

## Bölüm 3

# TAHILLARDA VERİMİ ETKİLEYEN ABİYOTİK STRES ÇEŞİTLERİ VE SAVUNMA MEKANİZMALARI

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Dünyada mevcut kara parçası yüzeyinin sadece küçük bir kısmını insanlar tarafından işlenebilmekteyken, kara parçasındaki büyük bir kısmı ise çok aşırı sıcaklar, çok aşırı soğuklar, kuraklık ve tuzluluk problemlerinin olması, ayrıca bazı kısımlarının dağlar veya çöllerle kaplı olması nedeniyle tarımsal amaçlar için kullanılmamaktadır. Yine sıcaklık, dünyada kontrol edilmeyen bir iklim faktörüdür. Bitkiler ise polikiloterm canlılardır. Yani ortamın sıcaklığına uyum gösterirler. Bu nedenle sıcaklık stresi, tarımsal açıdan, bitki yayılışı ve gelişimini etkileyen en önemli stres kaynaklarından biridir.

Düşük ve yüksek sıcaklıklar, yoğunluk ve süreye bağlı olarak bitkilerin metabolik aktivitelerini, büyümelerini ve fizyolojik faaliyetlerini bozmakta ve bir türün tabii yayılma alanını sınırlamaktadır.

Buna bağlı olarak yine bir bölgenin üretimi çevresel, kültürel ve ekonomik faktörleri etkilidir. Örnek olarak Pirinç, sel koşullarında iyi yetiştirilmektedir bu nedenle Suya erişimi yüksek olan bölgeler, pirinç ve mısırdaki baskın bir verime sahiptirler. Bu nedenle, Asya, tatlı su ve bol yağışın çok olması nedeniyle tüm bölgeler arasında dünyanın en büyük pirinç üreticisi konumundadırlar.

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eliminasyonunda kullanılacakları bir enzim sistemi olmadığından kolayca tüm biyolojik moleküller ile reaksiyona girebilir ve fazla miktarda üretildiğinde ise hücrelerin ölümüne sebep olabilirler.

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