

**Designação do projeto/Project title:** GO – Biofortification of tomato for industrial processing under biological production mode

**Código do projeto/Project code:** PDR2020-101-030703

**Objetivo principal/Main objective:** To promote Zn biofortification of tomato to improve its nutritional value.

**Região de Intervenção/Intervention region:** NUTS II

**Entidade beneficiária/Beneficiary entity:** Instituto Superior de Agronomia, Universidade de Lisboa

**Proponente/Proponent:** Faculdade de Ciências e Tecnologia da Universidade NOVA de Lisboa

**Outros parceiros/Other partners:** Instituto Superior de Agronomia da Universidade de Lisboa, Instituto Nacional de Investigação Agrária e Veterinária, I.P., Instituto Politécnico de Beja - Escola Superior Agrária, Associação de Beneficiários do Roxo, Campos do Roxo Lda., Quinta do Montalto II AgroIndústria Lda., AGROBIO - Associação Portuguesa de Agricultura Biológica, Universidade de Extremadura / UNEX (Spain), Company Agredo EOOB (Bulgaria), Network "Zinc-Net Cost Action TD1304".

**Data de aprovação/Approval date:** 07-06-2017

**Data de início/Beggining:** 01-10-2017

**Data de conclusão/Ending:** 30-12-2020

**Custo total elegível ISA/Eligible total cost ISA:** 26567.72 € (ISA/ULisboa)

**Apoio financeiro da União Europeia/European funding support:** FEADER – 19925.90 € (ISA/ULisboa)

**Site do projeto/Project site:** [https://sites.fct.unl.pt/bio\\_tomate\\_mg\\_zn\\_fe/](https://sites.fct.unl.pt/bio_tomate_mg_zn_fe/)

**Resumo e Objectivos/Abstract and objectives:** Agronomic biofortification has been used as a practice to enrich some minerals in the edible plant parts, with positive impact to health, namely as regards Mg, Fe and Zn. Mg deficiency affects ca. 5% of world population (but 25-47% of diabetics, 66% of metabolic syndrome, 30-80% in alcoholics). And with other import roles in human metabolism. Also Fe and Zn have important roles for human physiology. Fe is essential for haemoglobin synthesis, cerebral and muscular functions, etc. Zn is of upmost importance as antioxidant, enzyme regulation, etc. In this context, it is proposed to promote biofortification of tomato (*Solanum lycopersicum* L.) cultivars through leaf spraying, to identify the best way of application (solution and doses), as well as to study the possible changes in the nutritional value and the implications to food transformation industry (since it be studied only cultivars approved by industry).

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