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Lecturer of Undergraduate Program in Agrotechnology Study Program
Faculty of Agriculture
Universitas Sumatera Utara

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🏢 Room of Vice Dean I for Academic and Student Affairs, 2nd Floor of the USU Faculty of Agriculture Main Building

🌐 fp.usu.ac.id/en/lecturer/lisnawita

Lisnawita, familiarly called Ita, born in Kuala Simpang on October 5, 1969, is a lecturer at the Agrotechnology Study Program, Faculty of Agriculture, Universitas Sumatera Utara. Her main focus is the study of plant diseases (Phytopathology), with specialization in fungi and nematodes in plants.

Her higher education includes:

- Undergraduate Program in Plant Pests and Diseases, Universitas Sumatera Utara
- Master in Phytopathology, Institut Pertanian Bogor
- PhD in Phytopathology, Institut Pertanian Bogor

With her experience and in-depth knowledge, Ita plays an active role in teaching and developing plant disease science in the academic environment. Her profile reflects her high dedication to the field of mycology and nematology and her contribution to producing competent young people at the USU Faculty of Agriculture.

Publications

2015

Jurnal nasional

Enkapsulasi Beberapa Jenis Trichoderma. sp. pada Benih Kedelai untuk Mengendalikan Penyakit Sclerotium rolfsii Sacc.

DR LISNAWITA SP, MSI

2018

Prosiding seminar internasional

National Center for Biotechnology Information (NCBI) database search for rubber plant Hevea brasiliensis

DR LISNAWITA SP, MSI , MOHAMMAD BASYUNI , BAYU PRATOMO , RAHMAH HAYATI

2025

Book chapter internasional

Macromolecules from the fungal origin and their role in the development and production of sustainable and functional food

DR LISNAWITA SP, MSI , PROF DR IR AHMAD RAFIQI TANTAWI. MS , WISMAROH SANNIWATI BR SARAGIH

2021

Jurnal internasional bereputasi

Potency of secondary metabolites of Trichoderma asperellum and Pseudomonas fluorescens in the growth of cocoa plants affected by vascular streak dieback

DR LISNAWITA SP, MSI

2025

Book chapter internasional

Nanobiostimulants in Innovative Agriculture

DR LISNAWITA SP, MSI

2013

Jurnal nasional

Indeks Keanekaragaman Jenis Serangga pada Pertanaman Kelapa Sawit

(*Elaeis guineensis* Jacq.) di Kebun Helvetia PT. Perkebunan Nusantara II

MENAULY TARIGAN , DR LISNAWITA SP, MSI

2021

Prosiding seminar internasional

The bioinformatics of projected acetyl-CoA carboxylase genes in *Hevea brasiliensis*

DR LISNAWITA SP, MSI , MOHAMMAD BASYUNI

2025

Jurnal nasional terakreditasi

Pengabdian Internasional: Pelestarian dan Food Estate Melalui Penanaman Pohon di Ekowisata Beras Basah

DR LISNAWITA SP, MSI , WISMAROH SANNIWATI BR SARAGIH , IRWAN AGUSNU PUTRA , OCTANINA SARI BR SIJABAT , DEDI KURNIAWAN , BEJO SLAMET

2012

Jurnal internasional bereputasi

Identification of potato cyst nematode in Indonesia by polymerase chain reaction

DR LISNAWITA SP, MSI , SUPRAMANA

2021

Jurnal internasional bereputasi

Genetic Diversity and Sequences Analysis from *Elaeis guineensis* Jacq. Infected with *Ganoderma boninense*

DR LISNAWITA SP, MSI , MOHAMMAD BASYUNI , ERMAN MUNIR

2013

Jurnal nasional

Pengaruh Jenis Insektisida Terhadap Lalat Bibit (*Ophiomyia Phaseoli* Try.) Pada Tanaman Kedelai (*Glycine Max L.*)

YUSWANI PANGESTININGSIH , DR LISNAWITA SP, MSI

2018

Jurnal nasional terakreditasi

Sebaran Nematoda Sista Kentang di Wonosobo dan Banjarnegara, Jawa Tengah

DR LISNAWITA SP, MSI

2025

Jurnal internasional bereputasi

Integration of WebGIS and low-cost GNSS u-blox F9R into an android-based survey application for real-time monitoring

PUTRA MAULIDA , DR LISNAWITA SP, MSI , MOKHAMAD NUR CAHYADI , HEPI HAPSARI HANDAYANI , DENI KUSUMAWARDANI

2018

Artikel ilmiah

Survey and Identification of Meloidogyne Species Associated with Potato in North Sumatra, Indonesia

DR LISNAWITA SP, MSI , PROF DR IR AHMAD RAFIQI TANTAWI. MS , FITRIANINGRUM KURNIAWATI

2024

Buku referensi

Bakteri *Pseudomonas fluorescens* Terhadap Penyakit Virus Tanaman Cabai

IR. NURLIANA , DR LISNAWITA SP, MSI

2024

Buku referensi

MANAJEMEN PENGETAHUAN

DR LISNAWITA SP, MSI , PROF DR IR AHMAD RAFIQI TANTAWI. MS

2013

Jurnal nasional

Tingkat serangan ulat kantung *Metisa plana walker* (Lepidoptera: Psychidae)

terhadap umur tanaman kelapa sawit (*Elaeis guineensis* jacq.) di Kebun Matapao PT. Socfin Indonesia

DR LISNAWITA SP, MSI

2013

Jurnal internasional bereputasi

Nematodes from galls on Myrtaceae. V. *Fergusobia* from large multilocular shoot bud galls from *Angophora* and *Eucalyptus* in Australia, with descriptions of six new species

DR LISNAWITA SP, MSI

2023

Jurnal internasional bereputasi

The Vector of Pineapple Mealybug Wilt-associated Virus (PMWaV) in Sipahutar Pineapples in North Tapanuli, Indonesia

WISMAROH SANNIWATI BR SARAGIH , DEWI SARTIAMI , MARYANI CYCCU TOBING , PROF DR IR AHMAD RAFIQI TANTAWI. MS , ARTA JUNITA HUTAHAYAN , DR LISNAWITA SP, MSI

2024

Prosiding seminar internasional

The presence of *Myopopone castanea* Smith (Hymenoptera: Formicidae) as a predator in oil palm plantations

MARYANI CYCCU TOBING , DR LISNAWITA SP, MSI , WIDIHASTUTY

2021

Prosiding seminar internasional

Pineapple mealybug wilt-associated virus (PMWaV) on Sipahutar pineapple, in North Tapanuli, Indonesia

PROF DR IR AHMAD RAFIQI TANTAWI. MS , DR LISNAWITA SP, MSI

2013

Jurnal nasional terakreditasi

Aplikasi Cendawan Endofit terhadap Perkembangan Populasi Nematoda *Radopholus similis* pada Pisang Barangan

DR LISNAWITA SP, MSI , PROF DR IR AHMAD RAFIQI TANTAWI. MS

2025

Jurnal internasional bereputasi

Isolation and characterization of potential amyolytic, proteolytic, gelatinolytic and chitinolytic properties in bacterial antagonists obtained from chilli plants (*Colletotrichum* spp.)

PROF DR IR AHMAD RAFIQI TANTAWI. MS , DR LISNAWITA SP, MSI , RASISKA TARIGAN , Catur Hermanto

2010

Jurnal nasional terakreditasi

Pengaruh Temperatur Terhadap Perkembangan Nematoda Sista Kentang (*Globodera* Spp.) Indonesia

DR LISNAWITA SP, MSI , SUPRAMANA

2024

Buku referensi

BAKTERI *Pseudomonas fluorescens* TERHADAP PENYAKIT VIRUS PADA TANAMAN CABAI

DR LISNAWITA SP, MSI , IR. NURLIANA

2013

Jurnal nasional terakreditasi

Identifikasi Patotipe *Globodera rostochiensis* Menggunakan Klon Diferensial

DR LISNAWITA SP, MSI , SUPRAMANA

2020

Jurnal internasional bereputasi

Short communication: Mads-box genes expression in seedlings of *elaeis guineensis* jacq. resistance to *ganoderma boninense*

DR LISNAWITA SP, MSI

2021
Jurnal internasional bereputasi

The fourier transform infrared spectroscopy (Ftir) from diplazium esculentum and rivina humilis analysis to reveals the existence of necessary components in oil palm plantations of ganoderma boninense control

DR LISNAWITA SP, MSI

2015
Jurnal nasional

Potensi bakteri endofit dalam meningkatkan pertumbuhan tanaman tembakau yang terinfeksi nematoda puru akar (Meloidogyne spp.)

DR LISNAWITA SP, MSI , SYAHRIAL OEMRY

2025
Jurnal internasional bereputasi

Insect pollinators of oil palm plantations in South Sumatra, Indonesia

NOVRI NELLY , DR LISNAWITA SP, MSI , CHANDRA IRSAN , DELLANIA EKA RINDIANI , SITI HERLINDA , JELLY MILINIA PUSPITA SARI , ERISE ANGGRAINI , RADIX SUHARJO

2015
Jurnal nasional

Pengaruh Beberapa Jenis Termitisida dalam Mengendalikan Rayap (Coptotermes curvignathus Holmgren) di Laboratorium

DR LISNAWITA SP, MSI

2026
Prosiding seminar internasional

Effectiveness of edible coatings from plant extracts in suppressing postharvest anthracnose disease (Colletotrichum gloeosporioides) in tomatoes (Solanum lycopersicum) as agrotechnological approaches towards sustainable agriculture

DR LISNAWITA SP, MSI , INDRI EQLESIA UJUNG

2019
Jurnal nasional

Pengaruh Bahan Organik (Mucuna bracteata) dan Mikroba Antagonis (Trichoderma viride dan T. harzianum) terhadap Dominasi Nematoda Puru Akar (Meloidogyne spp.) pada Tanaman Kentang di Lapangan

DR LISNAWITA SP, MSI

2017
Jurnal nasional terakreditasi

Efektivitas Bakteri Endofit Sebagai Pupuk Hayati Terhadap Pertumbuhan Dan Produksi Cabai (Capsicum Annuum, L.)

DR LISNAWITA SP, MSI

2013
Jurnal nasional

PENGGUNAAN CENDAWAN MIKORIZA ARBUSKULA (CMA) UNTUK MENGENDALIKAN Fusarium oxysporum f.sp. cubense DAN NEMATODA Radopholus similis PADA TANAMAN PISANG BARANGAN (Musa Paradisiaca L.) DI RUMAH KACA

DR LISNAWITA SP, MSI

2025
Jurnal internasional bereputasi

Integration of Low-Cost GNSS and Multispectral Camera to Increase Oil Palm Position Accuracy and Health Monitoring

TRIONO BAGUS SAPUTRO , MOKHAMAD NUR CAHYADI , WISMAROH SANNIWATI BR SARAGIH , DENI KUSUMAWARDANI , DR LISNAWITA SP, MSI , M.ALDILA SYARIZ , FADLILATUL TAUFANY , Miko Cahya Laksana , Failaqlul Haq , Luki Adi Triawan

2010
Jurnal nasional

Kisaran Inang Nematoda Sista Kentang (Globodera spp.) di Indonesia

DR LISNAWITA SP, MSI

2017
Jurnal nasional terakreditasi

Kisaran Inang *Corynespora cassiicola* (Berk. & Curt) Wei Pada Tanaman Di Sekitar Pertanaman Karet (*Hevea brassiliensis* Muell)

DR LISNAWITA SP, MSI

2025
Prosiding seminar internasional

Exploration of microbial antagonists in chili to control anthracnose disease in vitro

DR LISNAWITA SP, MSI , PROF DR IR AHMAD RAFIQI TANTAWI. MS

2014
Jurnal nasional

Pengaruh Lamanya Inokulasi Parasitoid *Sturmiopsis inferens* Town (Diptera: Tachinidae) terhadap Jumlah Inang *Phragmatocia castaneae* Hubner (Lepidoptera: Cossidae) di Laboratorium

DR LISNAWITA SP, MSI , MARYANI CYCCU TOBING

2021
Prosiding seminar internasional

Thaumatococin protein predicted from oil palm and rubber using PHYRE 2 and SWISS-MODEL software

MOHAMMAD BASYUNI , DR LISNAWITA SP, MSI , ERMAN MUNIR

2019
Jurnal nasional

Potensi *Fusarium* Non Patogenik untuk Mengendalikan *Fusarium oxysporum* f. *sp. cubense* pada Tanaman Pisang Barangan

DR LISNAWITA SP, MSI

2018
Prosiding seminar nasional

Potensi berbagai tanaman sebagai moluskisida nabati untuk mengendalikan keong mas (*Pomacea canaliculata* lamarck)(Mollusca: Ampullariidae) pada tanaman padi di rumah kaca

DR LISNAWITA SP, MSI

2021
Prosiding seminar internasional

Predicted of a heat shock cognate 70 kDa protein by PHYRE2 and SWISS-MODEL software from *Elaeis guineensis* and *E. oleifera*

MOHAMMAD BASYUNI , DR LISNAWITA SP, MSI , ERMAN MUNIR

2022
Prosiding seminar internasional

Survey and distribution of Pineapple Wilt Mealybug Wilt associated Virus (PMWaV) on pineapple plants in North Tapanuli, Indonesia

DR LISNAWITA SP, MSI , MARYANI CYCCU TOBING

2021
Jurnal internasional bereputasi

Microsatellite analysis to evaluate the seedling and mature of oil palm populations (*Elaeis guineensis* Jacq.) to *Ganoderma boninense* resistance

ERMAN MUNIR , MOHAMMAD BASYUNI , DR LISNAWITA SP, MSI

2013
Jurnal nasional

Potensi Cendawan Endofit Dalam Mengendalikan *Fusarium Oxysporum* F. *sp. Cubense* Dan Nematoda *Radopholus Similis* Cobb. Pada Tanaman Pisang Barangan (*Musa Paradisiaca* L.) Di Rumah Kaca

MUKHTAR ISKANDAR PINEM , DR LISNAWITA SP, MSI

2014
Jurnal nasional

Penyakit Layu *Fusarium* (*Fusarium oxysporium* f. *sp. cubense* FF Smith) Synd

& Hans) pada Tanaman Pisang (*Musa spp*) dan Hubungannya dengan Keberadaan Nematoda (*Rdopholus similis*...

DR LISNAWITA SP, MSI

2018

Prosiding seminar nasional

Serangan Karat Daun Kopi (*Hemileia vastatrix* B et Br) pada Tanaman Kopi Arabika di Perkebunan Rakyat Kabupaten Mandailing Natal Sumatera Utara

DR LISNAWITA SP, MSI

2011

Prosiding seminar nasional

Keanekaragaman Hayati Cendawan Endofit Lokal yang Berpotensi Sebagai Bioprotecting Terhadap Patogen Tular Tanah pada Pisang Barangan di Sumatera Utara

DR LISNAWITA SP, MSI , MUKHTAR ISKANDAR PINEM , PROF DR IR AHMAD RAFIQI TANTAWI. MS

2021

Prosiding seminar internasional

Predicted of isoflavone reductase protein from oil palm and date palm using of PHYRE2 and SWISS-MODEL software

DR LISNAWITA SP, MSI , MOHAMMAD BASYUNI , ERMAN MUNIR

2019

Prosiding seminar internasional

Bioinformatics approach of polyprenol reductase in *Hevea brasiliensis*

DR LISNAWITA SP, MSI , MOHAMMAD BASYUNI , BAYU PRATOMO

2025

Prosiding seminar internasional

Isolation and characterization of potential amyolytic, proteolytic, gelatinolytic and chitinolytic properties in bacterial antagonists obtained from chilli plants (*Colletotrichum spp.*)

DR LISNAWITA SP, MSI , PROF DR IR AHMAD RAFIQI TANTAWI. MS

2007

Prosiding seminar internasional

Polymerase Chain Reaction to identify species of potato cyst nematode in Indonesia

DR LISNAWITA SP, MSI , SUPRAMANA

2015

Jurnal nasional

The Effectiveness of Several Techniques to Control *Setothosea asigna* on Vegetative Phase of Palm Oil in Greenhouse

DR LISNAWITA SP, MSI

2014

Jurnal nasional

Pengaruh Bentuk dan Ketinggian Perangkap Sticky Trap Kuning Terhadap Lalat Buah (*Bactrocera spp.*)(Diptera: Tephritidae) Pada Tanaman Tomat (*Solanum lycopersicum mill.*) di Dataran Rendah

YUSWANI PANGESTININGSIH , DR LISNAWITA SP, MSI

2021

Jurnal internasional bereputasi

Short communication: Digital identification approach to characterize *Hevea Brasiliensis* leaves

DR LISNAWITA SP, MSI

2019

Jurnal nasional

Populasi Parasitoid Larva Pada Masa Tanam Berbeda di Lahan Tebu Kebun Tandem Hulu PTPN II Sei Semayang

DR LISNAWITA SP, MSI

2017

Jurnal nasional terakreditasi

Potensi jamur endofit terhadap pertumbuhan dan produksi tanaman cabai (*Capsicum annum*)

DR LISNAWITA SP, MSI

2024

Jurnal nasional terakreditasi

AKTIVITAS ANTIFUNGI EKSTRAK DAUN *Asystasia gangetica* (L.) T. Anderson TERHADAP BIBIT KELAPA SAWIT (*Elaeis guineensis* Jacq.) TERINFEKSI *Ganoderma boninense*

WISMAROH SANNIWATI BR SARAGIH , DR LISNAWITA SP, MSI

2017

Jurnal nasional terakreditasi

Pengaruh Pemberian Cendawan Endofit Asal Tanaman Kelapa Sawit Terhadap Pertumbuhan Kelapa Sawit Pada Tanah Terinfeksi *Ganoderma Sp*

MUKHTAR ISKANDAR PINEM , DR LISNAWITA SP, MSI

2024

Jurnal nasional terakreditasi

AKTIVITAS ANTIFUNGI EKSTRAK DAUN *Asystasia gangetica* (L.) T. ANDERSON TERHADAP BIBIT KELAPA SAWIT (*Elaeis guineensis* Jacq.) TERINFEKSI *Ganoderma boninense*

DR LISNAWITA SP, MSI , WISMAROH SANNIWATI BR SARAGIH

2021

Prosiding seminar internasional

Fungi diversity in the rhizosphere of corn and *Spodoptera frugiperda* larvae

DR LISNAWITA SP, MSI

2021

Prosiding seminar internasional

Potential of production in *Elaeis guineensis* Jacq. type resistance to *Ganoderma* pathogen

DR LISNAWITA SP, MSI , MOHAMMAD BASYUNI , ERMAN MUNIR

2020

Prosiding seminar internasional

Comparison of attractants and height traps to coffee berry borer (*hypothenemus hampei ferr.*, coleoptera: Scolytidae) in soban village, dairi regency, north sumatra, indonesia

DR LISNAWITA SP, MSI , MARYANI CYCCU TOBING , MARJAN SINAGA

2013

Jurnal nasional

Penggunaan jamur antagonis *Trichoderma sp.* dan *Gliocladium sp.* untuk mengendalikan penyakit layu fusarium pada tanaman bawang merah (*Allium ascalonicum* L.)

DR LISNAWITA SP, MSI

Researches

2025

Penelitian Kerjasama Antar Perguruan Tinggi

Deteksi penurunan keanekaragaman genetik serangga polinator pada tanaman kelapa sawit

NOVRI NELLY , SITI HERLINDA , DR LISNAWITA SP, MSI

2021

Penelitian Unggulan Perguruan Tinggi

Budidaya Bawang Vertikal secara Hidroponik untuk Tanaman Sehat dan Hemat Lahan

2021

Studi Penyakit Layu Pineapple Mealybug Wilt Associated Virus (PMWaV) pada Tanaman Nanas Sipahutar, Tapanuli Utara

PROF DR IR AHMAD RAFIQI TANTAWI. MS , MARYANI CYCCU TOBING , DR LISNAWITA SP, MSI

2019

UJI EFEKTIVITAS CENDAWAN ENTOMOPATOGEN DENGAN PENAMBAHAN MINYAK NABATI DALAM MENGENDALIKAN ULAT GRAYAK SPODOPTERA FRUGIPERDA (LEPIDOPTERA : NOCTUIDAE)

MARYANI CYCCU TOBING , DR LISNAWITA SP, MSI

2009

Penelitian Strategis Nasional

Eksplorasi dan karakterisasi bakteri endofit lokal Sumatera Utara dan potensinya sebagai bioprotecting dan biofertilizer untuk meningkatkan daya tahan kedelai terhadap nematoda puru akar (Meloidogyne spp.)

MUKHTAR ISKANDAR PINEM , DR LISNAWITA SP, MSI

2024

Ipteks

INTEGRASI DRONE MULTI SENSOR UNTUK OPTIMASI PROSES PENYERBUKAN KELAPA SAWIT

WISMAROH SANNIWATI BR SARAGIH , RONNY MARDIYANTO , MOKHAMAD NUR CAHYADI , AGUS BUDI RAHARJO , YUNI SETYANINGSIH , DR LISNAWITA SP, MSI , TRIONO BAGUS SAPUTRO

2023

Penelitian Kerjasama Antar Perguruan Tinggi

MONITORING TATA GUNA LAHAN, KESEHATAN TANAMAN, DAN OPTIMASI RANTAI PASOK KELAPA SAWIT DENGAN TEKNOLOGI GEOSPATIAL UNTUK PENINGKATAN EKONOMI PETANI RAKYAT

WISMAROH SANNIWATI BR SARAGIH , MOKHAMAD NUR CAHYADI , DENI KUSUMAWARDANI , DR LISNAWITA SP, MSI

2025

INTEGRASI DRONE MULTI SENSOR UNTUK OPTIMASI PROSES PENYERBUKAN KELAPA SAWIT

WISMAROH SANNIWATI BR SARAGIH , RONNY MARDIYANTO , MOKHAMAD NUR CAHYADI , AGUS BUDI RAHARJO , YUNI SETYANINGSIH , DR LISNAWITA SP, MSI , TRIONO BAGUS SAPUTRO

2025

Penelitian Kerjasama Antar Perguruan Tinggi

Eksplorasi dan Identifikasi Polinator Endemik dan Faktor Penghambat Kinerjanya, serta Evaluasi Sinergisme Multi-polinator (Endemik dan Eksotik) untuk Produksi Sawit Berkelanjutan

CHANDRA IRSAN , NOVRI NELLY , ERISE ANGGRAINI , SITI HERLINDA , DR LISNAWITA SP, MSI , RADIX SUHARJO

2010

STUDIES ON THE POTENTIAL OF ENDOPHYTIC FUNGI AS BIOPROTECTING TO CONTROL ROOT KNOT NEMATODE (Meloidogyne spp.) ON SOYBEAN

DR LISNAWITA SP, MSI

2021

Penelitian Unggulan Perguruan Tinggi

Budidaya Bawang Vertikal secara Hidroponik untuk Tanaman Sehat dan Hemat Lahan

PROF DR IR AHMAD RAFIQI TANTAWI. MS , DR LISNAWITA SP, MSI

2024

Penelitian Disertasi Doktor

Keragaman dan Potensi Jamur Endofit Tanaman Kelapa Sawit Moderat Gano dalam Menekan Perkembangan Ganoderma boninense

PROF DR IR AHMAD RAFIQI TANTAWI. MS , IR. NURLIANA , DR LISNAWITA SP, MSI , NURLIANA

2020

Studi Penyakit Layu Pineapple Mealybug Wilt Associated Virus (PMWaV) pada Tanaman Nanas Sipahutar, Tapanuli Utara

PROF DR IR AHMAD RAFIQI TANTAWI. MS , MARYANI CYCCU TOBING , DR LISNAWITA SP, MSI

Community Services

2025

Pelatihan Pembuatan Kompos Jerami Padi (Pemberdayaan Masyarakat Kerjasama Penanganan Akses Reforma Agraria Kementrian ATR/BPN)

TAVI SUPRIANA , DR LISNAWITA SP, MSI

Intellectual Property Rights

2013

Hak cipta nasional

BAKTERI Pseudomonas fluorescens TERHADAP PENYAKIT VIRUS PADA TANAMAN CABAI

IR. NURLIANA , DR LISNAWITA SP, MSI
