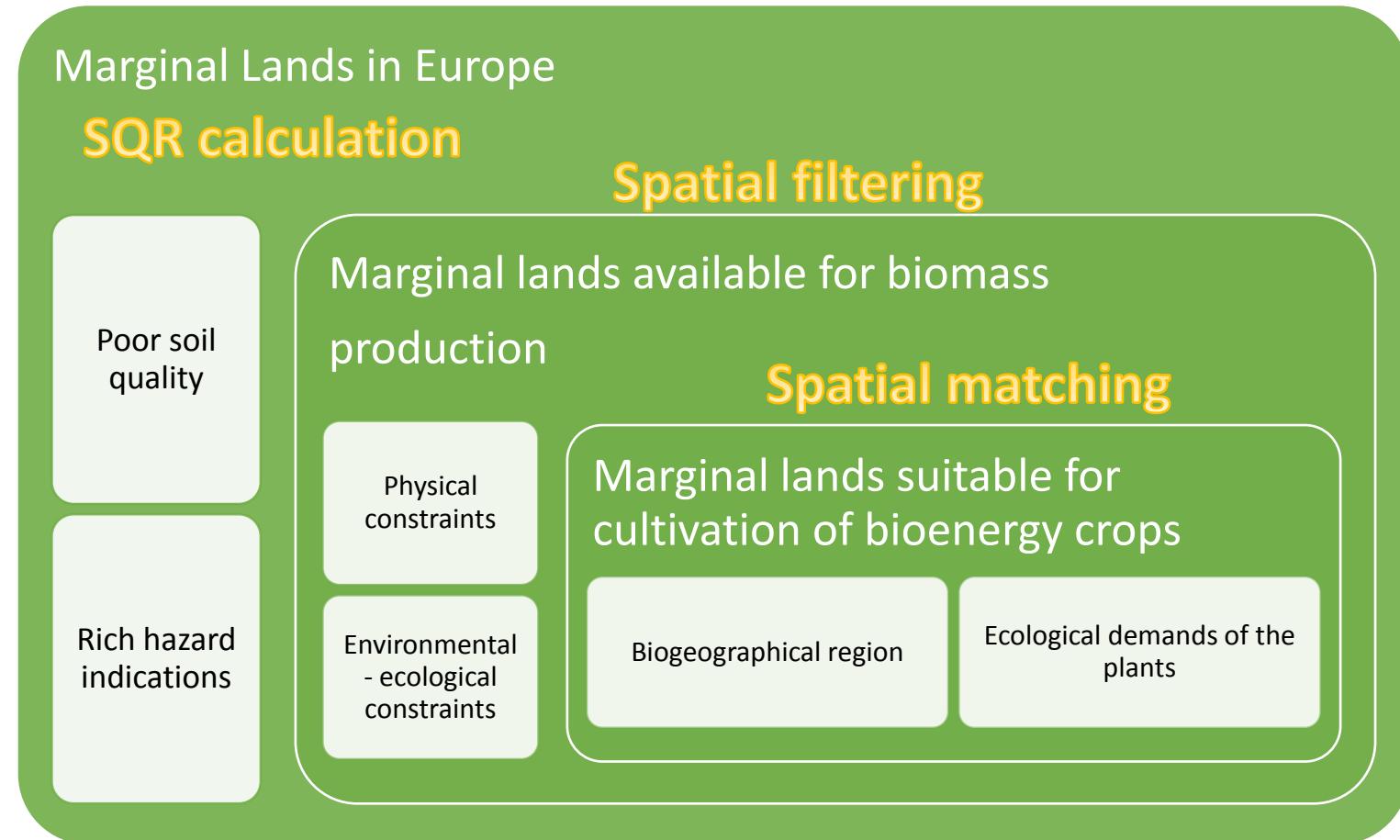
1. MagL Definition
- 2. MagL Identification (regionalization)**



	Common name	Scientific name	Climatic zone
FAO Harmo	Aleppo pine	<i>Pinus halepensis</i> Miller	Mediterranean
	Calabrian pine	<i>Pinus brutia</i> Ten.	Mediterranean
ESDAC Euro	Black pine	<i>Pinus nigra</i>	Atlantic
WorldClim			Continental
Köppen-Gei	Poplar	<i>Populus sp. L.</i>	Mediterranean
NASA-Shutt			Atlantic
Protected a	Basket willow	<i>Salix viminalis</i> L.	Continental
World Data	Miscanthus	<i>Miscanthus × giganteus</i>	Atlantic
High nature	Giant reed	<i>Arundo donax</i> L.	Continental
Corine Land	Switchgrass	<i>Panicum virgatum</i> L.	Mediterranean

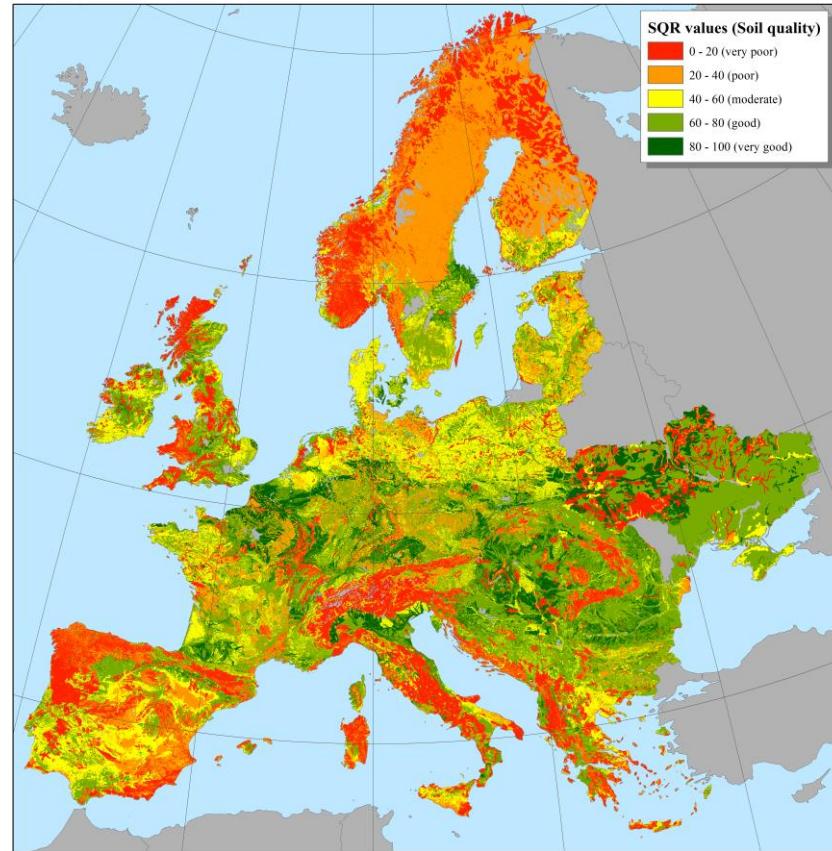
The SEEMLA GIS tool concept

1. MagLs Definition
2. MagLs Identification (regionalization)



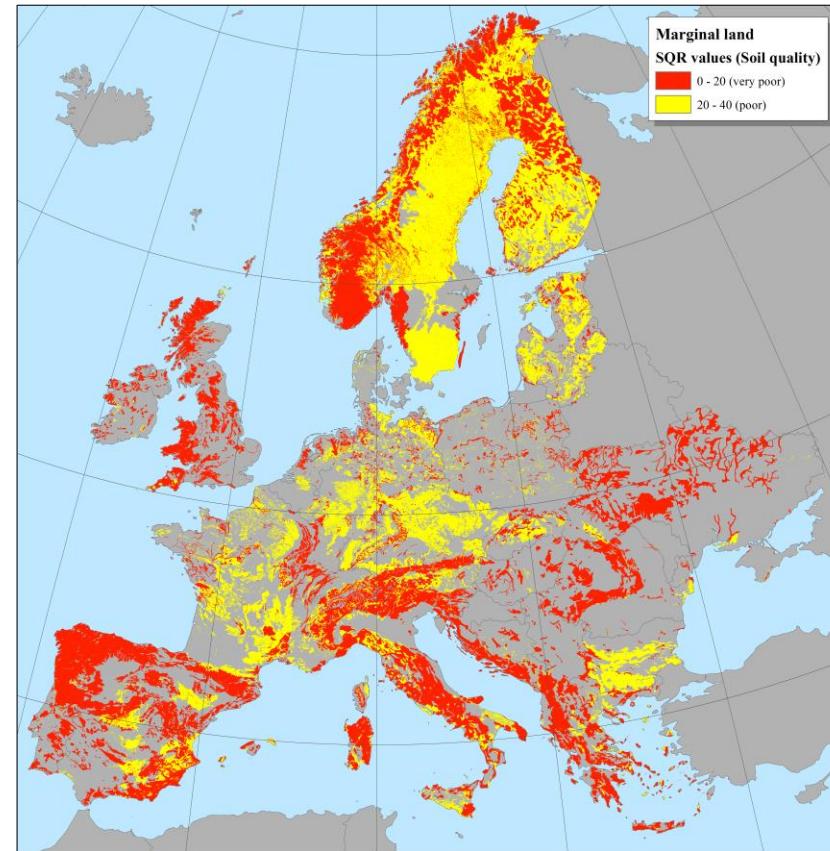
The SEEMLA GIS Tools results

- 1. MagLs Definition (calculate SQR)**
- 2. MagLs Identification (regionalization)**



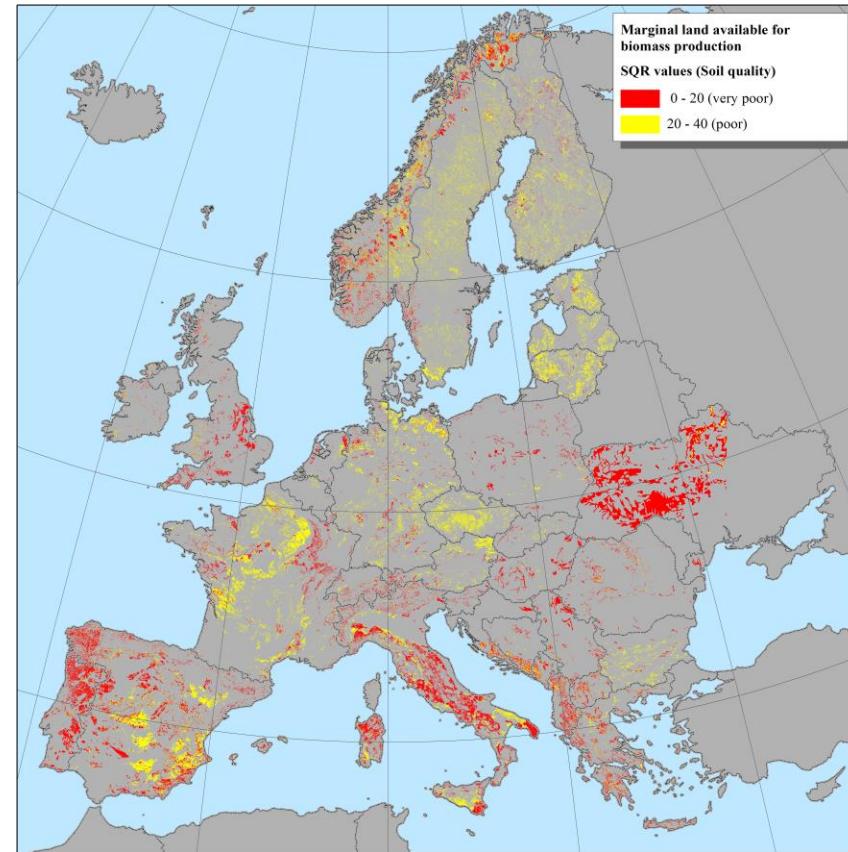
The SEEMLA GIS Tools results

1. MagLs Definition (SQR \leq 40)
2. MagLs Identification (regionalization)



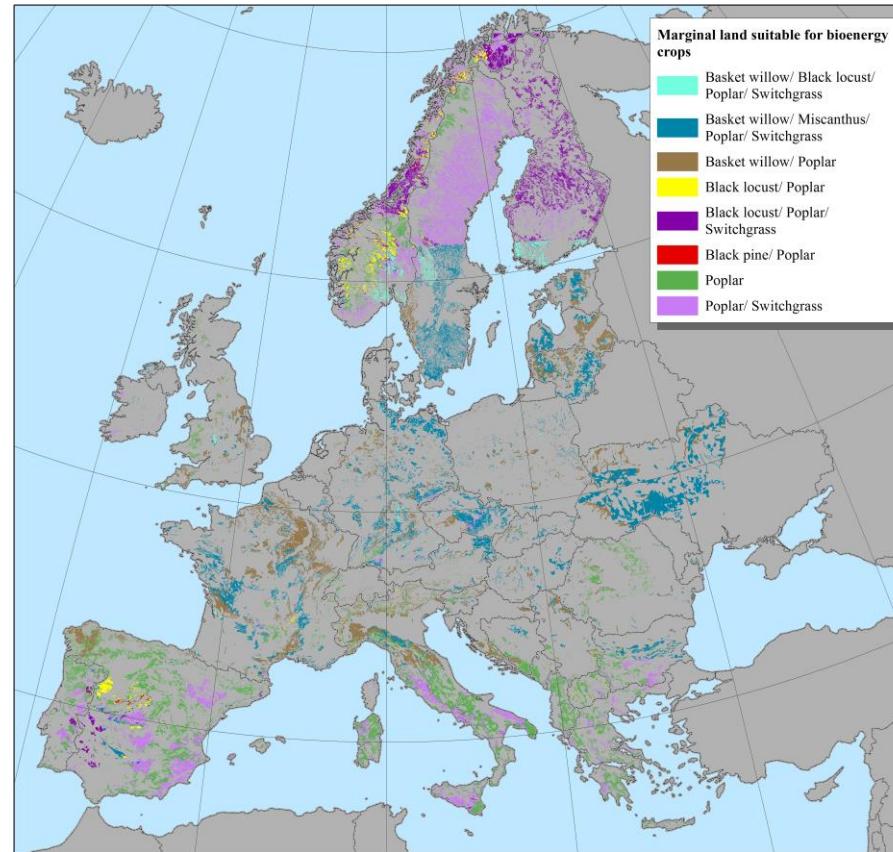
The SEEMLA GIS Tools results

1. MagLs Definition ($SQR \leq 40$)
2. MagLs Identification (regionalization)



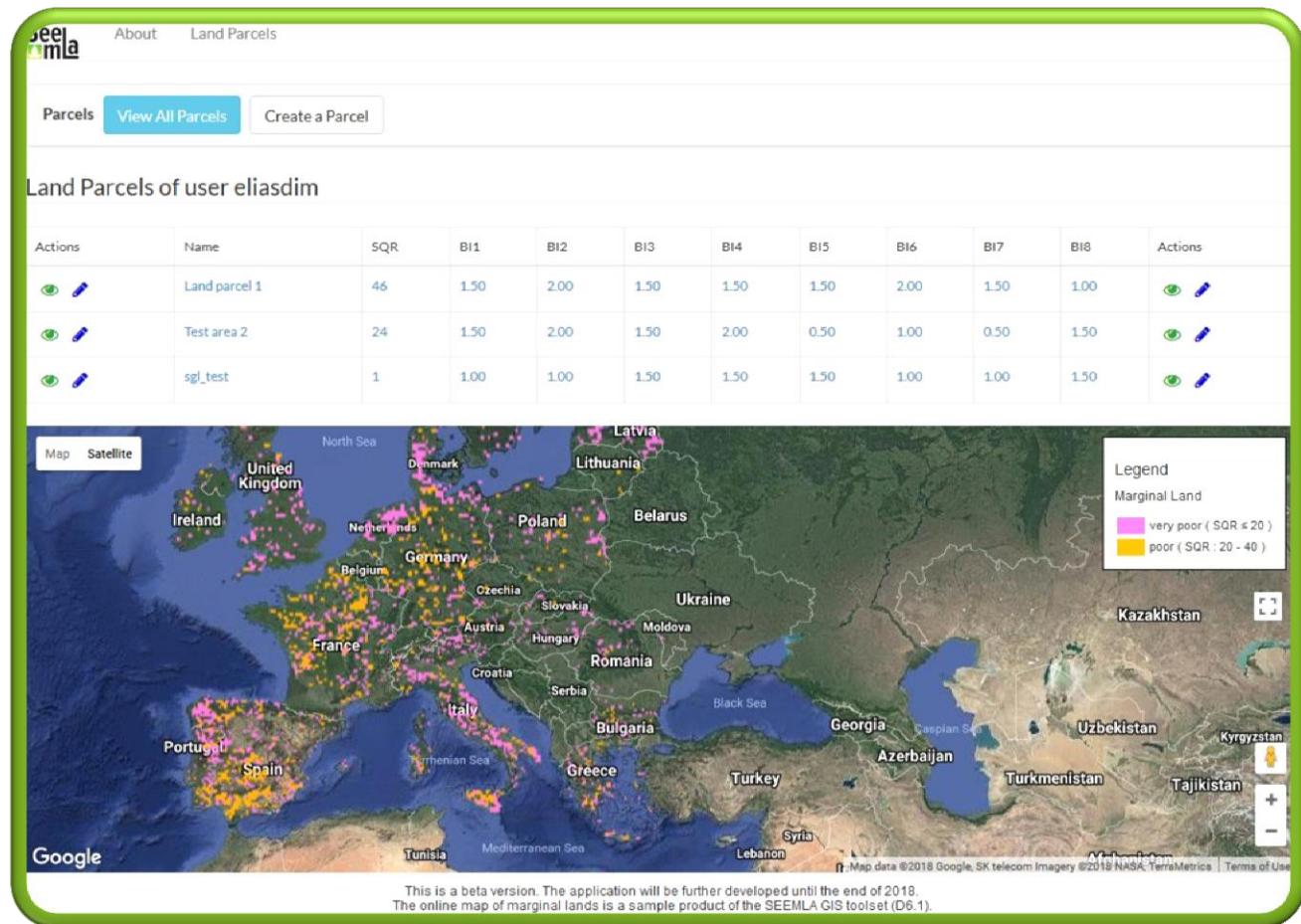
The SEEMLA GIS Tools results

1. MagLs Definition (SQR \leq 40)
2. MagLs Identification (regionalization)



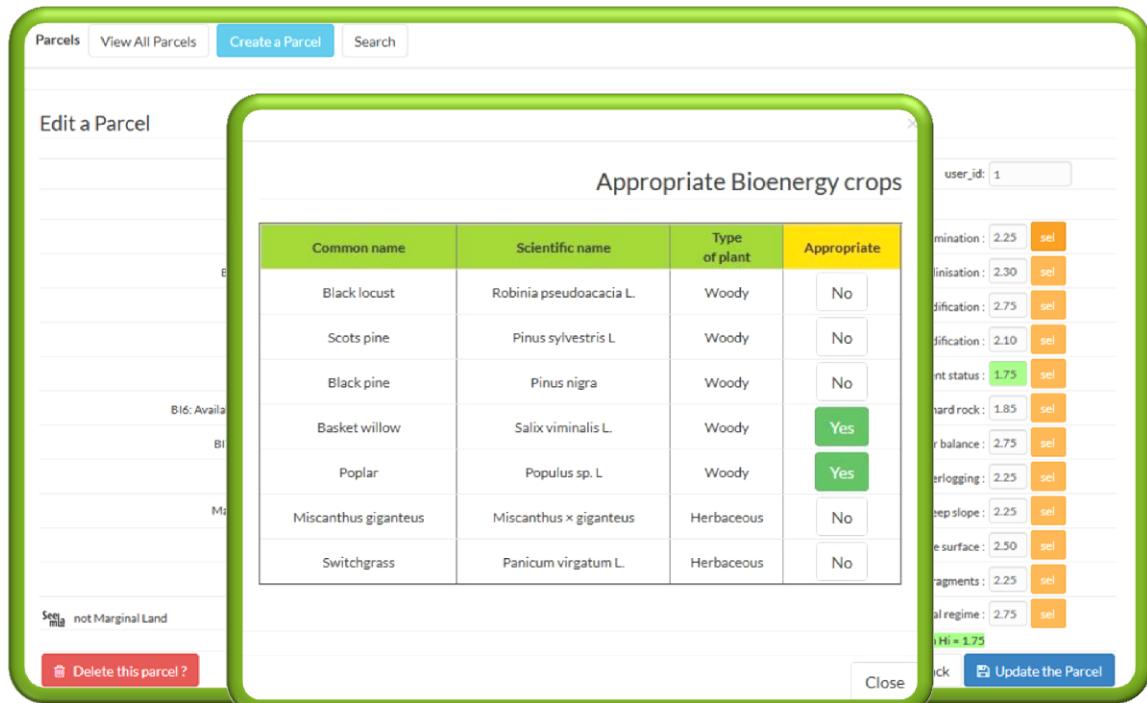
The SEEMLA Web application

1. MagLs Definition
2. MagLs Identification (regionalization)



The SEEMLA Web application

1. MagLs Definition
2. MagLs Identification (regionalization)

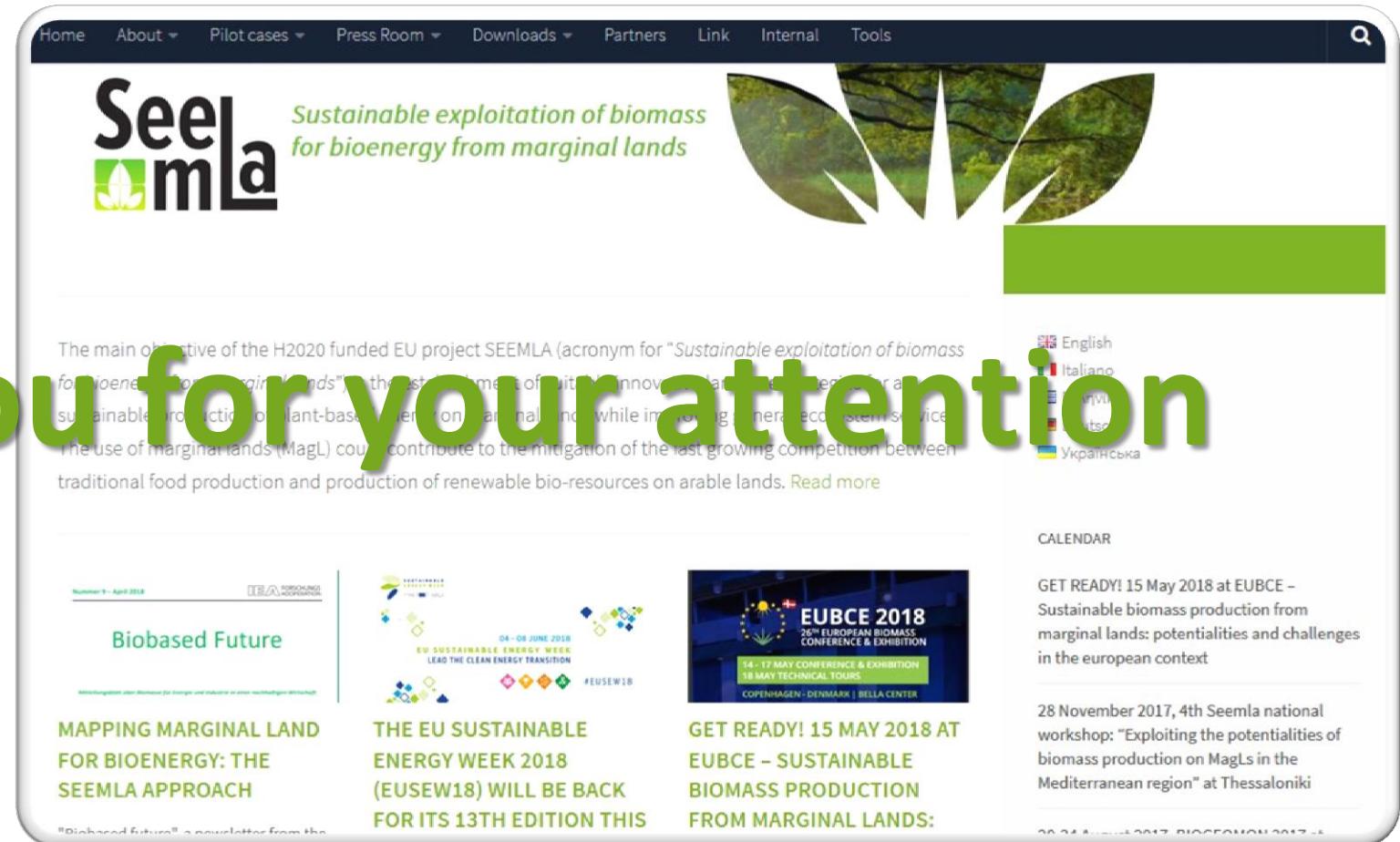


The screenshot shows a web-based GIS application interface. At the top, there are navigation buttons: 'Parcels', 'View All Parcels', 'Create a Parcel' (which is highlighted in blue), and 'Search'. Below this, a modal dialog box is open with the title 'Edit a Parcel'. Inside the dialog, there is a sub-modal titled 'Appropriate Bioenergy crops' which contains a table:

Common name	Scientific name	Type of plant	Appropriate
Black locust	<i>Robinia pseudoacacia</i> L.	Woody	No
Scots pine	<i>Pinus sylvestris</i> L.	Woody	No
Black pine	<i>Pinus nigra</i>	Woody	No
Basket willow	<i>Salix viminalis</i> L.	Woody	Yes
Poplar	<i>Populus</i> sp. L.	Woody	Yes
Miscanthus giganteus	<i>Miscanthus × giganteus</i>	Herbaceous	No
Switchgrass	<i>Panicum virgatum</i> L.	Herbaceous	No

At the bottom of the modal, there are buttons for 'Delete this parcel?' (red), 'Close' (grey), and 'Update the Parcel' (blue). The background of the application shows a map with various parcels and a sidebar with numerical values and dropdown menus.

The SEEMLA website
www.seemla.eu



The main objective of the H2020 funded EU project SEEMLA (acronym for "Sustainable exploitation of biomass for bioenergy from marginal lands") is the development of innovative technologies for a sustainable production of plant-based energy on marginal land while improving general ecosystem services. The use of marginal lands (MagL) could contribute to the mitigation of the fast growing competition between traditional food production and production of renewable bio-resources on arable lands. [Read more](#)

Biobased Future
Newsletter 9 – April 2018

MAPPING MARGINAL LAND FOR BIOENERGY: THE SEEMLA APPROACH

THE EU SUSTAINABLE ENERGY WEEK 2018 (EUSEW18) WILL BE BACK FOR ITS 13TH EDITION THIS

GET READY! 15 MAY 2018 AT EUBCE – SUSTAINABLE BIOMASS PRODUCTION FROM MARGINAL LANDS:

CALENDAR

GET READY! 15 May 2018 at EUBCE – Sustainable biomass production from marginal lands: potentialities and challenges in the european context

28 November 2017, 4th Seemla national workshop: "Exploiting the potentialities of biomass production on MagLs in the Mediterranean region" at Thessaloniki

Project coordinator
Partner

b-tu Brandenburg University of Technology Cottbus - Senftenberg

ifeu INSTITUTE FOR ENERGY AND ENVIRONMENTAL RESEARCH WESSELBURN

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TAIBA ST. LUDVÍK SALIX energy

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