



TITLE

FERPLANT - NEW FERTILIZERS TO PREVENT CHLOROSIS

HIGHLIGHTS

Development of a new source of Fe chelates that may be sustainable alternatives to existing commercial products for iron deficiency soil improvers

ABSTRACT

Iron deficiency chlorosis (IDC) is a serious environmental problem affecting the growth of several crops in the world. Soil application of synthetic Fe (III) chelates is still one of the most common measures to correct IDC and the search for more effective Fe chelates remains an important issue. Herein, we will analyse the effectiveness of tris (3-hydroxy-4-pyridinonate) iron(III) complexes, Fe(dmpp)₃ and Fe (mpp)₃, as well as others, as new IDC correctors. Different morphological, biochemical and molecular parameters will be assessed as a first step towards understanding their mode of action, compared with that of the commercial fertilizer FeEDDHA, in soybean (*Glycine max L.*) plants.

KEYWORDS

Deficiency of Iron in Soils, Iron Chelates, Chlorosis, Fertilizers, IDC

PROMOTERS / PARTNERS

Escola Superior de Biotecnologia – Universidade Católica Portuguesa (coordinator)

FINANCING PROGRAM	EXECUTION DATE	GLOBAL BUDGET
PTDC/AGR-PRO/3515/2014	2016-2019	€ 96 599,00

CONTACTS	E-MAIL	PHONE
Marta Vasconcelos	mvasconcelos @porto.ucp.pt	+351 22 558 0001