Service plants, towards new agroecosystems

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Résumé

In the context of the agro-ecological transition towards more sustainable agriculture that is more respectful of the environment and health, it is essential to reduce the dependence of crops on synthetic inputs. A solution is to optimise the ecosystem services of agrosystems, in particular by increasing the functional diversity of plants that can be introduced within or around the agrosystem. The use of Service Plants (SP) appears as a promising and original method. Service plants are plants that provide one or more ecosystem services to the agrosystem, in addition to the food/fiber provisioning service provided by the crop plant.
The aim of this book is (i) to describe the mechanisms associated with the services provided by SP - e.g. soil fertility, climate regulation, pollination & pest regulation; (ii) to identify multiservice combinations and also the risks of disservices; (iii) to describe the technical itineraries that enable SP to be effectively introduced into the agrosystem, as well as the socio-economic brakes and levers required for their adoption; (iv) to compare the use of SP between sectors (e.g. field crops, arboriculture, vines and vegetable crops) and thus rethink the agrosystem as an agroecosystem based on the functional diversity of SP and the services they provide.

Mots-Clés: Service plants

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