Fertilisation by crop rotation and polyculture

Crop rotation – a different location every year

Growing the same crop in the same place every year eventually depletes the garden soil. That's why our ancestors worked according to the three-year crop rotation principle. This principle can also apply to the vegetable garden: depending on their nutrient requirements, a distinction is made between plants with high, medium and low needs. By successively planting greedy plants, then frugal plants, you can implement crop rotation.

Three-year crop rotation for annual crops

Crop rotation over three years is the most common: the garden is divided into at least three plots. In autumn, plot 1 is fertilised with compost or an organic fertiliser (e.g. well-rotted manure) and planted with nutrient-intensive plants for the first season. Plot 2 will be reserved for less greedy plants and plot 3 for frugal plants. Every year, the groups are rotated. In year 4, the starting order is back to what it was in year 1. Using this process, no plot of land is left uncultivated, and frugal plants gather nitrogen.

Soil improvement

Crops with high nutrient requirements	Crops with medium nutrient requirements	Crops with low nutrient requirements
Main types of cabbage (white cabbage, red cabbage, cauliflower, etc.)	Garlic	Legumes (beans, peas, etc.)
Cucumber	Beetroot	
Courgette	Carrot	
Leek	Kohlrabi	
Potato	Spinach	
Pumpkin	Fennel	
Celery	Onion	
	Radish	
	Lettuce	

Perennial crops

Perennial vegetables, herbs and strawberries, or shrubs such as redcurrants and raspberries are not suitable for plots with crop rotation. Strawberry plants should remain in the same bed for three years, and green asparagus for 8 to 10 years. Rhubarb, like tomatoes, prefers to grow in the same spot year after year.

Mixed cropping – Everybody needs good neighbours

All plants have different nutrient requirements, and their growth patterns and secretions are unique. Companion plants are those that complement each other in terms of nutrient requirements and insecticide and fungicide action.

In other words, they make good neighbours. But watch out for bad neighbours – some plants are also bad for each other! They will wither or fail to thrive when cultivated too close together.

	Beans	Savory	Dill	Endives	Green peas	Strawberries	Cucumber	Nasturtium	Potato	Garlic	Types of cabbage	Kohlrabi	Lettuce	Leek	Carots	Mint	Lamb's lettuce	Radishes	Beetroot	Celery	Spinach	Tomatoes	Courgette	Onions
Beans		+	+		-	+	+		+	-	+	+	+	-			+	+	+	+		+		-
Savory	+												+				+		+					
Dill	+				+		+				+		+				+		+					+
Endives											+													
Green peas	-		+				+		-	-	+	+	+	-	+			+				-		-
Strawberries	+									+	-		+	+				+			+			+
Cucumber	+		+		+				-	+	+	+	+	+				-	+	+		-		+
Nasturtium									+									+				+		
Potato	+				-		-	+		+		+				+			-	-		-		
Garlic	-				-	+	+		+		-				+				+			+		
Types of cabbage	+		+	+	+	-	+			-			+	-		+	+	+	+	+	+	+		-
Kohlrabi	+				+		+		+				+	-				+	+	+	+	+		+
Lettuce	+	+	+		+	+	+				+	+		-	+	+		+	+	-		+		+
Leek	-			+	-	+	+				-	-	-		+				-	+		+		+
Carrots			+		+					+			+	+		+	+	+				+		+
Mint									+		+		+		+							+		
Lamb's lettuce	+	+	+								+				+			+	+			+		
Radishes	+				+	+	-	+			+	+	+		+		+				+	+		-
Beetroot	+	+	+				+		-	+	+	+	+	-			+					+		+
Celery	+						+		-		+	+	-	+								+		
Spinach						+			+		+	+						+				+		
Tomatoes	+				-		-	+	-	+	+	+	+	+	+	+	+	+	+	+	+		+	+
Courgette					+			+														+		+
Onions	-		+		-	+	+				-	+	+	+	+			-	+			+	+	

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