



BioTechnologie BT

YOUR PRODUCT... OUR KNOW-HOW



Biotechnologie BT delivers a **complete** and competitive range of **integrated studies** to support the product **registration** and active substance approval/renewal of **agrochemicals**, **biopesticides**, **biostimulants** and **biocides**.

- **European Contract Research Organization (CRO)**
- **GLP and GEP certified**
- **2 Test facilities**
- **Cutting edge equipment**
- **State-of-the-art laboratories**
- **Greenhouses**
- **In house insectarium**

All of our tests are performed in compliance with **International** accepted Guidelines

Biotechnologie BT, thanks to its consolidated know-how and highly qualified staff is here to support you in providing the essential data for the creation of a complete dossier, solving any challenges along the way.



BioTecnologie BT

YOUR PRODUCT .. OUR KNOW-HOW

Our test facilities: A wide range of services

**GLP, GEP
certified**



GLP, GEP certified

Set up and GLP Validation of Chemical Analytical Methods

5-Batch analysis

Environmental Fate test

Agrochemical Residue studies

Efficacy and residues studies

Agrochemical Residues studies

**Efficacy and residue Field trials Including biopesticides
and biostimulants**

**GLP
certified**



GLP certified

Ecotox tests

Phys-Chem characterizations

Storage stability studies

**Studies on microbial biopesticides and
biostimulants**

(bacteria, fungi, yeasts and viruses)

**Laboratory-scale and greenhouse
screening**



BioTecnologie BT

Frazione di Pantalla di Todi

06059 Perugia - Italy

Phone: +39 075 8950045

info@biotechnologiebt.it



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YOUR PRODUCT .. OUR KNOW-HOW

**OUR INTEGRATED
APPROACH TO BOOST
THE POTENTIAL OF
BIO-CONTROL
AGENTS**



**DEDICATED TASKFORCE OF
SPECIALISTS IN MICROBIOLOGY**

- ✓ **STUDIES ON ACTIVE SUBSTANCE:**
 - Determination of the Minimal Inhibitory Concentration (MIC)
 - Growth morphological characteristics and viability at different temperatures
 - Fate and behaviour in soil and water
 - In vitro efficacy laboratory-scale screening for early stage
- ✓ **STUDIES ON TECHNICAL AND FORMULATED PRODUCTS**
 - Set-Up and Analytical method validation for determination of active substance and metabolites
 - 5- batch analysis (determination of active ingredient contaminants and metabolites)
 - Physical-Chemical characterization
 - Storage stability studies
 - Analytical Ecotox

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**OUR EXPERTISE IN
DEVELOPING
BESPOKE
ANALYTICAL
METHODS TO
SATISFY YOUR
SPECIFIC
UNRESOLVED
NEEDS**

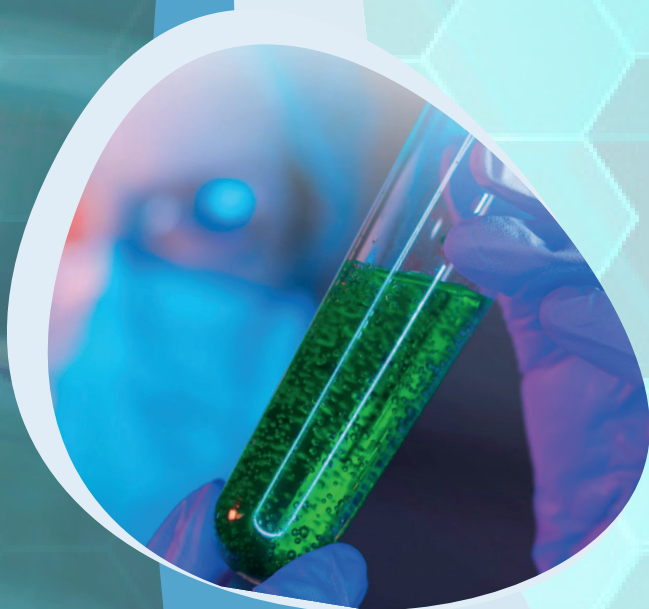


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YOUR PRODUCT .. OUR KNOW-HOW

**A COMPLETE SET OF TOOLS AND A
DEDICATED TEAM OF STUDY DIRECTORS TO
BUILD UP A DETAILED PROFILE OF YOUR
TECHNICAL AND FORMULATED PRODUCTS**

- ✓ *5-Batch analysis of Technical and Formulated products*
- ✓ *Phys-Chem characterizations*
- ✓ *GLP Certificates of Analysis (COA)*
- ✓ *Determination of impurity profiles*
- ✓ *Accelerated & Long-term Storage Stability studies*
- ✓ *A dedicated team of specialists in analytical chemistry*
- ✓ *Analytical Methods set-up and validation to determine active ingredients, metabolites and degradation products in matrices from residue, environmental and ecotox test*
- ✓ *Residue analysis of fresh and processed plant & animal derived products*
- ✓ *Residue quantification in environmental matrices*
- ✓ *Environmental Fate Studies*





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YOUR PRODUCT .. OUR KNOW-HOW

**FROM CONSOLIDATED EXPERTISE IN
CONDUCTING GLP STUDIES TO
OUR COMMITMENT TO
INNOVATE RESEARCH AND
INTERNATIONAL RING TESTS**

- ✓ **Honeybees acute oral/contact toxicity test**
(OECD 213/214)
- ✓ **Honeybees chronic adult 10 days oral
toxicity test** (OECD 245)
- ✓ **Honeybees larval toxicity test,
single/repeated exposure** (GD239)
- ✓ **Bumblebees, acute
oral/contact toxicity test** (OECD 247/246)



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**OUR SPECIALITY:
EXPERIENCED TASK
FORCE ON HEALTH
STUDIES OF
POLLINATORS**





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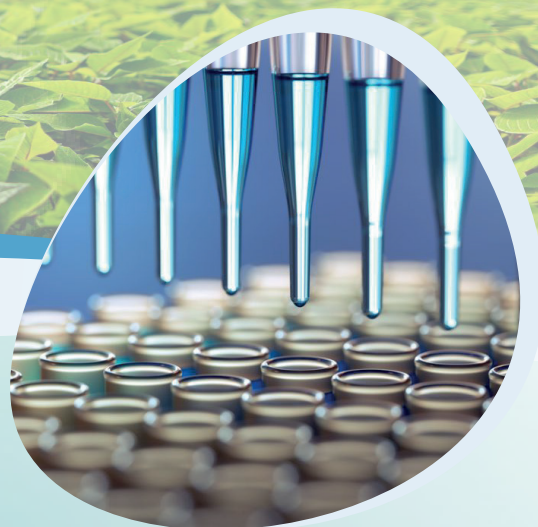
YOUR PRODUCT .. OUR KNOW-HOW

OUR COMMITMENT TO IN-DEPTH ASSESS ENVIRONMENTAL IMPACT

- ✓ *End-to-end package of ecotox GLP tier-I and tier-II studies*
- ✓ *Non-target arthropods*
- ✓ *Pollinators*
- ✓ *Soil macro- and micro-organism*
- ✓ *Non-target plants*
- ✓ *Aquatic plants and Algae*
- ✓ *Aquatic invertebrates*
- ✓ *Activated sludge*
- ✓ *Environmental fate studies on soil, water and sediment*
- ✓ *Ready Biodegradability test*
- ✓ *Chemical analysis on samples from Ecotox studies*



FERTILIZERS AND BIOSTIMULANTS



MAIN ANALYSES CONDUCTED:

- ✓ **Physical chemical characterization**
- ✓ **Determination of chemical and microbiological impurities**
- ✓ **Quantification of microbial active ingredient**
- ✓ **Determination of the complete chemical composition**
- ✓ **Determination and quantification of pathogenic and non-pathogenic microorganisms**
- ✓ **Biochemical characterization in a laboratory scale aimed to discover the specific activities of several microorganisms.**
- ✓ **Efficacy evaluation: In vitro screening, in vivo efficacy test in climatic chamber and/or greenhouse, agronomic evaluation in open field**

Our staff is involved in the **European Working Group CEN/TC 455/WG 3 “Pathogenic and non-pathogenic microorganisms”** and in the **European Working Group CEN/TC 455/WG 5 “Labelling and denominations”** projects in the frame of the European Commission Standardization Request M/564 to the European Committee for Standardization as regards the EU fertilizing products in support of Regulation (EU) 2019/1009 of the European Parliament and of the Council ; and actively participates as project leader in the drafting of the following guidelines:

- ✓ **DETERMINATION OF SHIGELLA SPP.**
- ✓ **PREPARATION OF SAMPLE FOR MICROBIAL ANALYSIS**
- ✓ **DETERMINATION OF ESCHERICHIA COLI**
- ✓ **DETERMINATION OF YEAST AND MOULD**



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BioTechnologie BT

AGRONOMY UNIT



- ✓ **Agrochemical residue studies in fresh and processed matrices**
- ✓ **Efficacy and selectivity field studies in annual and perennial crops (Italy)**
- ✓ **Environmental fate studies**

With our well-established expertise in efficacy studies and residue studies, performed in compliance to the Good Agronomic and Laboratory Practices, we are well-equipped to deliver high-quality services to our clients in the field of fertilizers and biostimulants.