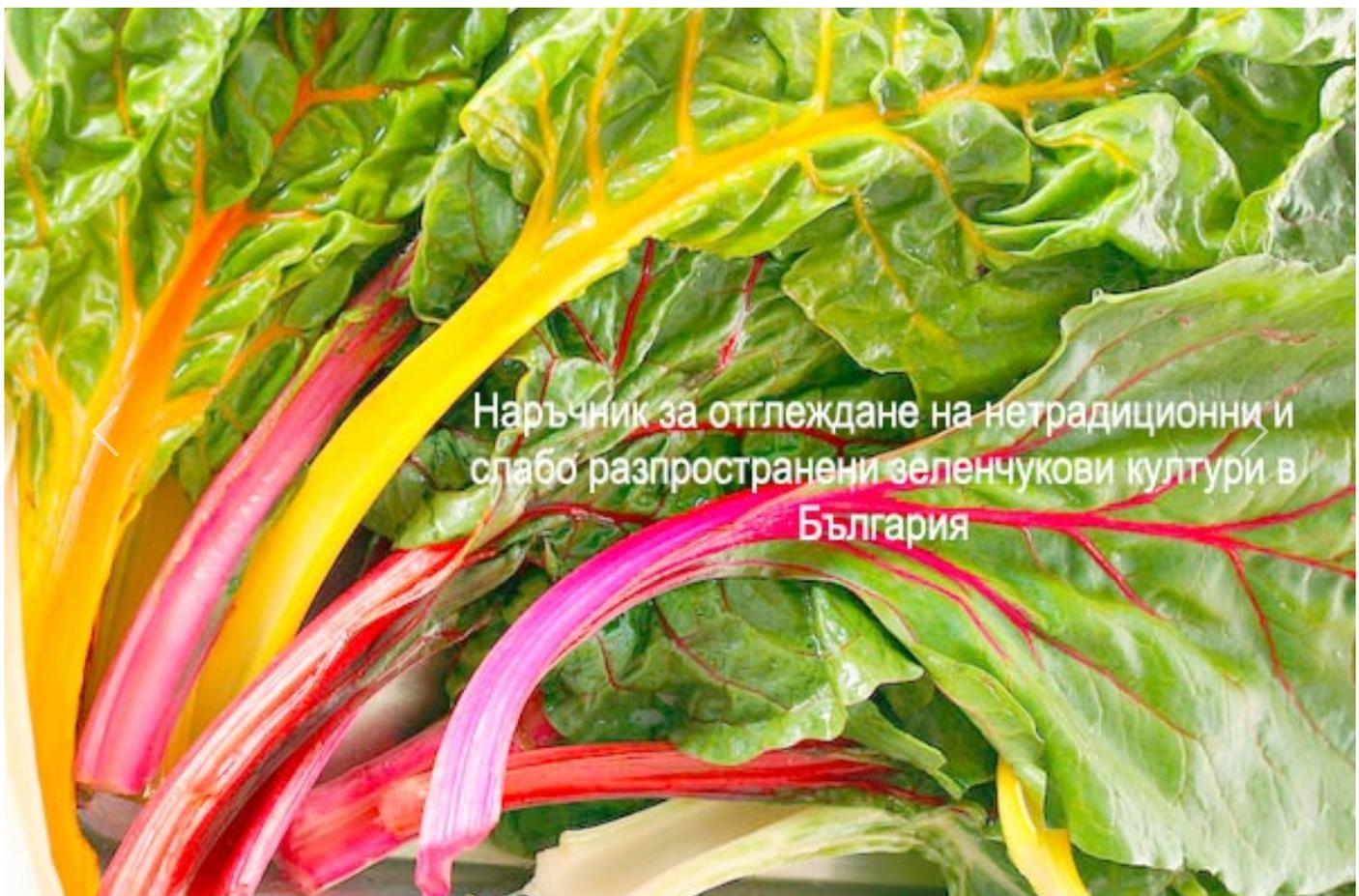


# Manual of technological instructions for the cultivation of non-traditional and less widespread vegetable crops in Bulgaria

*Author(s):* доц. д-р Цветанка Динчева, ИЗК "Марица" в Пловдив

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In the Innovation Competition, section “Scientific Developments” at AGRA 2024, the “Maritsa” Vegetable Crops Research Institute, Plovdiv (Agricultural Academy, Sofia) was awarded a Diploma for Innovative Product.

The innovative product “Handbook of technological instructions for the cultivation of non-traditional and minor vegetable crops in Bulgaria” was developed by scientists from the “Maritsa” Institute (Assoc. Prof. Tsvetanka Dincheva, PhD; Prof. Hriska Boteva, PhD; Assoc. Prof. Vinelina Yankova, PhD; Assoc. Prof. Olga Georgieva, PhD; Chief Assist. Prof. Boyan Arnaudov, PhD; Chief Assist. Prof. Dima Markova, PhD; Assoc. Prof. Ivanka

Tringovska, PhD), one scientist from the Institute of Agriculture – Kyustendil (Chief Assist. Prof. Desislava Todorova, PhD) and one scientist from the Institute of Rose and Essential Oil Crops – Kazanlak (Assoc. Prof. Stanko Stanev, PhD). The scientific product aims to provide basic guidelines for cultivation, covering the agrotechnical activities from soil preparation to harvesting and giving guidance on plant protection against diseases and pests for the following crops: lovage, pak choi, arugula, parsnip, chard and leaf beet.



*Assoc. Prof. Tsvetanka Dincheva, PhD*

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*If you are interested in the printed edition of the handbook, you may contact VCRI “Maritsa” – <http://izk-maritsa.org/kontakti/> or directly Assoc. Prof. Tsvetanka Dincheva, PhD at the following phone number: 0896265792*

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The handbook consists of five technological instructions. It is intended for farmers of very small (0.5–1.0 ha) and small farms (1.0–5.0 ha), as well as for amateur gardeners of these crops, with the aim of increasing the diversity of plant species that differ in their biological requirements, cultivation methods and consumption compared to the vegetables traditionally grown in the country.

The technological instructions are the result of four-year scientific research carried out under the conditions of the town of Plovdiv at the “Maritsa” Institute, in open-field conditions with lovage, parsnip, chard, leaf beet and under greenhouse conditions with arugula and pak choi. In the town of Kyustendil – Institute of Agriculture, studies were conducted with chard and leaf beet. The materials cover the specific biological characteristics of the crops, the length of their vegetation period and their requirements for climatic conditions. The most suitable periods and schemes for their cultivation have been identified, fertilization recommendations have been made and key agrotechnical guidelines have been presented so that they can assist farmers to successfully cultivate them, achieve optimal productivity and market high-quality produce from these crop species. To date, studies on technological elements for the cultivation of chard, leaf beet, parsnip and lovage have not been updated, and no research has been carried out on the cultivation of arugula and pak choi. In this respect, the innovative scientific product provides valuable information that can easily be applied in practice and serve as a basis for more in-depth studies.