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Crop rotation in vegetable cultivation

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Why is it necessary to apply crop rotation rules even in the small vegetable garden?

With proper crop rotation, the soil does not become exhausted, because each plant has a different root system depth and thus the uptake of nutrients by the cultivated crops is optimized.

When a given vegetable is grown continuously in the same place, the incidence of diseases and pests increases significantly. Without crop rotation, various types of pathogens appear and multiply, and pests adapt and form whole colonies, which leads to severe damage to the plants. It is necessary to grow different vegetables on the same plot in different years, and a given crop should not be returned to the same place earlier than four years.

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A good yield is guaranteed only if the predecessors of a given crop are well selected. In addition, the application of crop rotation rules leads to proper utilization of the vacated areas within a given season. The ability of vegetables to suppress weeds also differs.

After shallots, onions and carrots, the garden usually remains more infested with weeds, while after cabbage, tomatoes, pepper or eggplant it is cleaner. Vegetables must be alternated in a way that helps reduce weed infestation and facilitates weed control.

As first crops, early potatoes, early cabbage, green peas, zucchini, garlic, etc. are grown. Cucumbers, green beans, late and cauliflower are grown as second crops. Tomatoes, pepper, eggplant, carrots, parsley, parsnip, beetroot for salad and celery are grown as main crops.

In the most commonly practiced six-field crop rotation, one of the fields is always sown with alfalfa for three consecutive years. The fields are alternated, thus ensuring a “restorative break” for all areas.

An important plant, which is not a vegetable but is included in the vegetable crop rotation, is rye. It is extremely effective in controlling rhizomatous weeds and especially couch grass. As a medicine, it cleanses the

gastrointestinal tract, and when included in the vegetable crop rotation, it cleans the field of weeds.

Leafy vegetables and herbs – an important “player” in a healthy diet

Many ornamental crops and herbs can be sown throughout the season among the vegetables, because they repel certain pests. Such are the different marigolds (Tagetes), pot marigold, savory, dill, lemongrass, basil, etc.