

## Res. Asst. PhD SERHAT KAYA

### Personal Information

**Office Phone:** [+90 286 218 0018](tel:+902862180018) Extension: 22280

**Email:** serhatkaya@comu.edu.tr

**Web:** <https://avesis.comu.edu.tr/serhatkaya>

### International Researcher IDs

ScholarID: 6oPkbsQAAAAJ

ORCID: 0000-0002-0984-2824

Publons / Web Of Science ResearcherID: AAF-3135-2021

ScopusID: 57217302216

Yoksis Researcher ID: 105948

### Education Information

Doctorate, Canakkale Onsekiz Mart University, Fen Bilimleri Enstitüsü, Biyoloji Anabilim Dalı, Turkey 2005 - 2015

Postgraduate, Canakkale Onsekiz Mart University, Fen Bilimleri Enstitüsü, Biyoloji Anabilim Dalı, Turkey 2002 - 2005

Undergraduate, Ege University, Faculty Of Science, Biyoloji, Turkey 1997 - 2002

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Education Management and Planning, Deney Hayvanları Kullanımı Sertifikası, ÇOMÜDAM, 2017

### Dissertations

Doctorate, KONAĞA VERİLEN İNDOL-3-ASETİK ASİTİN VE KALİKS SIVISININ KONAK *Galleria mellonella* L.

(LEPIDOPTERA: PYRALIDAE) VE PARAZİTOİD *Pimpla turionellae* L. (HYMENOPTERA: ICHNEUMONIDAE)

HEMOSİTLERİNE ETKİSİ, Canakkale Onsekiz Mart University, Fen Bilimleri Enstitüsü, Biyoloji, 2015

Postgraduate, Çanakkale İli ve Civarının Herpetofaunası, Canakkale Onsekiz Mart University, Fen Bilimleri Enstitüsü, Biyoloji, 2005

### Research Areas

Life Sciences, Animal Biology, Animal Physiology, Natural Sciences

### Academic Titles / Tasks

Research Assistant PhD, Canakkale Onsekiz Mart University, Fen Fakültesi, Biyoloji, 2015 - Continues

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Humoral immune response of *Galleria mellonella* after mono- and co-injection with *Hypericum perforatum* extract and *Candida albicans***  
Genç T., Kaya S., Günay M., Çakaloğlu Ç.  
APMIS, vol.132, no.5, pp.358-370, 2024 (SCI-Expanded)
- II. **Influence of *Artemisia annua* (Asteraceae) leaf extract on immunity in *Galleria mellonella* (Lepidoptera: Pyralidae)**  
Öztürk R., KAYA S.  
Biologia, 2024 (SCI-Expanded)
- III. **Immunosuppressive effect of *Plantago major* on the innate immunity of *Galleria mellonella***  
Kaya S.  
PEERJ, vol.11, pp.1-23, 2023 (SCI-Expanded)
- IV. **The Potential Error on the *Quercus pyrenaica* Honeydew Honey Identifications**  
BATTAL F., KAYA S., KÖSEOĞLU M.  
INTEGRATIVE CANCER THERAPIES, vol.21, 2022 (SCI-Expanded)
- V. **Influence of *Helichrysum arenarium* on hemocyte-mediated immune responses and phenoloxidase enzyme activity of model organism *Galleria mellonella* (L.)**  
KAYA S., Akkus G., Turkdogan S., GÜNDÜZ B.  
INTERNATIONAL JOURNAL OF TROPICAL INSECT SCIENCE, vol.41, no.4, pp.2521-2528, 2021 (SCI-Expanded)
- VI. **Immunosuppressive influence of parasitoid wasp *Pimpla turionellae* calyx fluid on host *Galleria mellonella* cell-mediated immune response and hemocyte viability.**  
Kaya S., Uçkan F., Er A.  
Bulletin of entomological research, pp.1-9, 2021 (SCI-Expanded)
- VII. **Influence of Indole-3-Acetic Acid on Cellular Immune Responses of *Galleria mellonella* L. (Lepidoptera: Pyralidae) and *Pimpla turionellae* L. (Hymenoptera: Ichneumonidae) in a host-parasitoid system**  
Kaya S., Uçkan F., Er A.  
INTERNATIONAL JOURNAL OF TROPICAL INSECT SCIENCE, vol.41, no.1, pp.169-179, 2021 (SCI-Expanded)
- VIII. **ANTIMICROBIAL ACTIVITY IN THE SKIN SECRETION OF *Hyla arborea* (LINNAEUS, 1758)**  
Dülger B., TOK C. V., KAYA S., Sevinç M.  
RUSSIAN JOURNAL OF HERPETOLOGY, vol.14, no.2, pp.117-120, 2007 (SCI-Expanded)
- IX. **Erythrocyte count and size in some Colubridae (Reptilia: Ophidia) from Turkey**  
TOK C. V., TOSUNOĞLU M., GÜL Ç., Yiğini B., Türkakın M., Saruhan G., KAYA S.  
RUSSIAN JOURNAL OF HERPETOLOGY, vol.13, no.2, pp.97-100, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The influence of olive leaf extract on the activity of antioxidant enzymes in the Hemolymph of *Galleria mellonella* (L.) (Lepidoptera: Pyralidae)**  
KAYA S., Türkdoğan S., SÖKÜT AÇAR T.  
Journal of New Results in Science, vol.12, no.3, pp.188-200, 2023 (Peer-Reviewed Journal)
- II. **Assessment of The Effect of *Thymbra capitata* Ethanolic Extract on *Galleria mellonella* Hemolymph Antioxidant Enzymes**  
Kaya S.  
Commagene Journal of Biology, vol.6, no.2, pp.184-189, 2022 (Peer-Reviewed Journal)
- III. **The Olive Leaf Extract Induced Phenoloxidase Activity Changes in *Galleria mellonella* Hemolymph**

Kaya S., Türkdoğan S.

Turkish Journal of Agricultural and Natural Sciences, vol.8, no.4, pp.934-939, 2021 (Peer-Reviewed Journal)

**IV. Effects of Supplementation with Iron, Selenium and Magnesium on *Galleria mellonella* Cell-Mediated Immune Responses**

Kaya S., Gündüz B.

Turkish Journal of Agricultural and Natural Sciences, vol.8, no.3, pp.605-614, 2021 (Peer-Reviewed Journal)

**V. THE EFFECTS OF PYRETHRUM EXTRACT ON *Galleria mellonella* HEMOLYMPH PHENOLOXIDASE ENZYME**

Kaya S.

Journal of Scientific Perspectives, vol.4, no.4, pp.269-280, 2020 (Peer-Reviewed Journal)

**VI. Zeytin (*Olea europaea*) Yaprağı Ekstraktının Model Organizma *Galleria mellonella* Hemosit Aracılı Bağışıklık Tepkileri Üzerine Etkileri**

KAYA S., DEMİR N.

Türk Tarım ve Doğa Bilimleri Dergisi, vol.7, no.7, pp.646-653, 2020 (Peer-Reviewed Journal)

## **Refereed Congress / Symposium Publications in Proceedings**

**I. Demonstration of The Antioxidant Effect of *Plantago major* Leaf Extract on The Invertebrate Model Organism *Galleria mellonella***

Kaya S.

1st International Symposium of Biodiversity Studies, Ankara, Turkey, 23 - 25 May 2022, pp.1

**II. THE EFFECT OF *SAMBUCUS NIGRA* EXTRACT ON *GALLERIA MELLONELLA* TOTAL HEMOCYTE COUNT**

Taşkın D., Öztürk R., Kaya S.

III. International Agricultural, Biological & Life Science Conference, Edirne, Turkey, 1 - 03 September 2021, pp.211

**III. ASSESSMENT OF THE EFFECT OF *THYMBA CAPITATA* EXTRACT ON *GALLERIA MELLONELLA* HEMOLYMPH ANTIOXIDANT ENZYMES**

Kaya S., Çetin B.

III. International Agricultural, Biological & Life Science Conference, Edirne, Turkey, 1 - 03 September 2021, pp.137

**IV. Demonstration of The Effects of Plant Phenolic Contents on Immunity via Invertebrate Model Organism *Galleria mellonella***

Kaya S.

III. INTERNATIONAL AGRICULTURAL, BIOLOGICAL & LIFE SCIENCE CONFERENCE AGBIOL 2021, Edirne, Turkey, 1 - 03 September 2021, pp.127

**V. *Helichrysum arenarium* INDUCED PHENOLOXIDASE ACTIVITY IN *Galleria mellonella* HEMOLYMPH**

KAYA S., Akkuş G., GÜNDÜZ B.

International Biological, Agricultural and Life Science Congress, Lviv, Ukraine, 7 - 08 November 2019

**VI. EFFECTS OF DIFFERENT CONCENTRATIONS OF DIMETHYL SULFOXIDE ON *Galleria mellonella* HEMOLYMPH PHENOL OXIDASE ACTIVITY**

KAYA S., TÜRKDOĞAN S., GÜNDÜZ B.

International Biological, Agricultural and Life Science Congress, Lviv, Ukraine, 7 - 08 November 2019

**VII. EFFECTS OF ENRICHED NUTRITION WITH INORGANIC SUBSTANCE ON *GALLERIA MELLONELLA* HEMOCYTES AND ENCAPSULATION-MELANIZATION RESPONSE**

KAYA S., GÜNDÜZ B.

International Biological, Agricultural and Life Science Congress, Lviv, Ukraine, 7 - 08 November 2019

**VIII. THE EFFECTS OF *Salvia officinalis* EXTRACT ON *Galleria mellonella* PHENOLOXIDASE ACTIVITY**

Akkuş G., KAYA S., GÜNDÜZ B.

International Biological, Agricultural and Life Science Congress, Lviv, Ukraine, 7 - 08 November 2019

**IX. OLIVE LEAF EXTRACT INDUCED *Galleria mellonella* (L.) (LEPIDOPTREA: PYRALIDAE) TOTAL HEMOCYTE COUNT CHANGES**

KAYA S., BALKAN E. İ., DEMİR N.

International Biological, Agricultural and Life Science Congress, Lviv, Ukraine, 7 - 08 November 2019

- X. **EFFECTS OF DIMETHYL SULFOXIDE ON THE HEMOCYTE CONTENT OF *Galleria mellonella***  
BALKAN E. İ., KAYA S., GÜNDÜZ B.  
International Biological, Agricultural and Life Science Congress, Lviv, Ukraine, 7 - 08 November 2019
- XI. **Effects of Different Concentrations of Dimethyl Sulfoxide on *Galleria mellonella* Hemolymph Phenol Oxidase Activity**  
KAYA S., Türkdoğan S., GÜNDÜZ B.  
International Biological, Agricultural And Life Science Congress, Lviv, Ukraine, 7 - 08 November 2019, pp.139
- XII. **Effects Of Dimethyl Sulfoxide On The Hemocyte Content of *Galleria mellonella***  
Balkan E. İ., KAYA S., GÜNDÜZ B.  
International Biological, Agricultural And Life Science Congress, Lviv, Ukraine, Lviv, Ukraine, 7 - 08 November 2019, pp.138
- XIII. ***Helichrysum arenarium* Induced Phenoloxidase Activity In *Galleria mellonella* Hemolymph**  
Akkuş G., KAYA S., GÜNDÜZ B.  
International Biological, Agricultural And Life Science Congress, Lviv, Ukraine, 7 - 08 November 2019, pp.137
- XIV. **Influence of *Helichrysum arenarium* on Hemocytes and Encapsulation-Melanization Immune Responses of Model Organism *Galleria mellonella***  
KAYA S., Akkuş G., Türkdoğan S., GÜNDÜZ B.  
Joint ESENIAS and DIAS Scientific Conference and 9th ESENIAS Workshop, Ohrid, Macedonia, 3 - 06 September 2019, pp.63
- XV. **Effects of *Salvia officinalis* on Hemocytes Counts of *Galleria mellonella***  
Akkuş G., İnan P., KAYA S., GÜNDÜZ B.  
1st INTERNATIONAL SYMPOSIUM ON BIODIVERSITY RESEARCH, Çanakkale, Turkey, 2 - 04 May 2019, pp.633
- XVI. **Effects of *Hypericum perforatum* extract on Greater Wax Moth (*Galleria mellonella*) Phenoloxidase activity**  
KAYA S., Idrizoglou G., Yerlikaya S. S., GÜNDÜZ B.  
1st INTERNATIONAL SYMPOSIUM ON BIODIVERSITY RESEARCH, Çanakkale, Turkey, 2 - 04 May 2019, pp.632
- XVII. **Effects of *Hypericum perforatum* extract on Greater Wax Moth (*Galleria mellonella*) Phenoloxidase activity**  
KAYA S., Idrizoglou G., Yerlikaya S. S., GÜNDÜZ B.  
1st INTERNATIONAL SYMPOSIUM ON BIODIVERSITY RESEARCH, Çanakkale, Turkey, 2 - 04 May 2019, pp.632
- XVIII. **Effects of olive leaf extract on *Galleria mellonella* Phenoloxidase activity**  
KAYA S., Çakaloğlu Ç., GÜNDÜZ B.  
1st INTERNATIONAL SYMPOSIUM ON BIODIVERSITY RESEARCH, ÇANAKKALE, TÜRKİYE, Çanakkale, Turkey, 2 - 04 May 2019, pp.631
- XIX. **Effects of Supplementary Diet and Diet Types on Physiology of Mother and Pups**  
KAYA S., GÜNDÜZ B.  
ISEEP-2017 VIII. INTERNATIONAL SYMPOSIUM ON ECOLOGY AND ENVIRONMENTAL PROBLEMS, Çanakkale, Turkey, 4 - 07 October 2017, pp.133
- XX. **Indol-3-Asetik Asit'in *Galleria mellonella*'nin Enkapsülasyon Tepkilerine Etkisi**  
KAYA S., Uçkan F.  
22. Ulusal Biyoloji Kongresi, Eskişehir, Turkey, 23 - 27 June 2015, pp.1
- XXI. **Effects of Zinc Oxide Nanoparticles on Hemocytes of *Galleria mellonella* (L.) (Lepidoptera: Pyralidae)**  
Nurullahoğlu Z. U., Eskin A., Kaya S.  
International Conference on Civil and Environmental Engineering, Nevşehir, Turkey, 20 - 23 May 2015, pp.392
- XXII. **Effects of Titanium dioxide Nanoparticles of *Galleria mellonella* (L.) (Lepidoptera: Pyralidae)**  
ZORLU T., NURULLAHOĞLU Z. U., KAYA S.  
International Conference on Civil and Environmental Engineering, Nevşehir, Turkey, 20 - 23 May 2015, pp.393
- XXIII. **Effects of Silver Nanoparticles on Hemocytes of *Galleria mellonella* (L.) (Lepidoptera: Pyralidae)**  
ESKİN A., NURULLAHOĞLU Z. U., KAYA S.

3th Balkan Scientific Conference on Biology, Plovdiv, Bulgaria, 30 May - 01 June 2014, pp.1

**XXIV. Indol-3-Asetik Asit'in Büyük Balmumu Güvesinin (*Galleria mellonella*, L. Lepidoptera: Pyralidae) Hemosit Sayısına Etkisi**

KAYA S., Uçkan F.

1. Ulusal Zooloji Kongresi, Nevşehir, Turkey, 28 - 31 August 2013, pp.1

**XXV. Çanakkale Civarının Herpetofaunası**

KAYA S., TOK C. V., GÜL Ç., TOSUNOĞLU M.

17. Ulusal Biyoloji Kongresi, Adana, Turkey, 21 - 24 June 2004, pp.1

**XXVI. Türkiye'deki Bazı Kaplumbağa Türlerinde Hematolojik İncelemeler**

TOSUNOĞLU M., GÜL Ç., KAYA S., TOK C. V.

17. Ulusal Biyoloji Kongresi, Adana, Turkey, 21 - 24 June 2004, pp.2

**XXVII. Türkiye'deki Bazı Kaplumbağa Türlerinde Hematolojik İncelemeler**

GÜL Ç., TOSUNOĞLU M., KAYA S., TOK C. V.

XVII. Ulusal Biyoloji Kongresi, Adana, Turkey, 1 - 04 June 2004, pp.25

## Other Publications

- I. **Omurgasızlar Sistematigi Laboratuvar Kılavuzu**  
TOK C. V., TOSUNOĞLU M., GÜL Ç., KAYA S., GÜRKAN M.  
Experiment, pp.50, 2003
- II. **Hayvan Fizyolojisi Laboratuvar Kılavuzu**  
TOSUNOĞLU M., GÜL Ç., KAYA S., GÜRKAN M.  
Experiment, pp.50, 2003

## Supported Projects

TURGUT GENÇ T., GÜNEY M., KAYA S., Project Supported by Higher Education Institutions, Hünnap Ziziphus jujuba Mill Meyve Ekstraktının *Galleria mellonella* Fenoloksidaz, Gallerimisin ve Hemolin Gen Ekspresyonlarına Etkisinin Belirlenmesi, 2022 - 2024

KAYA S., İP A., GENÇ C., Project Supported by Higher Education Institutions, Kaz Dağlarından Elde Edilen Propolisin Model Organizma *Galleria mellonella* Hemosit Aracılı Bağışıklık Tepkileri Üzerine Etkileri, 2022 - 2024

Öztürk R., Taşkın D., Kaya S., Project Supported by Higher Education Institutions, Influence of Geraniol on Model Organism *Galleria mellonella* L. (Lepidoptera: Pyralidae) Cell- Mediated Immune Responses and Antioxidant Enzyme Activity, 2021 - 2023

KAYA S., Project Supported by Higher Education Institutions, Altınotu'nun (*Helichrysum arenarium*) Hayvanlarda Antioksidan Enzim Aktivitesi Üzerine Etkilerinin Omurgasız Model Organizma *Galleria mellonella* Üzerinden Değerlendirilmesi, 2021 - 2023

TURGUT GENÇ T., KAYA S., GÜNEY M., Çakaloğlu Ç., Project Supported by Higher Education Institutions, Hypericum perforatum Ekstraktının *Galleria mellonella* Fenoloksidaz ve Bazı Antimikrobiyal Peptid Genlerinin Ekspresyonları Üzerine Etkisi, 2021 - 2023

Öztürk R., Kaya S., Project Supported by Higher Education Institutions, Influence of *Artemisia annua* leaf extract on model organism *Galleria mellonella* cell-mediated immune responses and antioxidant enzyme activity, 2021 - 2023

KAYA S., Project Supported by Higher Education Institutions, *Plantago major* yaprak ekstraktının model organizma *Galleria mellonella* toplam hemosit sayısı bağışıklık ve hemolenf antioksidan enzimleri üzerine etkisi, 2020 - 2022

KAYA S., TÜRKDOĞAN S., Project Supported by Higher Education Institutions, Zeytin *Olea europea* yaprağı ekstraktının büyük balmumu güvesi *Galleria mellonella* hemolenf antioksidan enzimleri üzerine etkisi, 2020 - 2021

Çağlayan H., Kaya S., TUBITAK Project, Kafeik Asidin Model Organizma *Galleria mellonella* Antioksidan Aktivitesi Üzerine Etkilerinin belirlenmesi, 2020 - 2020

KAYA S., DEMİR N., Project Supported by Higher Education Institutions, Zeytin *Olea europaea* yaprağı ekstratlarının

model organizma *Galleria mellonella* hemosit ve hemosit aracılı bağışıklık tepkileri üzerine etkileri, 2018 - 2020

KAYA S., GÜNDÜZ B., Project Supported by Higher Education Institutions, İnorganik maddelerce zengin beslenmenin

*Galleria mellonella* L Hemositleri üzerine etkileri, 2018 - 2020

Özen F., Yiğit N., Ergül H. A., Kaya S., Uçak M., Aksan S., Uçkan F., Aksoy Ö., Project Supported by Other Official Institutions, Kocaeli İlinin Karasal ve İç Su Ekosistemleri Biyolojik Çeşitlilik Envanter ve İzleme Projesi, 2015 - 2017

Uçkan F., Kaya S., Project Supported by Higher Education Institutions, Konağa Verilen İndol 3 asetik asitin Konak *Galleria mellonella* L Lepidoptera Pyralidae ve Parazitoid *Pimpla turionellae* L Hymenoptera Ichneumonidae Biyolojisi ve Hemositlerine Etkisi, 2012 - 2015

TOK C. V., KAYA S., TOSUNOĞLU M., TUBITAK Project, Kemaliye(Erzincan) Ve Çevresinin Biyoçeşitlilik Açısından İncelenmesi, 2005 - 2008

## Memberships / Tasks in Scientific Organizations

Royal Zoological Society of Belgium, Member, 2019 - Continues

## Scientific Refereeing

INTERNATIONAL JOURNAL OF TROPICAL INSECT SCIENCE, Journal Indexed in SCI-E, February 2021

INTERNATIONAL JOURNAL OF TROPICAL INSECT SCIENCE, Journal Indexed in SCI-E, August 2020

acta biologica Turcica, Other Indexed Journal, July 2020

## Tasks In Event Organizations

Kaya S., UYSAL İ., KOÇUM E., ISEEP-2017 VIII. INTERNATIONAL SYMPOSIUM ON ECOLOGY AND ENVIRONMENTAL PROBLEMS, Scientific Congress, Çanakkale, Turkey, Ekim 2017

## Metrics

Publication: 47

Citation (Scopus): 11

H-Index (WoS): 1

H-Index (Scopus): 2

## Awards

Kaya S., Hamilton Syringe Grant Recipients, Hamilton Company, May 2022

## Non Academic Experience

Çanakkale Onsekiz Mart Üniversitesi