

Copper(II) complexes of the imidazolinone herbicide imazapyr.

Autorzy

Anna M. Duda

Marcin Dyba

Henryk Kozłowski

Giovanni Micera

A. Pusino

Rok wydania

1996

Czasopismo

Journal of Agricultural and
Food Chemistry

Numer woluminu

44

Strony

3698-3702

DOI

10.1021/jf9507856

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The copper(II) complexes formed by the imidazolinone herbicide imazapyr [(±)-2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)nicotinic acid] were studied in aqueous solution by potentiometric and spectroscopic techniques. Imazapyr acts as a chelating molecule and is effective over a wide pH range. The chelating set active in acidic media involves rather weak donors, namely the pyridine and imidazole nitrogens. In neutral media, the lactam site of the imidazolinone ring deprotonates and the ligand takes advantage of a rather basic nitrogen atom, which, assisted by the pyridine donor, yields stable complexes with five-coordination at the metal ion.

Słowa kluczowe

Imazapyr, 2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)nicotinic acid, copper(II) complexes

Adres publiczny

<https://doi.org/10.1021/jf9507856>

Strona internetowa wydawcy

<https://www.acs.org/content/acs/en.html>