



TAGEM
R&D AND INNOVATION

WESTERN MEDITERRANEAN AGRICULTURAL
RESEARCH INSTITUTE / ANTALYA

SERAP MELİKE SÜLÜ, PhD Agricultural Engineer

EDUCATION

- **Assoc. prof**
- **PhD** 2014-2020 Hatay Mustafa Kemal University
Plant Protection/Phytopathology
- **MSc** 2005-2008 Akdeniz University
Field Crops
- **Bachelor's Degree** 1999-2003 Akdeniz University
Faculty of Agriculture
Plant Protection

LANGUAGE English YÖKDİL / YDS

CAREER

- 2020- PhD., Bati Akdeniz Agricultural Research
Institute ANTALYA
- 2011-2020 Agricultural Engineer, Bati Akdeniz
Agricultural Research Institute ANTALYA

ABOUT ME

I was born in 1981 in Erzurum. In 2003, I graduated from Akdeniz University, Faculty of Agriculture. I continued my professional education in Field Crops Dept. of the same university.

I have worked on scientific projects on the detection, diagnosis and control of plant pathogenic bacteria since 2011, and specialized in "phytobacteriology" and "biological control".

My research interests particularly focus on *Acidovorax citrulli*, *Clavibacter michiganensis* subsp. *michiganensis*, induced systemic resistance (ISR) in plants to control of bacterial diseases, bacterial endophytes, epiphytes and bacteriophages besides action mechanisms of bacterial biocontrol agents and host-microbe interactions.

CONTACT



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▪ **PROJECTS**

▪ **Projects Conducted**

1. Investigation of Existence of *Xylella fastidiosa* and Its Vectors on Different Hosts in Antalya Province and Determination of Disease Control Strategies Based on Risk Management (2017-2020, TAGEM, Co-Researcher)
2. Creation of Gene Pool on Sardinia (*Pelargonium* sp.) and Variety Development by Clone Selection (2016-2020, TAGEM, Co-Researcher)
3. Determination of Disease and Pests Causing Trouble to Artichoke Cultivation in Antalya, Izmir, Aydın Provinces and Investigation of Their Control Possibilities (2016-2019, TAGEM, Co-Researcher)
4. Determination of Diseases, Pests and Weeds in Minor Vegetable Species in West Mediterranean Region and Studies on Their Management (2016-2018, TAGEM, Co-Researcher)
5. Investigation of Efficacies of Endophytic and Epiphytic Bacteria in the Biological Control of Watermelon Bacterial Seedling Blight Disease (*Acidovorax citrulli*) (2015-2020, PhD Thesis, Leader)
6. Improvement of Qualified Genitors for Melon Breeding Programs and Seed Technology Project (2015-2019, TAGEM, Co-Researcher)
7. Detection of Phytoplasma Diseases and Possible Vector Species in Vineyard Areas of Antalya Province and Determination of Measures to be Taken (2013-2019, TAGEM, Co-Researcher)
8. Detection of Bacterial Pathogens in Pomagranate Orchards in Antalya Province and Determination of Their Control Possibilities (2013-2016, TAGEM, Leader)
9. Strengthening of Plant Protection Laboratory Infrastructure, Improvement of Competitiveness of Seed and Seedling Sector (2012-2013, BAKA, Co-Researcher)
10. Comparison of Dwarf Chickling (*Lathyrus cicera* L.) and Grass Pea (*Lathyrus sativus* L.) for Agronomic Characteristics and Drought Resistance (2005-2008, Master Thesis, Leader)
11. Selection for Herbicide Resistance in Chickpea (*Cicer* sp.) Mutants (2005-2008, TÜBİTAK 1001, TOVAG 104O109, Scholar)

▪ **Ongoing Projects**

1. Investigation of Existence of *Xylella fastidiosa* and Its Vectors on Different Hosts in Antalya Province and Determination of Disease Control Strategies Based on Risk Management (2nd Slice) (2022-2025, TAGEM, Leader)
2. Use of Bacteriophage Cocktails to Control of Bacterial Leaf Diseases (*Pseudomonas syringae* pv. *tomato*, *Xanthomonas* spp.) in Tomato Growing (2021-2024, TÜBİTAK 1001, TOVAG 121O545, Co-Researcher)



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3. Development of Quality Line and Variety within the Scope of Tomato Breeding Programs-II (2020-2024, TAGEM, Co-Researcher)
4. Development of Quality Line and Variety within the Scope of Eggplant Breeding Programs-II (2020-2024, TAGEM, Co-Researcher)
5. Development of Quality Line and Variety within the Scope of Melon Breeding Programs-II (2020-2024, TAGEM, Co-Researcher)
6. Development of Bacterial Biopreparations in Biological Control with Tomato Bacterial Cancer and Wilt Disease caused by *Clavibacter michiganensis* subsp. *michiganensis* (2019-2022, TAGEM, Co-Researcher)

▪ **PUBLICATIONS**

▪ **INTERNATIONAL ARTICLES AND PAPERS**

▪ **Articles Published in International Journals (Original Articles (SCI))**

1. Aydoğdu, M., SÜLÜ, S.M., Kurbetli, İ., Sülü, G. (2021). *In vitro* and *in vivo* biological control of the green mold using different bacteria in button mushroom cultivation. *Egyptian Journal of Biological Pest Control*, 31(1):1-11

▪ **Articles Published in International Journals (Disease Notes (SCI))**

1. Kurbetli, İ., Sülü, G., Aydoğdu, M., Özdemir, M., SÜLÜ, S.M. and Polat, İ. (2016). First Report of Kumquat Shoot Blight Caused by *Phytophthora citrophthora* in Turkey. *Plant Disease*, 100(5):1023
2. ICOZ, S.M., Polat, İ., Sulu, G., Yilmaz, M., Unlu, A., Soylu, S., Bozkurt, A. and Baysal, O. (2014). First Report of Bacterial Blight of Pomegranate Caused by *Xanthomonas axonopodis* pv. *punicae* in Turkey. *Plant Disease*, 98(10):1427

▪ **International Papers, Seminars, etc. (Oral Presentation)**

1. Ünlü, M., Kurum, R., SÜLÜ, S.M., Kırışık, M. (2018). Determination of resistance status of melon landraces against *Acidovorax citrulli* and *Aphis gossypii* (Glover) in Turkey. *XXX International Horticultural Congress (IHC2018)*, İstanbul/TURKIYE. *Acta Horticulturae* 1257, p.51-56.
2. ICOZ, S.M., Ceylan, F.O., İnci, N.E., Canci, H., Toker, C. (2014). Selection of Red Pea (*Lathyrus cicera* L.) For Drought and Heat Tolerance. *International Agriculture Congress (IAC)*, Putrajaya/MALEYSIA. *Proceeding Book*, p.50-54

▪ **International Papers, Seminars, etc. (Poster Presentation)**

1. Yilmaz, M., Kavak, S., SÜLÜ, S.M. and Baysal, Ö. (2015). Seed Film Coating With Commercial Essential Oils Against to *Clavibacter michiganensis* subsp. *michiganensis* and Its Efficiency on Tomato Seed and Seedling Quality in Seedling Company Conditions. *XVIII. International Plant Protection Congress*, Berlin/GERMANY. p.478



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2. Yılmaz, M., Kavak, S., SÜLÜ, S.M. and Baysal, Ö. (2015). Seed Health and Film Coating. *XVIII. International Plant Protection Congress*, Berlin/GERMANY. p.477
3. Yılmaz, M., Özalp, R., Çelik, İ., SÜLÜ, S.M. and Kavak, S. (2015). Efficiency on Pepper (*Capsicum annuum* L.) Seed Quality of Different Seed Production Dates, Storage and Moisture Content. *XVIII. International Plant Protection Congress*, Berlin/GERMANY. p.482
4. SÜLÜ, S.M., Yılmaz, M. and Soylu, S. (2015). Endophytic Bacteria and Their Use in Plant Protection. *XVIII. International Plant Protection Congress*, Berlin/GERMANY. p.483
5. SÜLÜ, S.M., Yılmaz, M. and Baysal, Ö. (2015). *In vitro* Efficacy of Some PGPR Isolates as Biocontrol Agent Against Colony Growth of *Pseudomonas savastanoi* pv. *savastanoi* Causing Olive Knot Disease on Olive. *XVIII. International Plant Protection Congress*, Berlin/GERMANY. p.483
6. Yılmaz, M., İÇÖZ, S.M., Aras, V., Kavak, S. and Baysal, Ö. (2013). Investigation on Use of Apple Cider and Wine Vinegar for Seed Disinfection to Control of Bacterial Fruit Blotch (BFB) as A Seed Coating Material. *30th ISTA (International Seed Testing Association) Congress*, ANTALYA/TURKIYE. p.98
7. M. Yılmaz, A. Ünlü, M. Ünlü, V. Gözen, V. Aras, R. Kurum and S.M. İÇÖZ. (2012). Evaluation of Some Native Cucurbits (Watermelon, Melon and Cucumber) for Resistance to *Acidovorax avenae* subsp. *citrulli* in Turkey. *Xth. EUCARPIA International Meeting on Cucurbitaceae*, ANTALYA/TURKIYE. s.797

▪ NATIONAL ARTICLES AND PAPERS

▪ Articles Published in National Journals

1. Ünlü, A., Baysal, Ö., Polat, İ., SÜLÜ, S.M., İkten, H., Devran, Z., Gümrükcü, E. (2017). Batı Akdeniz Bölgesi Örtüaltı Yetiştiriciliğinde Sorun Olan Domateste Bakteriyel Benek (*Pseudomonas syringae* pv. *tomato* "Okabe" Y.D.&W) Hastalık Etmeni İzolatlarının Genetik Farklılıklarının Moleküler Yöntemlerle Tespiti. *Derim Dergisi*, 34(2):122-130.
2. SÜLÜ, S.M., Bozkurt, İ.A. ve Soylu, S. (2016). Bitki Büyüme Düzenleyici ve Biyolojik Mücadele Etmeni Olarak Bakteriyel Endofitler. *MKÜ Ziraat Fakültesi Dergisi*, 21(1):103-111.

▪ National Papers, Seminars, etc. (Oral Presentation)

▪ National Papers, Seminars, etc. (Poster Presentation)

1. SÜLÜ, S.M., Soylu, S. (2016). Rezene (*Foeniculum vulgare* Mill.) Bitkisinden İzole Edilen Endofit Bakterilerin Domates Bakteriyel Benek Hastalığı Etmeni *Pseudomonas syringae* pv. *tomato*"ya Karşı in vitro Antagonistik Etkinliği. *Uluslararası Katılımlı Türkiye VI. Bitki Koruma Kongresi*, KONYA. s.158
2. Yılmaz, M., SÜLÜ, S.M. (2015). Domates ve Biberden İzole Edilen Bazı Antagonist Bakterilerin Domates Tohum Canlılığı ve Fide Gelişimi Üzerine Etkisinin Belirlenmesi. *VII. Ulusal Bahçe Bitkileri Kongresi*, ÇANAKKALE. s.242



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3. SÜLÜ, S.M., Yılmaz, M. (2015). Domates ve Biberden İzole Edilen Bazı Antagonist Bakterilerin Biber ve Domates Bakteriyel Leke (*Xanthomonas vesicatoria*) Etmeni Üzerine Etkisinin Belirlenmesi. *VII. Ulusal Bahçe Bitkileri Kongresi, ÇANAKKALE*. s.243
4. İÇÖZ, S.M., Yılmaz, M. ve Ünlü, A. (2014). Bakteriyel Leke Hastalığının Kimyasal Mücadelesinde Farklı Borik Asit Kombinasyonlarının Etkisinin Belirlenmesi. *Türkiye V. Bitki Koruma Kongresi, ANTALYA*. s.219
5. Yılmaz, M., İÇÖZ, S.M., Ünlü, A. ve Baysal, Ö. (2014). Nanobakırın *Clavibacter michiganensis* subsp. *michiganensis* ve Domates Tohum Canlılığı Üzerine Etkisinin Belirlenmesi. *Türkiye V. Bitki Koruma Kongresi, ANTALYA*. s.223
6. Yılmaz, M., İÇÖZ, S.M., Ünlü, A., Kavak, S. ve Baysal, Ö. (2014). Tohuma Uygulanan Nanobakırın Fitopatojen Bakterilere (*Clavibacter michiganensis* subsp. *michiganensis* ve *Xanthomonas vesicatoria*) ve Sebze (Domates ve Biber) Fide Kalitesi Üzerine Etkisi. *Uluslararası Katılımlı Ulusal Biyosidal Kongresi, ANTALYA*. s.19
7. İÇÖZ, S.M., Yılmaz, M. ve Ünlü, A. (2014). Bazı Fitopatojen Bakteri İzolatlarının Bakıra Dayanıklılığının Belirlenmesi. *Uluslararası Katılımlı Ulusal Biyosidal Kongresi, ANTALYA*. s.21
8. İÇÖZ, S.M., Yılmaz, M., Ünlü, A. ve Baysal, Ö. (2014). Borun Zeytin Dal Kanseri Hastalığının Mücadelesinde Kullanılabilirliğinin Belirlenmesi. *Uluslararası Katılımlı Ulusal Biyosidal Kongresi, ANTALYA*. s.12
9. Yılmaz, M., İÇÖZ, S.M., Kavak, S. ve Baysal, Ö. (2014). Bazı Ticari Uçucu Yağların Biyosidal Kapasitelerinin Belirlenmesi. *Uluslararası Katılımlı Ulusal Biyosidal Kongresi, ANTALYA*. s.18
10. Yılmaz, M., İÇÖZ, S.M., Kavak, S. ve Baysal, Ö. (2014). Borun Domates Tohum Uygulamalarında Kullanılabilirliğinin Belirlenmesi. *Uluslararası Katılımlı Ulusal Biyosidal Kongresi, ANTALYA*. s.20

▪ **OTHER PUBLICATIONS**

▪ **Ph.D. Thesis, Master Thesis, Reports, Books etc.**

1. SÜLÜ, S.M. (2020). Investigation of Efficacies of Endophytic and Epiphytic Bacteria in the Biological Control of Watermelon Bacterial Seedling Blight Disease (*Acidovorax citrulli*)
(PhD Thesis/Supervisor: Prof. Soner SOYLU)
2. SÜLÜ, S.M. (2008). Comparison of Dwarf Chickling (*Lathyrus cicera* L.) and Grass Pea (*Lathyrus sativus* L.) for Agronomic Characteristics and Drought Resistance
(Master Thesis/Supervisor: Prof. Cengiz TOKER)
3. Yılmaz, M., SÜLÜ, S.M., Yıldız, K. (2015). Sebze Hastalıklarında Tohumla Taşınım ve Önemi. *Harman Time*, 3(34): 62-68.
4. Yıldız, K., SÜLÜ, S.M., Yılmaz, M. (2015). Domates Bakteriyel Solgunluk Hastalığı (*Ralstonia solanacearum*). *Tarım Türk*, 10(56): 18-24.



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5. Yılmaz, M., SÜLÜ, S.M., Gümrükcü, E., (2015). Sebze Fide Hastalıkları. TURKTOB, 4(13): 53-56.
6. Yılmaz M., SÜLÜ, S.M. (2015). Uçucu Yağların Biyoteknik Mücadelede Kullanımı. Tarım ve Yaşam, 3: 21-23.
7. SÜLÜ, S.M., Yılmaz, M. (2015). Bazı Bakteriyel Hastalıkların Belirtileri ve Nedenleri. Tarım ve Yaşam, 3: 32-33.
8. SÜLÜ, S.M., Yılmaz, M. (2014). Teşhiste Gözardı Edilen Önemli Bir Husus: Analiz ve Analizde Dikkat Edilmesi Gereken Konular. Harman Time, 21: 50-54.
9. Yılmaz, M., SÜLÜ, S.M. ve Baysal, Ö. (2014). Tohumla Taşınan Bazı Sebze Hastalıkları. Harman Time, 16: 68-74.
10. İÇÖZ, S.M. (2012). Örtüaltı Domates Yetiştiriciliğinde Karşılaşılan Önemli Bakteriyel Hastalıklar ve Mücadele Yöntemleri. Tarım Gündem, 2(11): 22-28.

▪ **Membership, Training, Course, Meeting, Congress, Symposium and Other Activities**

Membership

Turkish Society of Phytopathology (2014-)

Training

1. Computer Assisted Pest Risk Analysis (CAPRA)-2012 / European and Mediterranean Plant Protection Organization (EPPO)
2. Bitkisel Üretimde Sorun Olan Fitoplazma Enfeksiyonlarının Belirlenmesi-2013 / Ankara Üniversitesi

Congress, Symposium, Meeting

1. Xth EUCARPIA International Meeting on Cucurbitaceae-2012 / ANTALYA-TURKIYE
2. 30th ISTA (International Seed Testing Association) Congress-2013 / ANTALYA-TURKIYE
3. V. Türkiye Bitki Koruma Kongresi-2014 / ANTALYA-TÜRKİYE
4. VII. Ulusal Bahçe Bitkileri Kongresi-2015 / ÇANAKKALE-TÜRKİYE
5. XVIII. International Plant Protection Congress-2015 / BERLIN-GERMANY
6. Uluslararası Katılımlı Türkiye VI. Bitki Koruma Kongresi-2016 / KONYA-TÜRKİYE

Reviewer for National and International Journals

- Journal of Plant Pathology (3)
- Horticultural Studies (1)