Benefits and usage areas of weed species

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Weeds are defined as unwanted plants by humans. Because, they cause yield loss via competition, carry on some harmful insects and release toxic chemicals as defined allelochemicals. On the other hand, no living creatures in the nature are useless. Weeds have many useful features, although they are accepted as harmful by humans. In this study, some benefits and usage areas of weeds are evaluated. Many of weed species are used as food source, for instance, *Portulaca oleracea* L., *Malva* spp. and many others. Weeds are also a genetic resource of culture plants. Many of them are used as herbal tea like chamomile (*Matricaria chamomilla* L.). Some of them are used as building material and making simple household items. For this purpose, usually *Arundo donax* L. and *Phragmites australis* (Cav.) Trin ex St. like weed species which have high lignin content are used. Some showy species like chrysanthemum (*Chrysanthemum segetum* L.) and daisy (*Bellis perennis* L.) are used in flower arrangements. Some of them are used a trap and catch plant against to some pests. Some weed species like vetch (*Vicia* spp.) are used as living mulch against to other weeds. There are also some benefits except the usage areas of weeds. For example, some weed species prevent soil erosion and also improve soil fertility by bring up nutrients from deep in the soil with their tap root and legume species are fixing nitrogen to the soil directly. Many of weed species are habitat and food source for many animals. Especially birds and insects like ants and bees are commonly used them. Some of them are indicator of some ecologic factors like soil pH (e.g. *Rumex acetocella* L.), soil fertility (e.g. *Malva sylvestris* L., *Mercurialis annua* L., *Urtica urens* L.), groundwater level (e.g. *Alopecurus myosuroides* Huds.) etc. All of these indicate that weeds are not entirely harmful. On the contrary, they have an extremely important role in terms of ecosystem and biodiversity. Therefore the main aim in weed control should not be to destroy all of them, contrary to keep them below economic threshold.

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