A collaborative European research project to develop more sustainable systems of agriculture and increase the diversity of cover crops and living mulches
Subsidiary crops are plants that are grown for the ecological services they provide rather than as a cash crop. They include cover crops, catch crops and living mulches.

OSCAR is an EU-funded project that aims to extend the existing knowledge base available on these subsidiary crops and to disseminate this information to growers and producers.

OSCAR will develop new cropping systems based around the use of cover crops and living mulches and will optimise these systems for use in low-tillage agriculture.

OSCAR will provide viable systems with which to:

- increase the duration of soil coverage by plant canopies;
- minimise the need for soil tillage and reduce tillage intensity;
- increase the diversity of species within the plant canopy and the rotation;
- reduce the need for fertilisers, pesticides and herbicides; and
- in dry climates, conserve water and reduce need for irrigation.

www.oscar-covercrops.eu
OSCAR involves twenty partners from nine European countries, plus Morocco and Brazil. The project brings together scientific researchers and agronomists with small businesses that are experienced in technological innovation for the production of farm machinery.

The core of the experimental programme is a set of coordinated field trials in twelve different environments, ranging from Scandinavia, through central Europe and the Mediterranean, to North Africa.

These experiments will investigate the climatic and environmental conditions under which different subsidiary crop species are best suited and the best approaches for using such crops.

Two key objectives will be the identification of new species and genotypes, and the development of new farm technology and machinery to facilitate the cultivation of subsidiary crops.
The main output of the project will be a comprehensive, publicly available knowledge base known as the Cover Crop and Living Mulch Toolbox.

The Toolbox will contain many user-interactive elements including:

- a cover crop and living mulch database;
- an equipment and technology database;
- a decision support tool, providing comprehensive advice on how to apply subsidiary crops;
- and a wiki, providing a continually evolving knowledge resource (www.covercrops.eu).

The interactive nature of the Toolbox will create a legacy for the project enabling the research and ideas to continue to grow and develop after the projects completion.