

# In the vegetable garden in May

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## Plant protection measures in the vegetable garden in May

- Selection of well-ventilated areas for crop cultivation;
- Regular autumn, pre-sowing and inter-row tillage lead to a significant reduction in pest density through mechanical destruction of a large part of the pupae in the soil;

- Introduction of crop rotations including crops other than the family *Solanaceae*. Very good predecessors are cereal and grain-legume crops;
- Spatial isolation. If crops that share common pests are grown on adjacent plots, there is a risk of movement from one crop to the other. This is particularly important for vectors of viral and other diseases (thrips, aphids, the leafhopper *H. obsoletus*);
- Observance of the most appropriate sowing and transplanting dates. Early planted crops ensure higher yields even under severe stolbur incidence;
- Use of pest-free areas, determined after preliminary surveys (wireworms, root-knot nematodes, etc.);
- Optimal plant density;
- “Bordering” of the crop with a strip free of weed vegetation;
- Use of healthy seedlings, free from diseases and pests;
- Selection of suitable varieties with resistance to certain diseases and root-knot nematodes;
- Use of certified seeds, free from pathogens;
- Limitation of overhead (sprinkler) irrigation;
- Placement of blue and yellow sticky traps in greenhouses and seedling compartments;
- The use of pheromone traps for tomato leafminer is a reliable method for timely detection of the presence of male moths and for reducing population density.
- Destruction of weed vegetation;
- Maintenance of an optimal water and nutrient regime. Under drought conditions, infestation by thrips and spider mites is higher. Unbalanced nitrogen fertilization causes prolonged vegetation and weakening of the plants, making them more susceptible to attack by aphids, greenhouse whitefly and certain diseases. When fertilizing with phosphorus and potassium fertilizers, fruit ripening is accelerated and tissues become tougher, which is unfavorable for pests and they attack and damage such plants to a lesser extent;
- Regular monitoring of the fields. This measure is of exceptional importance for timely detection of harmful organisms and for effective implementation of plant protection practices;
- In the presence of critical periods for the occurrence of diseases and pests, preventive treatments with plant protection products should be carried out;
- Collection and destruction of plant residues at the end of the vegetation period.

*The system for the protection of tomatoes, peppers and eggplants from the most dangerous diseases and pests during the vegetation period is published in issue 4/2018 of the journal “Plant Protection”*

