



TAGEM

R&D AND INNOVATION

CENTRAL RESEARCH INSTITUTE
FOR FIELD CROPS/ ANKARA

Sinan AYDOGAN

Agricultural Engineer, PhD

EDUCATION

- PhD**
2017-2021 Akdeniz University
Department of Field Crops
- MSc**
2002-2005 Ankara University
Department of Biometry and Genetics
- Bachelor's Degree**
1996-2000 Ankara University
Department of Plant Protection

LANGUAGE English: YDS 75

CAREER

- 2005-.... Agricultural Engineer- Ministry of Agriculture and Forestry, Central Research Institute for Field Crops, Department of Plant Breeding and Genetics (Ankara/Turkey)
- 1995-2002 Agricultural Engineer - General Directorate of Agricultural Research And Policies
- 1995-2002 Research Assistant - Ankara University Faculty of Agriculture Department of Biometry and Genetics

ABOUT ME

I was born in 1969 in Sivas. In 1994, I have started to work at the Ankara University as a research assistant. I have been working as a Barley Breeder at the Central Research Institute of Field Crops since 2005. Currently, I took part in the breeding of 14 barley varieties, two of them are hulless to date.

CONTACT

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■ **PROJECTS**

■ **Projects Conducted**

1. Barley Breeding Project in Central Anatolia (TAGEM TA/07/07/001) (2006-2011)
2. National Winter Barley Breeding Project for Feed and Malt (TAGEM) TA/03/03/03/008) (2003-2007)
3. Malting Barley Breeding Project (TÜBİTAK1007-KAMAG 105 G 083) 2006-2010
4. Production, Renewal, Agromorphological, Biochemical, Molecular Identification of Genetic Resources and Evaluation of Barley (*Hordeum vulgare* L.) Germplasm in the Anatolian Agricultural Research Institute (ATAE) (TÜBİTAK 1001-1040266)
5. Barley Breeding Project in the Central Anatolia (TAGEM/TA/07/07/05/0011) (2008-2012)
6. Determination of the most Suitable Growing Conditions for Anther Culture in Wheat and Barley and Optimization of Storage at Extreme Cold Conditions (TAGEM)
7. Identification of Reactions to Scald and Net-blotch Diseases and the Determination of Pathotypes of Scald and Net-blotch Disease in the Landraces and Wild Barley Genotypes (*Hordeum spontaneum*) (TÜBİTAK) (1001- 1110644).
8. Mapping Adaptation of Barley to Drought (MABDE) ICA3-CT2002-10026 (EU FP6 &FP7) (2003-2006)

■ **Ongoing Projects**

1. Barley Breeding Project in Central Anatolia Region (TAGEM/TBAD/B/18/A7/P40/172)
2. National Winter Barley Breeding Project for Malt and Feed (TAGEM/TBAD/Ü/18/A7/P40/170)
3. Development, cultivation and creation of gradual seeding system of barley genotypes suitable for Northern Cyprus environments (TAGEM / R&D)
4. Establishment of Major Gene Source Collections for Barley Breeding and Determination of Agro-Morphological and Pathogen-Related Characters – SNP Relationships by Genome-Wide Association Study in Barley Genotypes (TÜBİTAK 1001)
5. Development of Molecular Markers Associated with Resistance to Net-blotch (*Pyrenophora teres*) and Spot-blotch (*Rhynchosporium commune*) Diseases in Barley (TAGEM)
6. Development of Molecular Markers Associated with Resistance to Barley Striped Leaf Spot (*Drechslera graminea*) and Cochliobolus Leaf Spot (*Cochliobolus sativus*) Diseases (TAGEM)
7. Use of linear phenotypic selection indices in plant breeding (TAGEM) (Project Leader)
8. Application of different selection index and stability parameters for selection of advanced feed barley lines (TAGEM) (Project Leader)



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■ **PUBLICATIONS**

■ **INTERNATIONAL ARTICLES AND PAPERS**

■ **Articles Published in International Journals**

1. Morgounov A., Karaduman, Y., Akin B., **Aydoğan S.**, Baenziger P.S., Bhatta M., Chudinov V., Dreisigacker S., Govindan V., Güler S, Guzman C,, Nehe A., Poudel R., Rose, D.; Gordeeva, E., Shamanin V., Subasi K., Zelenskiy Y., Khlestkina E. (2020) Yield and Quality in Purple-Grained Wheat Isogenic Lines. *Agronomy* **2020**, *10*, 86. (SCI)
2. Rahimi, A., Karakaya, A., Oğuz, A. Ç., Ergün, N., Aydoğan, S. 2018. Evaluation of some agronomic properties of Iranian barley landraces under greenhouse conditions. Works of the Faculty of Agriculture and Food Sciences University of Sarajevo. Vol. XLIII, 68/1: 9-19.
3. Karagöz, A., Özbek, K., Akar, T., Ergün, N., Aydoğan, S. ve Sayim, İ. 2017. Agro-morphological variation among an ancient world barley collection. *Journal of Agricultural Sciences* , 23 (4) , 444-452 .
4. Ergun N., Sayim İ., Aydoğan S., Tekin M., Sanal T., Akar T. (2017). Ozen, the First Spring Hulless Barley Cultivar in Turkey, *Journal Of Plant Registrations*, vol.11, pp.207-211, 2017(SCI)
5. Çelik Oğuz, A., A. Karakaya, Z. Mert, N. Ergün, İ. Sayim, S. Aydoğan, S. 2016. Determination of the seedling reactions of advanced barley lines to spot blotch disease caused by *Cochliobolus sativus*. Works of the Faculty of Agriculture and Food Sciences, University of Sarajevo Vol. LXI, No. 66/1, 244-246.
6. Ergun N., Aydoğan, S. and Sarı A.O., 2012, Cereal Production and Agronomic Innovation in Turkey, Watch Letter, No 23. ISSN 2114-3129 p.36-39



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■ International Papers, Seminars, etc.

1. Ergün, N. Akan, K. Sayim, İ, Aydoğan, S. and Akar, T. 2016. Phenotypic evaluation of wild barley (*Hordeum spontaneum* c. Koch) as a source of resistance to barley scald. VII International Scientific Agriculture Symposium (Agrosym) Bosnia and Herzegovina. October 2016
2. Aydoğan, S. Ergün, N., Sayim, İ, and Akar, T. 2016. Use of index selection methods for determination of high yielding feed barley genotypes in multi environmental trials. VII International Scientific Agriculture Symposium (Agrosym) Bosnia and Herzegovina. October 2016
3. T. Akar, İ, Sayim, N. Ergun, S. Aydogan, T. Kahraman, M. Avci, H. Sipahi, K. Akan, S. Guler, T. Sanal (2009). Agro morphologic Variation Among Winter Malting Barley Genotypes in Trace Region. 19th Eucarpia Genetic Resources Conference, Slovenia (Poster).
4. İ. Sayim, T. Akar, N. Ergun, S. Aydogan, S. Yüksel, M. Avci, H. Sipahi, K. Akan, S. Guler, T. Sanal (2009). Agro Morphologic Variation Among Winter Malting Barley Genotypes in Western Transitional Zone. 19th Eucarpia Genetic Resources Conference, Slovenia. (Poster) S. Aydogan, T. Akar, İ. Sayim, N. Ergun, E. Kendal, M. Avci, H. Sipahi, Z. Mert, S. Guler, T. Sanal, A. Engin (2009).
5. Agro morphologic Variation Among Winter Malting Barley Genotypes in Southern Anatolia. 19th Eucarpia Genetic Resources Conference, Slovenia (Poster).
6. N. Ergun, T. Akar, İ. Sayim, S. Aydogan, M. Avci, H. Sipahi, Z. Mert, S. Guler, T. Sanal, A. Engin (2009). Agro morphologic Variation Among Winter Malting Barley Genotypes in Central Anatolia. 19th Eucarpia Genetic Resources Conference, Slovenia. (Poster)
7. S. Guler, T. Akar, İ, Sayim, N. Ergun, S. Aydogan, Sanal, H. Sipahi, M. Avci, Z. Mert, R. Özkara (2009). Friability Variation Among Winter Malting Barley Genotypes in Central Anatolia. 19th Eucarpia Genetic Resources Conference, Slovenia. (Poster)
8. T. Sanal, T. Akar, İ, Sayim, S. Guler, N. Ergun, S. Aydogan, H. Sipahi, M. Avci, K. Akan, R. Özkara (2009). Fine Extract Variation Among Winter Malting Barley Genotypes in Eastern Anatolia. 19th Eucarpia Genetic Resources Conference, Slovenia. (Poster)
9. M. Avci, T. Akar, M. Karacam, B. Ozdemir, A. Yururer, İ. Sayim, N. Ergun, S. Aydogan, H. Sipahi, Z. Mert, S. Guler, T. Sanal (2008). Agronomic Practices Affecting Malting Barleys in Dryland Agriculture. 10th Barley Genetics Symp. 5-10 April, Alexandria, Egypt. (Poster)
10. H. Sipahi, T. Akar, İ. Sayim, N. Ergun, S. Aydogan, Z. Mert, M. Avci, T. Sanal (2008). Production of Doubled Haploids Malting Barley Population for Breeding and Genetic Studies in Turkey. 10th Barley Genetics Symp. 5-10 April, Alexandria, Egypt. (Poster)
11. T. Akar, İ. Sayim, N. Ergun, S. Aydogan, H. Sipahi, M. Avci, Z. Mert, S. Guler, T. Sanal, R. Ayrancı, T. İnce, T. Kahraman, N. Aydın, E. Kendal, A. Engin (2008). Improvement of Candidate Malting Barley Cultivars for Diverse Agro-ecologies of Turkey. 10th Barley Genetics Symp. 5-10 April, Alexandria, Egypt. (Poster)



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■ NATIONAL ARTICLES AND PAPERS

■ Articles Published in National Journals

1. Yüksel, S. , Akar, T. , Sayim, İ. , Ergün, N. , Aydoğan, S. , Şanal, T. , Güler, S. , Belen, S. & Sönmez, A. C. (2021). SABRİBEY Maltlık Arpa Çeşidinin Islah Hikayesi. Adnan Menderes Üniversitesi Ziraat Fakültesi Dergisi, 18 (2) , 215-224.
2. Balcı, S., Karakaya, A., Çelik Oğuz, A., Ergün, N., Sayim, İ., Aydoğan. S., 2018. Bazı kavuzsuz arpa çeşit ve hatlarının Cochliobolus yaprak lekesi hastalığına karşı fide dönemi tepkilerinin değerlendirilmesi. Bitki Koruma Bülteni 58(4): 221-226.
3. Ergün, N., Aydoğan S., Sayim İ., Karakaya A. , Çelik Oğuz A., 2017. Arpa (Hordeum vulgare L.) Köy Çeşitlerinde Tane Verimi ve Bazı Tarımsal Özelliklerin İncelenmesi. Tarla Bitkileri Merkez Araştırma Enstitüsü Dergisi 26 (2): 180-189
4. Azamparsa, M. R., Z. Mert, A. Karakaya, İ. Sayim, N. Ergün, S. Aydoğan. 2015. Determination of the seedling reactions of some barley cultivars and advanced barley lines to Rhynchosporium commune. Bitki Koruma Bülteni 55(3): 247-252.
5. Aktaş Doğan D., A. Karakaya, A. Çelik Oguz, Z. Mert, İ. Sayim, N. Ergün, S. Aydoğan (2013). Bazı arpa genotiplerinin Drechslera teres f. maculata (Smed.-Pet., 1971)'ya karşı fide dönemi reaksiyonlarının belirlenmesi. Bitki Koruma Bülteni 2013, 53(3):175-183
6. Tugaç M., Torunlar H., Karakurt E., Aydoğan S. (2019). Buğday Verimi ve Biyokütlesi ile Uzaktan Algılama Vejetasyon İndisleri Arasındaki İlişkilerin Tarımsal İklim Bölgeleri Bazında Değerlendirilmesi. Toprak Su Dergisi, Özel Sayı, 177-186. DOI: 10.21657/topraksu.655617

■ National Papers, Seminars, etc.

1. Ergün N., İ. Sayim, S. Aydoğan T. Akar 2015. Yield and Stability of Some Feed Barley (Hordeum vulgare L.) Genotypes under Central Anatolian Conditions, 2. International Plant Breeding Congress, 1-5 November 2015 Antalya/Turkey
2. Sayim İ., N. Ergün, S. Aydoğan, T. Akar 2015. Yield and Stability of Some Malting Barley (Hordeum vulgare L.) Genotypes under Rainfed Conditions of Turkish Highlands 2. International Plant Breeding Congress, 1-5 November 2015 Antalya/Turkey
3. Aydoğan S., N. Ergün, İ. Sayim, T. Akar 2015. Yield and Stability of Some Barley (Hordeum vulgare L.) Genotypes Based on Different Stability Parameters 2. International Plant Breeding Congress, 1-5 November 2015 Antalya/Turkey.
4. Namuk ERGÜN, İsmail SAYİM, Sinan AYDOĞAN, Taner AKAR 2014, Grain Yield and Stability of Winter Malting Barley (Hordeum vulgare L.) Line and Cultivars Balkan Agriculture Congress 8-11 September, 2014 Edirne, Turkey. (Poster)
5. Ergün N., T. Akar, A. Karagöz, V. Eser, İ. Sayim, H. Sipahi, K. Özbek, A. Engin, S. Aydoğan (2013). Agromorphologic variation in a large barley germplasm collection under Central Anatolian highlands -the first year (2005-06). International Plant Breeding Congress, Antalya, TURKEY. (Sunulu)
6. Sinan AYDOĞAN, Namuk ERGÜN, İsmail SAYİM, Taner AKAR 2014, Determination of Heritability and Phenotypic and Genetic Correlations of Grain Yield and Some Morphologic Traits of Barley Varieties Cultivated Under Central Anatolia and Transitional Zones Balkan Agriculture Congress 8-11 September, 2014 Edirne, Turkey. (Poster)



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▪ **National Papers, Seminars, etc.**

7. İsmail SAYIM, Sinan AYDOĞAN, Namuk ERGÜN, Taner AKAR 2014, Grain Yield And Stability of Winter Feed Barley (*Hordeum vulgare* L.) Line And Cultivars Balkan Agriculture Congress 8-11 September, 2014 Edirne, Turkey.(Poster)
8. Sayim İ., T. Akar, N. Ergün, S. Aydoğan (2013). Winter Barley Breeding History of Turkey International Plant Breeding Congress Antalya, TURKEY.(Poster)
9. Ergün., N. ve Geçit, H.H., 2008, İleri Kademe Arpa (*Hordeum vulgare* L.) Hatlarında Verim ve Verime Btkili Bazı Karakterlerin incelenmesi. Ülkesel Tahıl Sempozyumu, Konya. 2-5 Haziran 2008. Sayfa 14-23

▪ **OTHER PUBLICATIONS**

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

1. Application of Different Selection Index and Stability Parameters for Selection of Advanced Winter Feed Barley Lines (PhD Thesis).
2. Identification of Barley Genetic Sources (Book).Taner Akar, Alptekin Karagöz, Vehbi Eser, İsmail Sayim, Hülya Sipahi, Namuk Ergün, , Kürşat Özbek, , Ahmet Engin, Turgay Polat, Sinan Aydoğan (2011).
3. Malting Barley Breeding and Agronomy (Book) Taner Akar. Vehbi Eser, Muzaffer Avcı, İsmail Sayim, Hülya Sipahi, Namuk Ergün, Sinan Aydoğan, Turgay Şanal, Safure Güler, Kadir Akan, Zafer Mert, Ahmet Engin, Recep Özkara, Nevzat Aydın, Ramazan Ayrancı, Turan Kahraman, Soner Yüksel, Enver Kendal (2012).



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

Membership

1. Plant Breeders Association of Turkey (BİSAB)
2. Turkish Agricultural Engineers Association (TZYMB)

Training

1. Agricultural biotechnology course, 6 months, Kobe Japan.
2. statistical analysis in plant breeding, Training of trainers, 2 weeks, Texcoco Mexico, CIMMYT
3. Genetic analyzes in plant breeding, , 2 weeks, Texcoco Mexico, CIMMYT
4. Statistical design and data analysis, 1 weeks, ICARDA and TAGEM Ankara
5. Conservation of genetic resources, 1 week, Aleppo, Syria ICARDA
6. WEB database for agricultural documents, 1 week, Aleppo Syria ICARDA
7. Bibliographic database management 1 week, Aleppo Syria ICARDA

Developed varieties

1. ÖZEN (2012) Two rows spring hulless barley
2. AKAR (2012) Two rows feed barley
3. BURAKBEY (2013) Two rows feed barley
4. YALIN (2014) Two rows winter hulless barley
5. TOSUNPAŞA (2016) Two rows feed barley
6. BOZLAK (2018) Two rows feed barley
7. ASİL (2019) Two rows feed barley
8. ANKA-06 (2019) Two rows feed barley
9. CACABEY (2019) Two rows feed barley
10. MİSKET (2020) Two rows feed barley
11. SİNANBEY (2021) Two rows feed barley
12. SAYIM 40 (2021) Two rows feed barley
13. CİRİT (2021) Two rows feed barley
14. BEŞPARMAK (2021) Six rows spring feed barley