



Prof. Dr. Çimen Atak

26.06.1953

RESEARCH AREA

Molecular plant breeding, *in vitro* mutations, Plant tissue cultures, Radiobiology, Magnetic field.

ACADEMIC

Education

B. Sc:Ankara University, Science Faculty, Department of Biology,(Botany-Zoology), 1974.

Ph. D.: Ege University, Agriculture Faculty, 1980.

Academic Degrees

Ass. Prof Dr.: Gazi University, Faculty of Arts and Sciences, Department of Biology, General Biology discipline (1987-1989)

Ass. Prof Dr.: Istanbul University, Science Faculty, Department of Biology, General Biology discipline (1989-1992)

Assoc. Prof Dr.: Istanbul University, Science Faculty, Department of Biology, Radiobiology discipline (1992-1998)

Prof. Dr.: Istanbul University, Science Faculty, Department of Biology, Radiobiology discipline, (1988 -2000)

Prof.Dr.: Halic University, Faculty of Arts and Sciences, Department of Molecular Biology and Genetics,(2000-2006)

Prof.Dr.: Istanbul Kültür University, Faculty of Science and Letters,
Department of Molecular Biology and Genetics,(2006 -Present)

Work Experience

Administrative Duties (University)

- Istanbul University, Faculty of Sciences, Deputy Director of Radiobiology and Health Physics and Application Center
- Istanbul University, Board Member of the Faculty of Sciences,
- Istanbul University, Member of Council of The Faculty of Sciences,
- Istanbul University, Faculty of Sciences, Deputy Head of Biology Department
- Halic University, Deputy Dean of Arts and Sciences
- Halic University, Board Member of The Faculty of Arts and Sciences
- Halic University, Member of Council of The Faculty of Arts and Sciences
- Halic University, Board Member of The University
- Halic University, Senator of the Faculty of Arts and Sciences

Administrative Duties (TAEK)

- TAEK, ANTEM, Head of Plant Breeding Department

Thesis supervised:

Master of Science (M.Sc.)

- 1-Güzel ÜNLÜ (Gazi Uni. Faculty of Arts and Sciences): Effect of gamma radiation on the different ploidy levels of wheat (1989).
- 2-Sevil YALÇIN (I.U.Science Fac.: Effect of gamma radiation on soybean (*Glycine max* L. Merrill) (1992).
- 3-Sema ALİKAMANOĞLU (I.U.Science Fac.): Effect of gamma radiation on soybean (*Glycine max* L. Merrill) tissue cultures (1993).

4-Yasemin CANBOLAT (I.U.Science Fac.): Induction of soybean (*Glycine max* L. Merrill) atrazine resistant mutants by gamma radiation.(1999).

Philosophy Degree (Ph.D.)

1- Sema ALİKAMANOĞLU (I.U. Science Fac.) :Induction of Haploid Sugar Beet (*Beta vulgaris* L.) by In Vitro Techniques and Induced Somatic Mutation with Gamma Radiation. (2000).

Publications

Articles published in International Journals:

- Çelik, Ö. **Atak, Ç.** Rzakulieva, A. (2008), "Stimulation of rapid regeneration by a magnetic field in *Paulownia* node cultures" *Journal of Central European Agriculture*, Vol.9, No.2, 297-304.
- **Atak, Ç.** Çelik, Ö. Olgun, A., Alikamanoğlu,S. Rzakoulieva A. Effect of magnetic field on peroxidase activities of soybean tissue culture. *Biotechnology & Biotechnological Equipment*.2,p.166-171,2007.
- Alikamanoğlu,S. Yaycılı, O. **Atak, Ç.** Rzakoulieva A. Effect of magnetic field and gamma radiation on *Paulownia tomentosa* tissue culture. *Biotechnology & Biotechnological Equipment*.1,p.49-53,2007.
- Büyüksulu, N. Çelik, Ö. **Atak, Ç.** The effect of magnetic field on the activity of superoxide dismutase. *Journal of Cell and Molecular Biology*, 5:57-62,, 2006.
- Atak, Ç.**, Alikamanoğlu,S. Açık L., Canbolat,T. Induced of plastid mutations in soybean plant (*Glycine max* L. Merrill) with gamma radiation and determination with RAPD.*Mutation Research* 556, 35-44, 2004.
- Atak, Ç.**, Emiroğlu, Ö., Alikamanoğlu, S., Rzakoulieva, A. Stimulation of regeneration by magnetic field in soybean (*Glycine max* L.Merrill) tissue cultures. *Journal of Cell and Molecular Biology*, 2:113-119, 2003.
- Ulakoğlu, G., Yurttaş,B.,**Atak,Ç.**, Rzakoulieva,A., Danilov,V.,""Effect of magnetic field on L-strain cells. *Communication of Joint Institute for Nuclear Research, Dubna*, E19-2000-230,1-6, 2000.

-**Atak,Ç.**, Yurttaş,B., Alikamanoğlu,S. Topçul,F., Rzakoulieva,A., Danilov,V.;"Effect of magnetic field on Paulownia seeds" Communication of Joint Institute for Nuclear Research, Dubna, E19-2000-231,1-14, 2000.

-**Atak,Ç.**, Alikamanoğlu,S., Yalcın,S.;"Induced mutation and radiation sensitivity *in vitro* culture of soybean (Glycine max L. Merrill)" Turkish Journal of Nuclear Sciences Vol.26 No.2, 69-88, December 1999

-**Atak, Ç.**, Yurttaş, B. Yalçın, S. Mutlu, D. Rzakoulieva, A. Danilov,V. " Effects of Magnetic Field on soybean (Glycine max. L. Merrill) seeds.". Communication of Joint Institute for Nuclear Research,Dubna.p.1-10,1997

- Alikamanoğlu,S., **Atak,Ç.** "Radiosensitivity in Callus Tissues of Soybean (Glycine Max (L.) Merrill)" Turkish Journal of Nuclear Sciences Vol.21 No.2 95-103 December 1994.

- Özbek,N., Atilla,S., Sağel, Z.,**Atak,Ç.** "Radiation Induced Mutations for Yield and Oil Content in Soybean". Turkish Journal of Nuclear Sciences 17, p.49-57, 1990.

- Özbek,N., **Atak,Ç.** "Mutagenic Efficiency of Gamma Irradiation in Two Soybean Varieties" Turkish Journal of Nuclear Sciences,11, p.43-50, 1984.

Papers published in International Conferences:

-**Atak,Ç.**, Yurttaş,B., Alikamanoğlu, S., Topçul, F.; Rzakoulieva, A.; Danilov, V., "Effect of magnetic field on Paulownia seeds" Second Balkan Congress 14-18. 5. 2000 İstanbul Türkiye.

-Ulakoğlu,G.; Yurttaş,B.; **Atak,Ç.**; Rzakoulieva,A.; Danilov,V.;"Effect of magnetic field on L-strain cells" International Conference Modern Problems of Radiobiology , Radioecology and evolution dedicated to centenary of N.W. Timofeeff-Ressevsky, September 6-9.2000,Dubna ,Russia.

Abstracts published in International Conferences :

- Ö. Çelik, **Ç. Atak**, N. Büyüksulu, The effects of magnetic field on germination of soybean seeds and on the activity of superoxide dismutase and catalase. In Vitro Cellular and Developmental Biology-Animal, Vol 43, s49-50,2007.

- Palavan-Ünsal, N; Atak, C.; Büyüktuncer, D; (2001) 'Role of Meta-topalin in Tissue Culture of *Arabidopsis thaliana*' 1st Eurasian Congress on Molecular Biotechnology (October 17-20,2001) Abstracts p.48.
- Ulakoğlu,G.; Yurttaş,B.; Atak,C.; Rzakoulieva,A.; Danilov,V.;"Effect of magnetic field on L-strain cells" International Conference Modern Problems of Radiobiology , Radioecology and evolution dedicated to centenary of N.W. Timofeeff-Ressevsky, September 6-9.2000,Dubna ,Russia.

Articles published in National Journals:

- Ünlü,G.,Atak,C. "Gama radyasyonunun Allopoliploidlerin Mitoz Bölünmesi üzerine etkisi" Gazi Üniv. Fen-Edebiyat Fakültesi, Fen Bilimleri Dergisi C.4 S.1 s 1-7 ,1994.
- Atak,C. "Gama Işınları ile Işınlanan Soyada (Glycine Max L. Merrill) Klorofil Mutasyonu" J.Biol.Fac. Sci. Arts. Gazi Üniv. 1991, 2:321-330.
- Özbek,N., Atak,C., Atilla,S., Sağel, Z. "Çukurovada Yetiştirilen Amsoy-71 ve Calland Soya Çeşitlerinde Verim ve Yağ Oranının Nükleer Teknikle Geliştirilmesi" TÜBİTAK yayınları, s.469-485.1986.
- Atak, C., Atilla,S., "Nem oranları değişik olan Soya tohumları üzerine Gama Radyasyonunun Etkisi" T.A.E.K., ANTAM, Bilimsel Araştırma ve İnceleme, 5.,1985.

Papers published in National Conferences:

- Atak,C., Alikamanoğlu,S., Yalçın,S. "Soya fasulyesi (Glycine Max L. Merrill) kallus ve meristem kültürlerine gama radyasyonunun etkileri. 13.Ulusal Biyoloji Kongresi, Çevre Biyolojisi Seksiyonu, Hücre Biyolojisi Seksiyonu, Radyobioloji Seksiyonu, Cilt.3 379-388, 1997.
- Atak,C.,Yurttaş,B., Yalçın S., Mutlu,D., Azakoulieva,A. "Magnetik alanın Soya (Glycine Max L. Merrill) tohumları üzerine etkisi. 13.Ulusal Biyoloji Kongresi, Bitki Fizyolojisi Seksiyonu,Bitki Morfolojisi Anatomisi ve Sistematigi Seksiyonu, Cilt.1 118-127, 1997.

- Atak,Ç., Alikamanoğlu,S. “Soya fasulyesi (*Glycine Max L. Merrill*) Meristem kültürlerinde gama radyasyonunun bitki rejenerasyonuna etkisi. 12.Ulusal Biyoloji Kongresi. Moleküler Biyoloji ,Genetik ve Mikrobiyoloji seksiyonu.Cilt:5,202-207,1994.
- Atak, Ç. “Pancarda Kolhisin Yardımıyla Poliploid Elde Etme Yolları ve Poliplolid Hatların Redüksiyon Bölünmesi Üzerine Araştırmalar . TÜBİTAK Yayınları No: 576 s.5-14,1984.

Abstracts published in National Conferences :

- Çimen Atak, Atok Olgun, Özge Emiroğlu, Sema Alikamanoğlu. Manyetik Alanın *In Vitro* Soya Büyümesinde Peroksidaz Aktivitesi ve Total RNA Miktarı Üzerine Etkisi. V.Ulusal Ekoloji ve Çevre Kongresi, Bolu, 5-8 Ekim 2004.
- Narçin Palavan-Ünsal, Nezih Hekim, Çimen Atak, Mehmet Ali Tüfekçi, Özge Emiroğlu, Damla Büyüktuncer. Soya Fasülyesi Süspansiyon Hücre Kültürlerinde Hidrojen Peroksidin Toksik Etkilerinin Apoptotik Parametrelerle Saptanması. V.Ulusal Ekoloji ve Çevre Kongresi, Bolu, 5-8 Ekim 2004.
- Ç. Atak, Ö. Emiroğlu, S. Alikamanoğlu, A.Rzakoulieva, Manyetik Alanın Soya (*Glycine max* L.Merrill) Doku Kültürleri Üzerine Etkisi. XIII. Biyoteknoloji Kongresi, Çanakkale, 25-29 Ağustos 2003.
- Ç. Atak, Ö. Emiroğlu, A. Ulus, F. Boyacı, Orman Güllerinin (*Rhododendron sp.*) *In Vitro* Üretimi. XIII. Biyoteknoloji Kongresi, Çanakkale, 25-29 Ağustos 2003.
- Oldaçay,S.; Atak, Ç.; (2001) Gama Radyasyonunun Soya Bitkisi (*Glycine max L. Merrill*) Üzerine Etkisi, XII. Biyoteknoloji kongresi Poster Özetleri Kitabı,(17-21 Eylül 2001) Ayvalık/Balıkesir p.32.
- Alikamanoğlu,S.; Açıık, L.; Atak, Ç.;(2001) Atrazine toleranslı ve mukavim soya mutantlarının moleküler analizleri, XII. Biyoteknoloji kongresi Poster Özetleri Kitabı,(17-21 Eylül 2001) Ayvalık/Balıkesir p.21.
- Atak,Ç., Alikamanoğlu,S., Canbolat,Y.;”Soya fasulyesinde ((*Glycine max L.Merrill*) gama radyasyonu ile plastit mutasyonlarının teşvik edilmesi ve somatik embriyogenez”XV.Ulusal Biyoloji Kongresi, Uluslararası katılımlı,5-9.9.2000 Ankara Türkiye.

- Yurttaş,B., Atak,Ç.,Doğan,G.,Canbolat,Y.; Danilov,V., Rzakoulieva, A.;"Magnetik alanın ayçiçek bitkisindeki (Helianthus annuus L.) olumlu etkisinin saptanması." XI Ulusal Biyofizik Kongresi, 31.10.1999,Antalya Türkiye.

-Özalpan,A.,Atak,Ç.,Yurttaş,B.,Alikamanoğlu,S.,Canbolat,Y.;Borucu, H.; Danilov,V., Rzakoulieva,A."Magnetik alanın soya (Glycine max L.Merrill) verimi üzerine etkisi." XI Ulusal Biyofizik Kongresi, 31.10.1999,Antalya Türkiye.

-Atak,Ç.,Yurttaş,B., Yalçın S., Mutlu,D., Rzakoulieva,A. "Magnetik alanın Soya (Glycine Max L. Merrill) tohumları üzerine etkisi. 13.Ulusal Biyoloji Kongresi, 17-20 Eylül 1996, İstanbul, Türkiye.

- Atak,Ç., Alikamanoğlu,S., Yalçın,S. "Soya fasulyesi (Glycine Max L. Merrill) kallus ve meristem kültürlerine gama radyasyonunun etkileri. 13.Ulusal Biyoloji Kongresi 17-20 Eylül 1996, İstanbul, Türkiye.

- Atak,Ç., Alikamanoğlu,S. "Soya fasulyesi (Glycine Max L. Merrill) Meristem kültürlerinde gama radyasyonunun bitki rejenerasyonuna etkisi. 12.Ulusal Biyoloji Kongresi, 6-8 Temmuz 1994, Edirne, Türkiye.

-Özbek,N.,Atak,Ç., Atilla,S., Sağel, Z. "Çukurovada Yetiştirilen Calland ve Amsoy-71 Soya Çeşitlerinde Verim ve Miktarının Nükleer Teknikle Geliştirilmesi" Bitki Islah Simpozyumu, TÜBİTAK 15-17 Ekim 1986, İzmir, Türkiye.

-Özbek,N.,Atak,Ç. "Amsoy-71 ve Calland Soya Çeşitlerinde Verim ve Yağ Oranının Nükleer Teknikle Geliştirilmesi" 2. Ulusal Nükleer Bilimler Kongresi, 10-12 Ekim 1984, TAEK, İstanbul,Türkiye.

-Atak, Ç. "Pancarda Kolhisin Yardımıyla Poliploid Elde Etme Yolları ve Poliplolid Hatların Redüksiyon Bölünmesi Üzerine Araştırmalar" 1. Ulusal Genetik Simpozyumu 2-5 Aralık 1981, TÜBİTAK, Ankara, Türkiye.

Book :

- S. Karol Z Suludere , C. Ayvalı, M. Akbaş, Y. Ayvaz, N. Polat, Ç. Atak, İ. Albayrak, Z. Aytaç, H. Duman, F. Ünal, S. Kıyak, L. Açıık, Y. Kalender, S. Candan, Biyoloji Terimler Sözlüğü, Atatürk Kültür ve Tarih Yüksek Kurumu, Türk Dil Kurumu Yayınları 699, ISBN-975-16-1012-5,1998.

Textbooks:

Radiation chemistry 1995, Istanbul University

General Biology, (Chemical Foundations and Cell) 2000 Halic University

General Biology, (Ecology) 2000 Halic University

Cell Biology laboratory 2001. Halic University

Medical Biology II, 2001. Halic Universitesi

Tissue Culture, 2002. Halic Universitesi

Projects**National Projects**

- Researches on reduction division of polyploid lines and polyploid obtaining methods by using colchicine in sugarbeet.
- Improvement of seed yield and oil contents in Callanad ve Amsoy – 71 soybean varieties which were started to grow in Cukurova region with nuclear techniques.
- Effect of gamma radiation on soybean seeds with different water contents.
- Effect of gamma radiation on soybean tissue cultures.
- Induction of atrazine resistant soybean mutants with gamma radiation.
- Effect of gamma radiation on plants and haploid plant production by *in vitro* techniques
- The use of microwave sources instead of agricultural chemicals for the works of destroying the wild weeds in crops and the production of microwave equipments in Turkey.
- Effect of magnetic field on plant growing and yield in important plants for Turkey.
- Molecular analysis of Atrazine Resistant and tolerated soybean mutants
- Micropropagation of woody plants
- Induction of mutation with gamma radiation on Rhododendron tissue culture
- In vitro propagation of Rhododendron sp.
- Plant plastid transformation
- Herbicide-resistant plants obtained by in vitro mutagenesis and transformed via particle bombardment.

International Projects

- Effect of magnetic field on living organisms.
- Molecular analysis of magnetic field effects on soybean (*Glycine max* L.Merrill) tissue cultures
- Effect of magnetic field on Micropropagation of Paulownia species and regeneration

Memberships

- Federation of European Societies of Plant Biology (FESPB)
- Biotechnology Society

Editorial Board

Advances in Molecular Biology

Turkish Journal of Biology

IUFS Journal of Biology

Referee Board

Egyptian Journal for Radiation Sciences and Applications,EJORSA.