

## Asst. Prof. Hasan Koyun

### Personal Information

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**Address:** Ziraat Fak. Zootečni Bol.

### International Researcher IDs

ScholarID: C5-yD30AAAAJ

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Publons / Web Of Science ResearcherID: GXH-8141-2022

ScopusID: 35976310800

Yoksis Researcher ID: 116237

### Education Information

Post Doctorate, University of Wisconsin - Madison, Life and Animal Sciences, Animal Molecular Genetics, United States Of America 2009 - 2011

Doctorate, Van Yüzüncü Yil University, Fen Bilimleri, Zootečni/ Genetik, Turkey 2003 - 2004

Doctorate, University of Wisconsin-Madison, Life and Animal Sciences, Animal Breeding and Genetics, United States Of America 1997 - 2001

Postgraduate, Illinois Institute of Technology, Biology, Molecular Cell Biology And Genetics, United States Of America 1994 - 1996

Undergraduate, Ankara University, Ziraat Fak., Zootečni, Turkey 1988 - 1992

### Foreign Languages

Italian, A2 Elementary

Russian, B1 Intermediate

English, C1 Advanced

### Dissertations

Doctorate, SIĞIR 7'İNCİ KROMOZOMU (BTA7) ÜZERİNDE OVULASYON ORANI QTL BÖLGELERİNDE YENİ MİKROSATELLİT BELİRTEÇ GELİŞTİRME YÖNTEMLERİ, Van Yüzüncü Yil University, Fen Bilimleri, Zootečni/ Genetik, 2004

Doctorate, DEVELOPING OF ADDITIONAL MICROSATELLITE MARKERS ON TARGETED REGIONS CONTAINING OVULATION RATE QTL OF BOVINE CHROMOSOME 7 (BTA7), University of Wisconsin-Madison, Meat And Animal Sciences, Animal Genetics, 2001

Postgraduate, DEVELOPING PROTOCOL FOR PURIFICATION OF RECOMBINANT Vitrocella HEMOGLOBIN PROTEIN (vtHb), Illinois Institute of Technology, Biology, Molecular Cell Biology, 1996

## Research Areas

Life Sciences, Molecular Biology and Genetics, Animal Molecular Genetics, Natural Sciences

## Academic Titles / Tasks

Assistant Professor, Van Yüzüncü Yil University, Ziraat Fakültesi, Zootekni Bölümü, 2018 - Continues  
Assistant Professor, Van Yüzüncü Yil University, Ziraat Fakültesi, Zootekni Bölümü, 2005 - 2018  
Research Assistant, Van Yüzüncü Yil University, Ziraat Fakültesi, Zootekni Bölümü, 2001 - 2005  
Research Assistant, University of Wisconsin-Madison, Animal Sciences, Animal Breeding , 1997 - 2001  
Research Assistant, Illinois Institute of Technology, Life Sciences, Biology, 1994 - 1996

## Courses

Biyoinformatik Veri Tabanlı Genomik Dizi Analizleri, Postgraduate, 2020 - 2021  
Hayvanlarda Moleküler Genetik Laboratuvar Uygulamaları, Postgraduate, 2020 - 2021  
Gen Haritalama Yöntemleri, Postgraduate, 2020 - 2021  
Moleküler Genetik II, Undergraduate, 2015 - 2016  
GENETİK, Undergraduate, 2015 - 2016  
ENFORMATİK BİLGİSAYAR PROGLAMA, Undergraduate, 2014 - 2015

## Advising Theses

Koyun H., Polymorphisms of growth hormone (GH) gene and their effects on some growth traits in norduz sheep, Postgraduate, N.IBRAHIM(Student), 2020  
Koyun H., Growth Hormone (GH) Gene Polymorphisms in Norduz Sheep , Postgraduate, R.MAHMOOD(Student), 2018  
Koyun H., Van ili bazı bal arısı (Apis mellifera L.)populasyonlarının filogenetik yapılarının moleküler tekniklerle belirlenmesi, Postgraduate, F.ALEV(Student), 2016

## Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Harran Üniversitesi, July, 2020  
Post Graduate, Post Graduate, Harran Üniversitesi, May, 2019  
Post Graduate, Post Graduate, Harran Üniversitesi, February, 2018  
Post Graduate, Post Graduate, Van Yüzüncü Yil Üniversitesi, September, 2017  
Post Graduate, Post Graduate, Harran Üniversitesi, June, 2016  
Post Graduate, Post Graduate, Harran Üniversitesi, June, 2016  
Post Graduate, Tez Savunma Jürisi, Harran Un.-FBE-Zootekni-Molekuler Genetik, June, 2016  
Doctorate, Tez Savunma Jürisi, YYU- FBE-Zootekni-Biyometri, December, 2013  
Doctorate, Doctorate, Van Yüzüncü Yil Üniversitesi, June, 2008  
Post Graduate, Tez Savunma Jürisi, ODTÜ-Biyoteknoloji ve Genetik Müh., January, 2006

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

- Detection of Growth Hormone (GH) Gene Polymorphism in Norduz Sheep**  
Yousif N. I., Koyun H.  
Indian Journal of Animal Research, vol.56, no.9, pp.1071-1076, 2022 (SCI-Expanded)

- II. **Single nucleotide polymorphisms of GDF9 gene/exon 2 region and their associations with milk yield and milk content traits in Karakaş and Norduz sheep breeds**  
Koyun H., Kiraz S., Karaca S., Koncagül S., Yılmaz A., Karakuş K., Yeşilova A., Aygün T.  
Turkish Journal of Veterinary and Animal Sciences, vol.45, no.5, pp.881-889, 2021 (SCI-Expanded)
- III. **Investigation of genetic structure in van cats using microsatellite**  
Koyun H., Koncagul S., Karakuş K., Okut H., Küçük M., Yılmaz A., Özkan C., Yeşilova A., Kaya A., Taşpınar M.  
JOURNAL OF BIOTECHNOLOGY, vol.1, no.1, pp.18, 2017 (SCI-Expanded)
- IV. **The Effect of Chemical and Surgical Castration on the Live Weight Gain and some Hormones of Male Norduz Sheep**  
Karakus K., Comba B., Taş A., Sancak T., Comba A., Sarıpınar Aksu D., Koyun H., Tariq M. M.  
PAKISTAN JOURNAL OF ZOOLOGY, vol.49, no.5, pp.1835-1840, 2017 (SCI-Expanded)
- V. **Caveolin-1 polymorphisms in patients with severe obstructive sleep apnea**  
Asker S., Taşpınar M., Koyun H., Ozbay B., Arısoy A.  
BIOMARKERS, vol.22, no.1, pp.77-80, 2017 (SCI-Expanded)
- VI. **Caveolin-1 Polymorphisms in Coronary Artery Disease**  
Aşker M., Taşpınar M., Koyun H., Akyol A., Akdağ S.  
WEST INDIAN MEDICAL JOURNAL, vol.3, pp.67-72, 2016 (SCI-Expanded)
- VII. **A review on population characteristics of Gilthead Seabream (Sparus auratd)**  
Arabacı M., Yılmaz Y., Ceyhun S. B., Erdoğan O., Dorlay H. G., Diler I., Akhan S., Kocabas M., Özdemir K., Koyun H., et al.  
Journal of Animal and Veterinary Advances, vol.9, no.6, pp.976-981, 2010 (SCI-Expanded)
- VIII. **Genomic Scan to Detect QTL Using SNP Markers for Simulated Data by Regression Analysis in Half-Sib Design**  
Koyun H., Koncagül S., Okut H.  
JOURNAL OF ANIMAL AND VETERINARY ADVANCES, vol.8, no.12, pp.2626-2630, 2009 (SCI-Expanded)
- IX. **Exploiting of DNA Microarray Technologies in Genome Analysis**  
Koyun H., Koncagul S., Yeşilova A.  
RESEARCH JOURNAL OF BIOTECHNOLOGY, vol.4, no.1, pp.77-81, 2009 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Importance and Determination of Body Electric Current Pre and Post Feeding in Turkish Karayaka Sheep**  
BAYRAM R., ÇELİKYÜREK H., KOYUN H.  
TURKISH JOURNAL OF AGRICULTURE: FOOD SCIENCE AND TECHNOLOGY, vol.12, no.2, pp.338-343, 2024 (Peer-Reviewed Journal)
- II. **Evaluate of The Reproductive Efficiency of Cows With Fuzzy Logic**  
Agaoglu B., Comba B., Koyun H.  
International Journal of Applied Mathematics, Electronics and Computers , vol.9, no.2, pp.19-25, 2021 (Peer-Reviewed Journal)
- III. **Impacts of Climitic Changes in Animal Genetic Diversity**  
Koyun H., Karakuş K., Taş A.  
Turkish Journal of Scientific Reviews, vol.9, no.2, pp.1-2, 2016 (Peer-Reviewed Journal)
- IV. **Significance of Genetic Diversity in Farm Animal Production.**  
Koyun H., Koncagül S., Karakuş K.  
Turkish Journal of Scientific Reviews, vol.9, no.1, pp.82-83, 2016 (Peer-Reviewed Journal)
- V. **The Importance of Keeping Records in Organic Animal Production.**  
Karakuş K., Koyun H., Taş A.  
Turkish Journal of Scientific Reviews, vol.9, no.1, pp.84-85, 2016 (Peer-Reviewed Journal)
- VI. **Goat in organic animal production**

Karakuş K., Koyun H., Taş A.

Turkish Journal of Scientific Reviews, vol.9, no.2, pp.3-5, 2016 (Peer-Reviewed Journal)

**VII. Effect on Yields of Foot Diseases in Sheep and Cattle Breeding.**

Taş A., Karakuş K., Koyun H.

Turkish Journal of Scientific Reviews, vol.9, no.1, pp.79-81, 2016 (Peer-Reviewed Journal)

**VIII. Sheep in Turkey from Wild Types to Domesticated Forms**

Karakuş K., Comba B., Koyun H., Taş A., Çınaroğlu S., Comba A.

Van Veterinary Journal, vol.26, no.3, pp.173-175, 2015 (Peer-Reviewed Journal)

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

- I. PROTOCOL FOR PURIFICATION OF RECOMBINANT BACTERIALHEMOGLOBIN (VHb) AT LARGE SCALE**  
Koyun H., Stark B. C.  
XIV International Scientific Research Congress, Naples, Italy, 14 September 2023, pp.737
- II. An Approach to Develop Additional Microsatellite Markers on the BTA7 Region Containing the QTL for Ovation Rate**  
Koyun H., Kirkpatrick B. W.  
VII. International Congress on Domestic Animal Breeding Genetics and Husbandry - 23, Krakow, Poland, 18 - 20 September 2023, pp.125
- III. IMPORTANCE AND DETERMINATION OF BODY ELECTRIC CURRENT IN SHEEP**  
Çelikyürek H., Güldiken O., Temür C., Bayram R., Koyun H.  
2nd INTERNATIONAL CONGRESS ON APPLIED SCIENCES, Paris, France, 25 August 2023, vol.1, pp.281-282
- IV. Exploiting of Next Generation Sequencing (NGS) Platforms in Livestock Genomes**  
Koyun H., Kiraz S., Koncagül S.  
iV-International Congress of Food, Agriculture and Veterinary Sciences, Van, Turkey, 27 - 28 May 2022, vol.1, no.1, pp.38
- V. Growth Hormone (GH) Gene Polymorphism in Norduz Sheep**  
Yousuf N. İ., Koyun H.  
INSAC Natural and Health Sciences (INHS-2020), İstanbul, Turkey, 22 - 23 May 2020, vol.1, no.1, pp.439
- VI. Determination of Milk Protein Polymorphism in Norduz and Karakuş Sheep Breeds using PCR-RFLP Technique**  
Koyun H., Kiraz S., Karaca S., Yılmaz A., Karakuş K., Yeşilova A., Koncagül S., Aygün T.  
1st International Gobeklitepe Agriculture Congress, Şanlıurfa, Turkey, 25 - 27 November 2019, vol.1, no.1, pp.113
- VII. Exploitation of Transethnic Genome-wide Association Statistics for Complex Traits**  
Koyun H., Okut H.  
1st International Congress Of Genomics and Bioinformatics, Aydın, Turkey, 1 - 04 November 2018, pp.25
- VIII. Reveal Association Between Complex Traits and Omics Data Using Deep Learning Architectures**  
Okut H., Yeşilova A., Ser G., Koyun H., Akkol S.  
International Agriculture Science Congress, Van, Turkey, 9 - 12 May 2018
- IX. Explaining the Discrepancy between Univariate and Regularized Regression Models for Correlated Variables**  
Okut H., Akkol S., Koyun H., Ser G., Yeşilova A.  
International Agriculture Science Congress, Van, Turkey, 9 - 12 May 2018
- X. Integrate Association Evidence from Correlated Phenotypes using GWAS Summary Statistics**  
Okut H., Ser G., Akkol S., Yeşilova A., Koyun H.  
International Agriculture Science Congress, Van, Turkey, 9 - 12 May 2018
- XI. PCR-RFLP Polymorphisms of Growth Hormone Gene (GH1) in Norduz Sheep**  
MahMOOD R., Koyun H., TURAP H.  
I. International Agricultural Science Congress, Van, Turkey, 9 - 12 May 2018, vol.1, no.1, pp.21
- XII. PCR-RFLP Polymorphisms of iNOS Gene in Broiler Chicks at High Altitude Condition**

- Koyun H., Babacanoğlu E., Güler H. C.  
International agricultural Science Congress, Van, Turkey, 9 - 12 May 2018, pp.20
- XIII. **Mendelian Randomization Method for Omics Data using Association Statistics**  
Koyun H., Okut H., Yeşilova A., Akkol S., Ser G.  
International Agriculture Science Congress, Van, Turkey, 9 - 12 May 2018
- XIV. **Investigation of genetic structure in van cats using microsatellite markers**  
Koyun H., KONCAGÜL S., Karakuş K., Okut H., Küçük M., YILMAZ A., Özkan C., Aygün T., Yeşilova A., Kaya A., et al.  
European Biotechnology Congress, Dubrovnik, Croatia, 25 - 27 May 2017, vol.256
- XV. **The Effect of Chemical and Surgical Castration on the Live Weight Increase and Some Hormones of Male Norduz Sheep**  
Karakuş K., Comba B., Taş A., Sancak T., Comba A., Sarıpınar Aksu D., Koyun H., Tariq M. M.  
3. International Congress on Applied Biological Sciences, Afyon, Turkey, 9 - 12 July 2017, pp.27
- XVI. **Investigation of Genetic Structure in Van cats using microsatellite markers**  
KOYUN H., KONCAGÜL S., KARAKUŞ K., OKUT H., KÜÇÜK M., YILMAZ A., ÖZKAN C., AYGÜN T., YEŞİLOVA A., KAYA A., et al.  
EUROPEAN BIOTECHNOLOGY CONGRESS, 25 - 27 May 2017
- XVII. **Determination of Phylogenetic Structures of Some Honey Bee (*Apis mellifera* L.) Populations in Van Province by Molecular Technics**  
ALEV ÇETİN F., Koyun H., Erkan C., MİKAIL N.  
International Conference on Agriculture, Forest, Food Sciences and Technologies (ICAF OF 2017), Nevşehir, Turkey, 15 - 17 May 2017, pp.18
- XVIII. **Goat in Organic Animal Production**  
Karakuş K., Koyun H., Taş A.  
2nd International Congress on Applied Biological Sciences, Sarajavo, Bosnia And Herzegovina, 27 - 31 May 2016, vol.1, no.2, pp.35
- XIX. **The importance of keeping records in organic animal production**  
Karakuş K., Koyun H., Taş A.  
2nd International Congress on Applied Biological Sciences, Sarajavo, Bosnia And Herzegovina, 27 - 31 May 2016, vol.1, no.2, pp.116
- XX. **Effect on Yields of Foot Diseases in Sheep and Cattle Breeding**  
Taş A., Karakuş K., Koyun H.  
2nd International Congress on Applied Biological Sciences, Sarajavo, Bosnia And Herzegovina, 27 - 31 May 2016, vol.1, no.2, pp.73
- XXI. **Significance of Genetic Diversity in Farm Animal Production**  
Koyun H., Karakuş K., Koncagul S.  
2nd International Congress on Applied Biological Sciences, Sarajavo, Bosnia And Herzegovina, 27 - 31 May 2016, vol.1, no.2, pp.29
- XXII. **Impacts of Climate Changes in Animal Genetic Diversity**  
Koyun H., Karakuş K., Taş A.  
2nd International Congress on Applied Biological Sciences, Sarajavo, Bosnia And Herzegovina, 27 - 31 May 2016, vol.1, no.2, pp.112
- XXIII. **Organik Hayvansal Ürünlerin Güvenilirliği.**  
Karakuş K., Comba B., Koyun H.  
6.Ulusal Veteriner Gıda Hijyeni Kongresi, Van, Turkey, 7 - 11 October 2015, pp.1
- XXIV. **Epigenetik ve Hayvan Islahındaki Önemi**  
Koyun H., Koncagul S., Karakuş K.  
9. Ulusal Zootekni Bilim Kongresi, Konya, Turkey, 3 - 05 September 2015, vol.1, no.1, pp.278-281
- XXV. **Organik Hayvancılıkta Hayvan Davranışı ve Refahi**  
Koyun H., Karakuş K., Sarıpınar Aksu D., Comba B., Taş A.  
9. Ulusal Zootekni Bilim Kongresi, Konya, Turkey, 3 - 05 September 2015, vol.1, no.1, pp.635-639
- XXVI. **Türkiye' de Yabancı Formundan Günümüze Koyun**

- Karakuş K., Comba B., Koyun H., Taş A., Çınaroğlu S., Comba A.  
1.Ulusal Yaban Hayvanları Kongresi, Van, Turkey, 27 - 30 May 2015, pp.1
- XXVII. **Endangered Endemic Species of Lake Van: Norduz and Karakaş Sheep, Norduz Goats and Van Cats.**  
Koyun H.  
Genetic diversity, selection and adaptation in wildlife and livestock molecular approaches workshop., Salzburg, Austria, 26 - 28 November 2008, vol.1, no.1, pp.14
- XXVIII. **Kanatlı genomunda MHC (Multihistocomplexity) Genlerinin Belirlenmesi**  
Koyun H.  
. I. Türkiye Kanatlı Genom Çalıştayı, Samsun, Turkey, 17 - 18 March 2008, vol.1, no.1, pp.1
- XXIX. **Çiftlik Hayvanlarında Gen Belirteç İlişkili Seleksiyon (Marker-Assisted Selection) Çalışmalarında Son Gelişmeler**  
Koyun H., Okut H.  
V. Türkiye Ulusal Zootekni Kongresi, Van, Turkey, 5 - 08 September 2007, vol.1, no.1, pp.67-69
- XXX. **Sıfır Değer Ağırlıklı Verilerin (Zero-inflated data) Modellenmesi**  
Yeşilova A., Okut H., Koyun H., Zırhloğlu G., Kaya Y.  
V. Türkiye Ulusal Zootekni Kongresi, Van, Turkey, 5 - 08 September 2007, vol.1, no.2, pp.89-92
- XXXI. **Targeted Development of Microsatellite Markers From Bovine BACs**  
Koyun H., KIRKPATRICK B., Arias J.  
27th International Society of Animal Genetics (ISAG) Meeting, Minnesota, United States Of America, 22 - 28 August 2000, vol.1, no.1, pp.39

## Supported Projects

- Koyun H., AL BOZI N. I. Y., Project Supported by Higher Education Institutions, Norduz Koyunlarında Büyüme Hormonu GH Gen Polimorfizmi ve Bazı Büyüme Özellikleri Üzerine Etkisinin Araştırılması, 2020 - 2021
- Koyun H., MOHAMED R. M., Project Supported by Higher Education Institutions, Norduz Irkı Koyunlarda Büyüme Hormonu (Growth Hormone; GH) Gen Polimorfizmi, 2017 - 2018
- Taş A., Sancak T., Koyun H., Sarıpınar Aksu D., Karakuş K., COMBA A., Comba B., Project Supported by Higher Education Institutions, Norduz Erkek Kuzularında Kimyasal ve Cerrahi Kastrasyonun Canlı Ağırlık Artışına ve Bazı Hormonlar Üzerine Etkisi, 2015 - 2016
- Babacanoğlu Çakır E., Güler H. C., Koyun H., Project Supported by Higher Education Institutions, Yüksek Rakımda Farklı Kuluçka Koşullarının Embriyonun Morfolojik ve Fizyolojik Özellikleri ile HIF1 genine Etkisi, 2014 - 2015
- Koyun H., Aygün T., Küçük M., Yeşilova A., Karakuş K., Taşpınar M., Kaya A., Özkan C., Project Supported by Higher Education Institutions, Van Kedilerinin Genetik Yapısının Mikrosatelite Belirteçler ile İncelenmesi, 2008 - 2015
- Koyun H., Karaca S., Project Supported by Higher Education Institutions, PCR-RFLF Yöntemiyle Norduz ve Karakaş Koyun Irklarında Süt Protein Polimorfizminin Belirlenmesi ve Bunun Süt Verimine Etkisi, 2008 - 2015

## Memberships / Tasks in Scientific Organizations

Van-YYU Zootekni Derneği, Board Member, 2014 - Continues

## Scientific Refereeing

- Türk Tarım ve Doğa Bilimleri Dergisi, Journal Indexed in ESCI, September 2020
- TURKISH JOURNAL OF VETERINARY & ANIMAL SCIENCES, SCI Journal, December 2019
- Project Supported by Higher Education Institutions, December 2018
- Turkish Journal of Veterinary and Animal Sciences, SCI Journal, April 2017
- Van Veterinary Journal, National Scientific Refreed Journal, March 2016

## Scientific Consultations

YYU-BAP, Project Consultancy, Van Yüzüncü Yil University, Ziraat Fakültesi, Zootekni Bölümü, Turkey, 2017 - 2018

## Metrics

Publication: 50

Citation (WoS): 20

Citation (Scopus): 26

H-Index (WoS): 3

H-Index (Scopus): 3

## Congress and Symposium Activities

TUBITAK-TOVOG, Panelists, Ankara, Turkey, 2021

1st International Gobeklitepe Agriculture Congress, Attendee, Şanlıurfa, Turkey, 2019

1st International Congress of Genomics and Bioinformatics, Session Moderator, Aydın, Turkey, 2018

1st International Congress of Genomics and Bioinformatics, Attendee, Aydın, Turkey, 2018

International Agricultural Science Congress, Attendee, Van, Turkey, 2018

International Agricultural Science Congress, Attendee, Van, Turkey, 2018

European Biotechnology Congress, Attendee, Dubrovnik, Croatia, 2017

2nd International Applied Biological Sciences, Attendee, Sarajevo, Bosnia And Herzegovina, 2016

Van Kedileri'nin Molekuler Genetik Analizleri, Invited Speaker, Van, Turkey, 2016

Türkiye Hayvancılığı ve Genomik Seleksiyon Uygulamaları (Tarım Bakanlığı-HAYGEM), Panelists, Ankara, Turkey, 2015

Türkiye Hayvancılığında Genetik Cesitlik ve Korunumu (Tarım Bakanlığı-HAYGEM), Panelists, İzmir, Turkey, 2015

9. Ulusal Zootekni Kongresi, Attendee, Konya, Turkey, 2015

Genetic Conservation of Animals (European Science Foundation), Invited Speaker, Salzburg, Austria, 2008

6th QTL Mapping Congress, Attendee, Uppsala, Sweden, 2008

I. Türkiye Kanatlı Genom Çalıştayı, Invited Speaker, Samsun, Turkey, 2008

Go Milk Sicily, Attendee, Palermo, Italy, 2008

## Scholarships

Yurdisi Doktora Ogrenim Bursu, Ministry of Education, 1997 - 2001

Yurdisi Y. Lisans Ogrenim Bursu, Ministry of Education, 1994 - 1996

## Awards

Koyun H., Van Kedilerinin Genetik Yapıları, YYU-Veteriner Fak. Genetik Topluluğu, March 2016

## Non Academic Experience

University of Wisconsin- Madison

ODTU

Yuzuncu Yil Universitesi

University of Wisconsin Madison

Illinois Institute of Technology