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Dosen Program Studi S1 Agroteknologi  
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🏢 Ruang Ketua dan Sekretaris Program Studi S1 Agroteknologi

🌐 [fp.usu.ac.id/id/dosen/nini-rahmawati](http://fp.usu.ac.id/id/dosen/nini-rahmawati)

*Ibu Nini Rahmawati lahir di Medan, 15 Februari 1972. Karier beliau sebagai dosen di Fakultas Pertanian Universitas Sumatera Utara dimulai sejak tahun 2001. Sampai saat ini, beliau telah meluluskan 75 orang mahasiswa program sarjana (S1) dan 8 orang mahasiswa program magister (S2).*

*Beliau aktif dalam penelitian dan pengabdian masyarakat. Jumlah publikasi yang telah dihasilkan beliau sampai saat ini sebanyak 39 artikel pada jurnal atau prosiding, baik nasional maupun internasional. Di samping itu, beliau juga telah menghasilkan 2 paten sederhana dan 2 hak cipta.*

*Pendidikan:*

*S1 di Fakultas Pertanian USU (1991-1995)*

*S2 di Fakultas Pengelolaan Sumber Daya Alam dan Lingkungan USU (1996-1999)*

*S3 di Fakultas Pertanian USU (2009-2015)*

## Publications

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2026

Monograf

**Pengaruh Jarak Tanam dan Waktu Penyiangan Gulma Terhadap Pertumbuhan dan Produksi Tanaman Bawang Merah (*Allium Ascalonicum* L.) Varietas Medan**  
**The Effect of Plant Spacing and**

NINI RAHMAWATI

2024

Prosiding seminar internasional

**Foliar application of SiO<sub>2</sub> nanoparticles to increase shallot production under water stress as an effort to mitigate climate change**

NINI RAHMAWATI

2024

Prosiding seminar internasional

**Growth in The Various Ecotypes from Vetiver Plant at Different Salinity Levels**

NINI RAHMAWATI

2005

Monograf

**Upaya Penyediaan Hara Nitrogen Pada Pertanian Organik**

NINI RAHMAWATI

2026

Jurnal nasional

**Pengaruh Konsentrasi dan Interval Waktu Pemberian Kitosan terhadap Pertumbuhan dan Produksi Bawang Merah (*Allium ascalonicum* L.) pada Wilayah Iklim Kering**

NINI RAHMAWATI

2017

Jurnal nasional

**Respon pertumbuhan dan produksi ubi jalar (*Ipomoea batatas* L.) terhadap tinggi bedengan dan dosis pupuk kandang ayam**

NINI RAHMAWATI

2026

Jurnal nasional terakreditasi

**Analysis of Organic and Conventional Lowland Rice (*Oryza Sativa* L) Cultivation Systems in Supporting Environmentally Friendly Agriculture in Beringin District, Deli Serdang Regency**

NINI RAHMAWATI

2023

Prosiding seminar nasional

**Analisis Produksi Tiga Genotipe Ubi Jalar Lokal Terhadap dengan Pemberian Zat Pengatur Tumbuh Retardan**

NINI RAHMAWATI

2017

Jurnal nasional

**Respons Pertumbuhan Dan Produksi Kedelai (*Glycine max* (L. Merril) Terhadap Pemberian Biochar Sekam Padi Dan Pupuk P**

NINI RAHMAWATI

2015

Jurnal nasional

**Pengaruh Pemberian Mikoriza Dan Komposisi Media Tanam Pada Pembibitan Kelapa Sawit di Pre Nursery**

NINI RAHMAWATI

2026

Jurnal nasional terakreditasi

**Growth and biochemical responses of red chili (*Capsicum annum* L) under drought conditions with 6-Benzylaminopurine application**

NINI RAHMAWATI

2019

Jurnal nasional terakreditasi

**Growth And Production Response of Two Varieties of Lettuce (*Lactuca sativa* L.) on Application of Various Sources of Nitrogen**

NINI RAHMAWATI

2014

Jurnal nasional terakreditasi

**Produksi dan fisiologi kedelai pada kondisi cekaman kekeringan dengan aplikasi *Bradyrhizobium japonicum* yang diberi penginduksi genistein**

YAYA HASANAH , NINI RAHMAWATI

2026

Monograf

**GROWTH AND YIELD RESPONSES OF GINGER (*Zingiber officinale* Rosc.) TO SOLID ORGANIC FERTILIZER AND COMPOSITION OF PLANTING MEDIA**

NINI RAHMAWATI

2026

Prosiding seminar internasional

**The effect of planting material and organic fertilizer on growth of elephant foot yam (*Amorphophallus oncophyllus* Prain.)**

NINI RAHMAWATI

2025

Jurnal nasional

**Exploration of the Potential of Local Cassava Genotypes to Support Food Security in the Highlands of Toba Regency**

NINI RAHMAWATI

2026

Jurnal nasional

**Pengaruh Zat Pengatur Tumbuh dan Komposisi Media Tanam Terhadap**

## **Pertumbuhan Okulasi Ubi Kayu: Effect of Plant Growth Regulator and Media Composition on Growth Budding Planting**

NINI RAHMAWATI

2023

Jurnal nasional terakreditasi

### **Analysis of Shallot Growth and Production With Organic Fertilizer and Zeolite in Beach Sand Media**

NINI RAHMAWATI

2024

Prosiding seminar nasional

### **Aplikasi Fitosan untuk Meningkatkan Produksi Tiga Varietas Bawang Merah Asal True Shallot Seed**

NINI RAHMAWATI

2022

Prosiding seminar internasional

### **Chemical characteristics of Bio-Vermigot (vermicompost and kasgot) fertilizer with the combination of Black Soldier Fly larvae and earthworm by using cow manure and banana stem**

T SABRINA , NINI RAHMAWATI , NUR ULINA WARNISYAH SEBAYANG

2024

Prosiding seminar internasional

### **Increasing shallot production with chitosan application to support food resilience in dry climate areas**

NINI RAHMAWATI

2026

Prosiding seminar internasional

### **Potential of refugia plants as microhabitat for predator *Sycanus sp***

NINI RAHMAWATI

2023

Prosiding seminar internasional

### **Application of Vermicompost, Kasgot (BSF Compost), and Vermigot for growth and production of Pakchoy (*Brassica rapa L.*) in Ultisol**

NURSIANI LUBIS , NINI RAHMAWATI , T SABRINA , NUR ULINA WARNISYAH SEBAYANG

2026

Jurnal nasional

### **Pertumbuhan dan Hasil Mentimun Jepang terhadap Pemberian Pupuk Organik Cair**

NINI RAHMAWATI

2022

Jurnal internasional bereputasi

### **Utilization of rice straw waste compost to increase growth and production of local sweet potatoes**

NINI RAHMAWATI

2014

Jurnal nasional

### **Peran Fungi Mikoriza Arbuskula dan Pupuk Rock Fosfat Terhadap Pertumbuhan dan Produksi Kedelai (*Glycine max (L.) Merrill*)**

YAYA HASANAH , NINI RAHMAWATI

2026

Jurnal nasional

### **Respons Pertumbuhan dan Produksi Ubi Jalar (*Ipomoea batatas L.*) Terhadap Tinggi Bedengan dan Dosis Pupuk Kandang Ayam: Response in growth and production of sweet potatoes**

NINI RAHMAWATI

2026  
Jurnal nasional terakreditasi

## **Introduksi Teknologi Pertanian Ramah Lingkungan Berbasis Reuse, Reduce Dan Recycle (3r) Dalam Meningkatkan Pendapatan Petani Jamur Tiram Di Desa Sei Beluru Kabupaten Asahan**

NINI RAHMAWATI

2017  
Jurnal nasional

## **Respons Pertumbuhan dan Produksi Berbagai Varietas Ubi Jalar(Ipomoea batatas(L.) Lam) Terhadap Pemberian Kompos Jerami Padi**

NINI RAHMAWATI

2024  
Prosiding seminar internasional

## **Reactions of Drought-Affected Oil Palm Variety Seedlings during the Nursery Phase: Bud and Root Responses**

NINI RAHMAWATI

2017  
Jurnal nasional

## **Respons Pertumbuhan dan Produksi Tiga Varietas Ubi Jalar Ungu (Ipomoea batatasL.) Terhadap Pemberian Berbagai Dosis Bokashi Jerami Padi**

NINI RAHMAWATI

2026  
Prosiding seminar internasional

## **Effect of foliar application of $\alpha$ -tocopherol on vegetative growth and some biochemical constituents of two soybean genotypes under salt stress**

NINI RAHMAWATI

2021  
Prosiding seminar internasional

## **Invigoration of expired chilli plant (Capsicum frutescens L.) seeds with various concentrations and soaking duration of bean sprout extract**

RATNA ROSANTI LAHAY , NINI RAHMAWATI

2021  
Prosiding seminar internasional

## **The response of morphological characteristics of some Soybean Varieties ( Glycine max (L.) Merrill) a vegetative phase in waterlogging condition**

NINI RAHMAWATI , REVANDY I M DAMANIK

2018  
Prosiding seminar internasional

## **Effect of foliar application of $\alpha$ -tocopherol on vegetative growth and some biochemical constituents of two soybean genotypes under salt stress**

NINI RAHMAWATI , REVANDY I M DAMANIK

2023  
Prosiding seminar internasional

## **Morphology of Oil Palm (Elaeis guineensis Jacq.) Seedlings Under Drought Stress with Oil Palm Shell Ash and Aspergillus niger treatment**

NINI RAHMAWATI , CHAIRANI HANUM L

2018  
Jurnal nasional

## **Pengendalian Rumput Belulang (Eleusine indica L.) dengan Berbagai Herbisida pada Tanaman Karet Belum Menghasilkan di Kebun Rambutan PTPN 3: Weeds Control (Eleusine indica) With ...**

NINI RAHMAWATI

2018  
Prosiding seminar internasional

## **Effect of foliar application of $\alpha$ -tocopherol on vegetative growth and some biochemical constituents of two soybean genotypes under salt stress**

2026

Prosiding seminar internasional

**Application of mycorrhizae and salicylic acid to increase antioxidative enzyme activity and relative water content in shallots under drought stress**

NINI RAHMAWATI

2026

Jurnal nasional

**Pengaruh Konsentrasi Air Kelapadan Lama Waktu Penyimpanan Batang Bawah Terhadap Persentase Keberhasilan Okulasi dan Pertumbuhan Ubi kayu Mukibat: The influence of coconut water& #8230;**

NINI RAHMAWATI

2026

Prosiding seminar internasional

**Increasing the growth of elephant foot yam (*Amorphophallus oncophyllus* Prain) bulbil with various compositions of planting media and gibberellin as a sustainable cultivation strategy**

NINI RAHMAWATI

2026

Prosiding seminar internasional

**Analysis of changes in morphological characteristics of leaves and stems in some sweet potato cultivars (*Ipomoea batatas* L.) from Simalungun and Dairi highlands planting in the& #8230;**

NINI RAHMAWATI

2018

Jurnal nasional terakreditasi

**Respons Pertumbuhan dan Produksi Tanaman Jagung Manis Terhadap Aplikasi Biochar**

NINI RAHMAWATI

2018

Jurnal nasional

**Physiologys Response Two Genotypes of Soybean on Giving  $\alpha$ -Tocopherol in Saline Lands**

NINI RAHMAWATI

2026

Prosiding seminar nasional

**Peningkatan produksi bengkuang (*Pachyrhizus erosus* L.) sebagai pangan alternatif melalui pemberian pupuk bokasih dan kalium**

NINI RAHMAWATI

2018

Jurnal nasional terakreditasi

**The Growth Response of Madeira Vine (*Anredera cordifolia* (Ten.) Steenis) on Different Levels of Shade and Application of Fertilizer and Biochar**

YAYA HASANAH , NINI RAHMAWATI

2023

Prosiding seminar internasional

**Morphology of Oil Palm ( *Elaeis guineensis* Jacq.) Seedlings under Drought Stress with Oil Palm Shell Ash and *Aspergillus niger* treatment**

NINI RAHMAWATI , CHAIRANI HANUM L

2022

Prosiding seminar nasional

**Aplikasi Cocopeat untuk Meningkatkan Pertumbuhan dan Produksi Bawang Merah Varietas Medan pada Cekaman Kekeringan**

RATNA ROSANTI LAHAY , NINI RAHMAWATI

2012

Jurnal nasional

## **Pertumbuhan Dan Produksi Beberapa Varietas Kedelai (*Glycine max L. merill.*) Pada Berbagai Kondisi Air Tanah**

YAYA HASANAH , NINI RAHMAWATI

2026

Prosiding seminar nasional

## **Pemberdayaan Kelompok PKK Dalam Pembuatan Jahe Merah Instan Dari Budidaya Tanaman Obat Keluarga (TOGA) Pada Program Kolaborasi Sosial Membangun Masyarakat Di Desa Bentok**

NINI RAHMAWATI

2019

Prosiding seminar internasional

## **Growth and Production Response of Several Local Sweet Potatoes (*Ipomoea batatas L.*) Clones on Multiple Trimming Levels**

NINI RAHMAWATI

2023

Jurnal nasional terakreditasi

## **Analysis of Shallot Growth and Production With Organic Fertilizer and Zeolite in Beach Sand Media**

NINI RAHMAWATI

2024

Prosiding seminar internasional

## **Improvement in physio-biochemical characteristics of shallot plants with nano silica at several levels of drought stress**

NINI RAHMAWATI

2023

Prosiding seminar internasional

## **Application of Vermicompost, Kasgot (BSF Compost), and Vermigot for growth and production of Pakchoy (*Brassica rapa L.*) in Ultisol**

NINI RAHMAWATI , T SABRINA , NUR ULINA WARNISYAH SEBAYANG

2022

Prosiding seminar nasional

## **The analysis of decomposition rate of Vermigot fertilizer (vermicompost and kasgot) by utilizing of Black Soldier Fly larvae and earthworms with and without technique feeding**

T SABRINA , NINI RAHMAWATI , NUR ULINA WARNISYAH SEBAYANG

2026

Monograf

## **Waktu dan Jarak Tanam Tanaman Jagung (*Zea mays L.*) Terhadap Pertumbuhan dan produksi Kacang Tanah (*Arachis hypogea L.*).**

NINI RAHMAWATI

2026

Monograf

## **Respons Pertumbuhan dan Produksi Jahe (*Zingiber officinale Rosc.*) Sistem Keranjang terhadap Pemberian Pupuk Organik Padat dan Komposisi Media Tanam**

NINI RAHMAWATI

2026

Jurnal nasional

## **Pertumbuhan dan Produksi Tomat Cherry pada Konsentrasi Nutrisi yang Berbeda dengan Sistem Hidroponik**

NINI RAHMAWATI

2026

Jurnal nasional terakreditasi

## **Respons Pertumbuhan Binahong (*Anredera cordifolia (Ten.) Steenis*)**

## Terhadap Beberapa

NINI RAHMAWATI

2025

Jurnal nasional terakreditasi

### **Organic Fertilizer and Oligochitosan to Increase The Growth of Elephant Foot Yam (*Amorphophallus muelleri* Blume) Plants**

NINI RAHMAWATI

2023

Prosiding seminar internasional

### **Application of Vermicompost, Kasgot (BSF Compost), and Vermigot for growth and production of Pakchoy (*Brassica rapa* L.) in Ultisol**

NINI RAHMAWATI , T SABRINA , NUR ULINA WARNISYAH SEBAYANG

2020

Jurnal internasional bereputasi

### **Analysis of physiological characters and yield quality of several sweet potato (*Ipomoea batatas* L.) genotypes at various watering levels in rainfed paddy field**

RATNA ROSANTI LAHAY , NINI RAHMAWATI

2019

Jurnal nasional

### **Pertumbuhan dan Hasil Produksi Jagung Manis Terhadap Pola Tumpangsari Serta Pemupukan NPK**

NINI RAHMAWATI

2025

Jurnal internasional bereputasi

### **REFUGIA PLANTS WITH VOLATILE COMPOUNDS IN OIL PALM PLANTATION AREAS USING GC-MS ANALYSIS**

NINI RAHMAWATI

2026

Prosiding seminar internasional

### **Comparative study several feed formulation based on agro-industrial by-product on production performance and in vivo digestibility of beef cattle**

NINI RAHMAWATI

2024

Prosiding seminar internasional

### **Optimization of golden snail egg liquid organic fertilizer in sweet potato cultivation: towards sustainable agriculture and increased production**

NINI RAHMAWATI

2026

Jurnal nasional

### **Pertumbuhan dan Produksi Tomat Cherry pada Konsentrasi Nutrisi yang Berbeda dengan Sistem Hidroponik: The Growth and Production of Cherry Tomato at Different Concentrations of**

NINI RAHMAWATI

2023

Prosiding seminar internasional

### **The effect of planting material and organic fertilizer on growth of elephant foot yam (*Amorphophallus oncophyllus* Prain.)**

EMMY HARSO KARDHINATA , NINI RAHMAWATI

## Researches

2021

Penelitian Dana Lokal Perguruan Tinggi

## **Respon Varietas Kedelai (Glycine max L. Merrill) Toleran Genangan pada Lahan Rawa dan Pasang Surut**

NINI RAHMAWATI , REVANDY I M DAMANIK

2019

### **Analisis Aktivitas Enzim Antioksidan dan Kualitas Hasil Ubi Jalar Lokal pada Kondisi Stress Kekeringan di Lahan Sawah Tadah Hujan**

NINI RAHMAWATI

2017

### **Kajian Morfofisiologi Kedelai Tahan Cekaman Salinitas dengan Aplikasi Antioksidan**

NINI RAHMAWATI

2013

Penelitian Disertasi Doktor

### **Peran Fungi Mikoriza Arbuskular Indigenous untuk Mengatasi Stres Osmotik dan Def**

NINI RAHMAWATI

## **Community Services**

2023

KKN Pembelajaran Pemberdayaan Masyarakat

### **Surat tugas DPL dan peserta program magang mitra USU MBKM**

NINI RAHMAWATI

## **Intellectual Property Rights**

2023

Paten nasional

### **Penggunaan Asam Askorbat untuk Meningkatkan Produksi Kedelai di Tanah Salin**

NINI RAHMAWATI

2023

Hak cipta nasional

### **Response On Growth And Production Of Vetiver (Vetiveria Zizanioides L.) On Gibberelin Under Salinity Stress Conditions**

NINI RAHMAWATI

2023

Hak cipta nasional

### **The Effect Of Gibberellin In Salin Soil On Growth Of Vetiver (Vetiveria Zizanioides L.)**

NINI RAHMAWATI

2023

Paten nasional

### **METODE MEDAN LISTRIK UNTUK PEMATAHAN DORMANSI DAN PENINGKATAN GERMINASI BIJI ANDALIMAN**

NINI RAHMAWATI