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How much naturally fertile soil is there on the planet?

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The apple metaphor

Try to imagine that this apple is our Planet

The Earth

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The oceans

The lands

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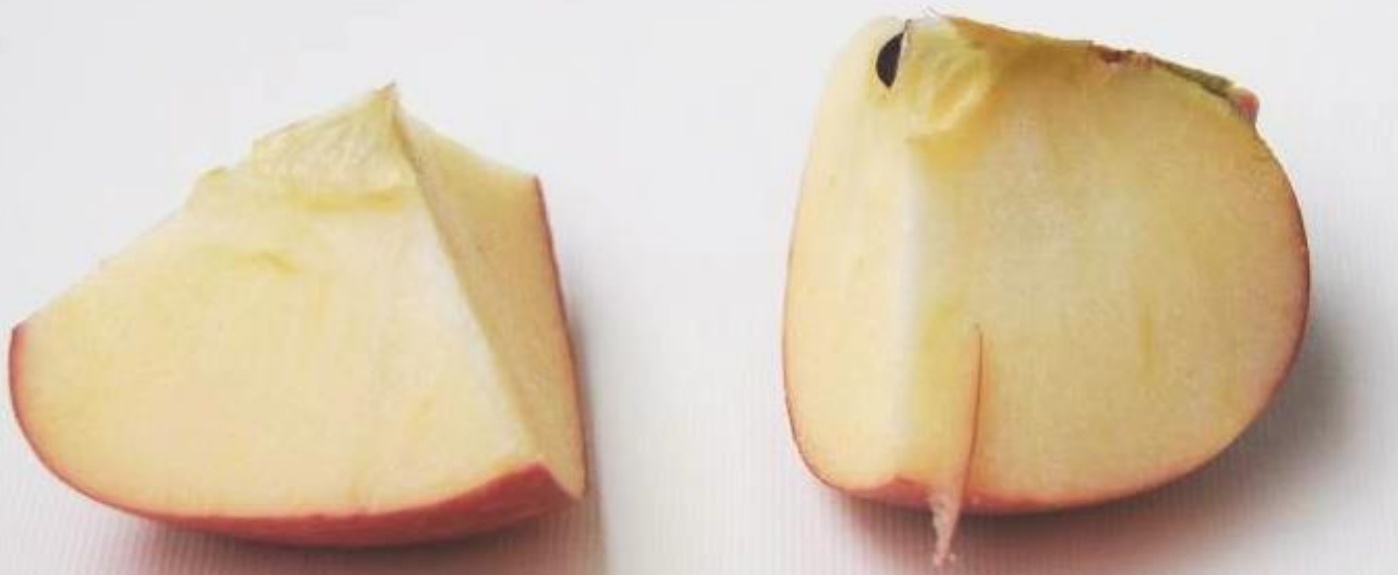
The remaining lands

Land too cold or too hot to be cultivated



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The remaining lands

Land too wet, too dry or with too low fertility to be cultivated

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The soils of the remaining lands

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The remaining soil
Soil degraded by:
erosion, compaction,
contamination,
sealing,
fertility decline, etc.
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Survival of humankind is based on this

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Sustainable management and effective conservation practices are essential to maintain soil fertility and thus ensure secure food supplies and reduce global poverty.

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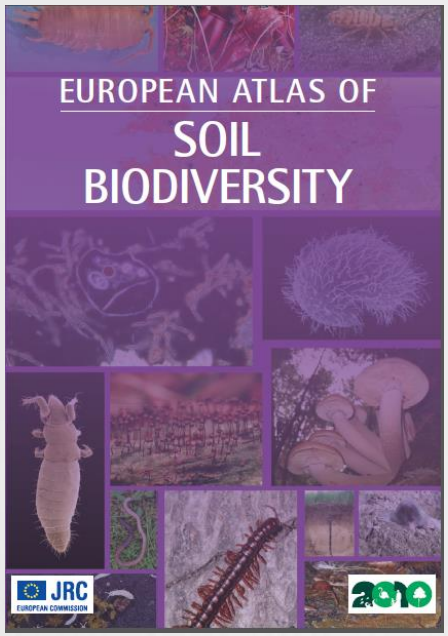
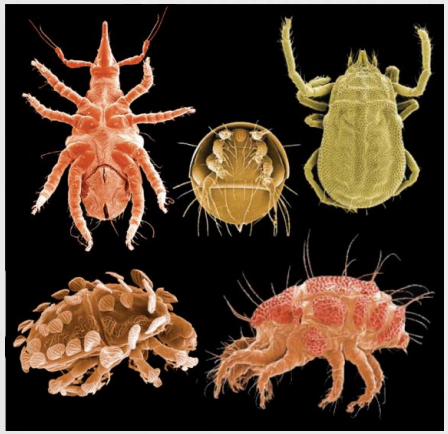
JRC research provides evidence of the critical importance of soil to society and the environment, highlights the need to reduce soil degradation activities and supports measures for sustainable soil conservation.

Key examples include the JRC soil atlas series, support to FAO's global soil partnership and activities of the European Soil Bureau Network.





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The European Atlas of Soil Biodiversity

- **Explains and illustrates the great diversity of life in the soils across Europe.**
- **Provides an overview of the below ground environment, soil biota in general, the ecosystem functions that soil organism perform.**
- **Highlights the important value soil has for human activities and relevance for global biogeochemical cycles.**
- **Aims to bring soil biodiversity into policy focus by identifying needs for policy and research strategies aimed at soil protection and enhancement of biodiversity.**

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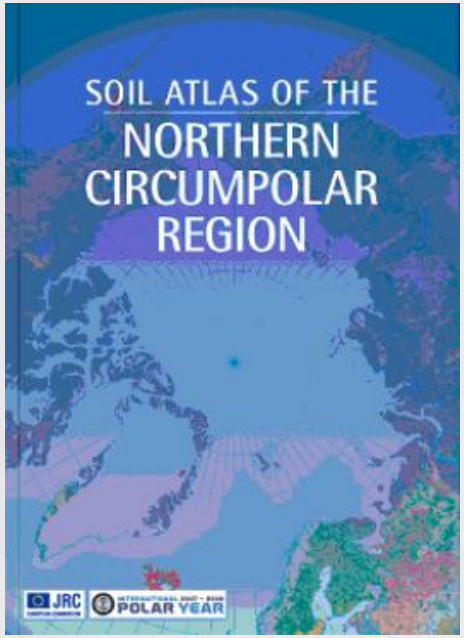

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The Soil Atlas of the Northern Circumpolar Region

- **With contributions from the northern European countries, the USA, Canada, Norway, Iceland, Greenland and Russia, provides a valuable scientific input to climate change and sustainable development models.**

- **Underlines the significant role of northern soils in climate change, covering regions above the latitude of 50° N, which represent 16% of global land surface and store 1700 billion tons of organic carbon.**

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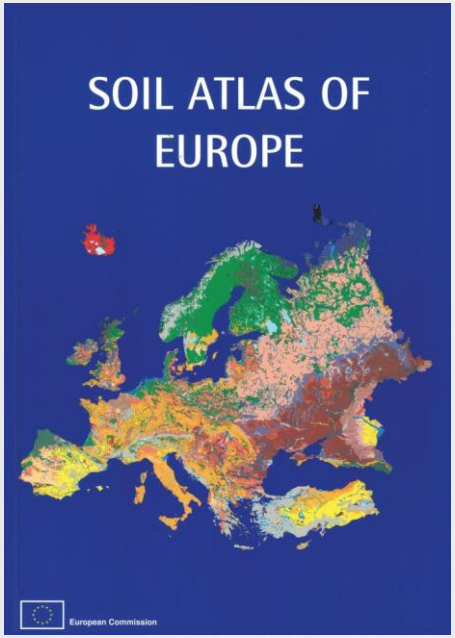

The Soil Atlas of Europe

- **Is intended to be a step towards raising public awareness on the importance and the key role of soil for many human activities and for the survival of ecosystems.**

- **Compiles existing information on different soil types in easily understandable maps covering the entire European Union and bordering countries.**

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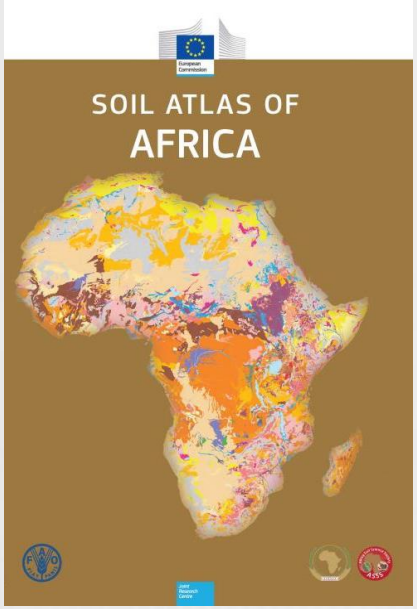
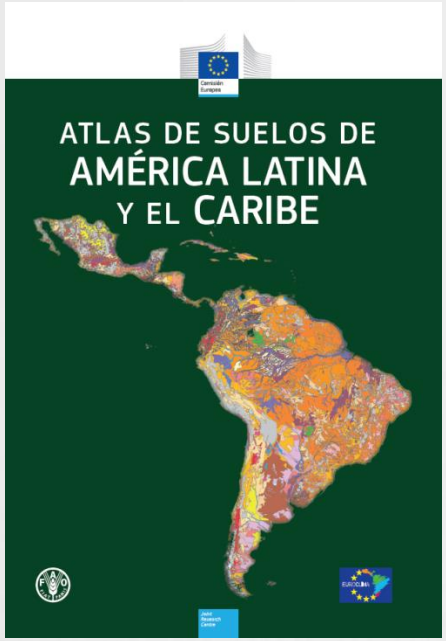


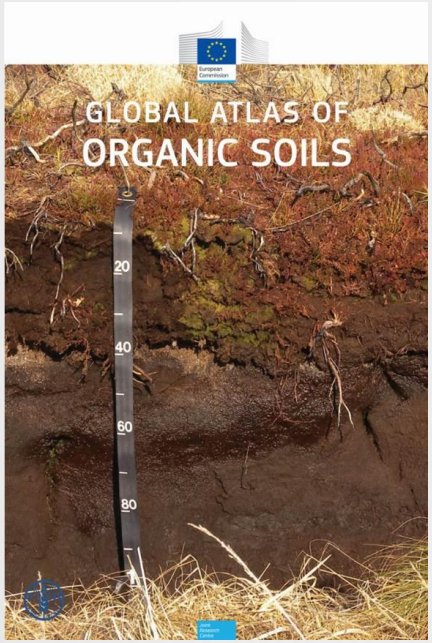
The Soil Atlas of Africa

- **Collects vital information on African soils and highlights the importance of this non-renewable resource.**
- **Healthy and fertile soils are the cornerstones of food security, key environmental services, social cohesion and the economies of most African countries. Up to 98% of all calories consumed in Africa originate from the soil resources of the continent.**
- **While Africa has some of the most fertile land on the planet, the soils over much of the continent are fragile, often lacking in essential nutrients and organic matter.**



The Soil Atlas of Latin America

- **Highlights the vital importance of a natural non-renewable resource which provides food, fodder and fuel for 580 million people.**
- **In Latin America and the Caribbean, soils have to meet the needs of a human population in continuous and rapid growth.**
- **More than half of the 576 million hectares of arable land of Latin America are estimated to be affected by degradation processes, notably in South America and Mesoamerica.**



The Soil Atlas of Organic Soils

- **In 2014, the JRC will start working on a worldwide assessment of peatlands that will eventually result in the Global Atlas of Organic Soils to be released in 2016.**

- **Peat is a unique soil type that delivered key environmental and ecological services that are under extreme pressures in many parts of the world (from warming in the Arctic, drainage in Europe, fire in Southeast Asia, etc).**

- **This new atlas will explain how this unique resource evolves, the role that it plays in our lives, its distribution and what measures are being developed to safeguard peat soils around the world.**

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