BÖLÜM 8

Pseudomonas TÜRLERİNİN BİTKİ BÜYÜMESİNİ TEŞVİK EDEN KÖK BAKTERİLERİ OLARAK POTANSİYELLERİ

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GİRİŞ

İnsan hayatı için vazgeçilmez olan tarımsal üretim, 2050 yılında olması beklenen 8 milyardan fazla nüfus, tarımsal alanların azalması ve kuraklık gibi çeşitli nedenlerden dolayı yeterli olmamaktadır (1,2). Bu sebeple birim alandan alınacak ürünün arttırılması gerekmektedir. Bir bitkinin yaşamını devam ettirebilmesi, topraktaki besin elementlerine yeterli seviyede ulaşabilmesine bağlıdır. Fakat bitkiler, toprağın doğal yapısındaki bu besinlere her zaman yeterli seviyede ulaşamamaktadır. Tarımsal ürün verim ve kalitesini geliştirmeye yönelik en yaygın strateji, toprağın gerekli gübrelerle iyileştirilerek bitkinin beslenmesini sağlamak ve bitki hastalık ve zararlılarıyla mücadeledir. Bu amaçla tarımda kimyasal gübre ve pestisitlerin kullanımı hem gelişmekte olan hem de gelişmiş ülkelerde yaygın hale gelmiştir (3,4). Tarımda bu kimyasalların tercih edilmesinin nedenleri arasında, yapılan uygulamadan kısa sürede yanıt alınması ve uygulama teknolojisinin gelişmiş durumda oluşu yer almaktadır. Ancak bu tarımsal kimyasalların maliyeti yüksektir ve yoğun olarak kullanımları sonucunda meydana gelen pek çok olumsuz durum bulunmaktadır. Toprağa verdiği zarar, toprağın su tutma kapasitesini düşürmesinin dışında bu topraklarda bulunan bitkilerin ve toprağın doğal florasında bulunan bitkiye

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