BÖLÜM

11 MAYA VE MANTARLAR

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GİRİŞ

Hayvan beslemede antibiyotiklerin büyüme uyarıcı olarak kullanılmasının yasaklanması hayvansal gıda üretimi sektörünün paydaşlarını ve özellikle de hayvan besleme uzmanlarını antibiyotiklerin yerine büyüme uyarıcı olarak kullanılabilecek alternatif yem katkı maddelerinin arayışına itmiştir. Bu kapsamda canlı vücudunda doğal olarak bulunan, sistematik yapısı bozulmadığı sürece çeşitli mekanizmalar aracılığı ile hem sindirim sisteminin sağlığını hem de hayvanların genel sağlık durumunu korumaya yardımcı olan probiyotik etkili mikrobiyal yem katkıları da en önemli alternatifler arasında görülmektedir. Yapılan araştırmalarda probiyotiklerin çalışma mekanizmaları gereği verim performansını iyileştirebileceği; aynı zamanda kemoterapötiklere ve farmasötiklere alternatif olabileceği ortaya konmuştur.

Geçtiğimiz yıllar içerisinde hayvan beslenme uzmanları ve mikrobiyologlar, memelilerin normal bağırsak mikrobiyotasına ve bunun konakçıya sağladığı faydalara ilişkin kapsamlı çalışmalar gerçekleştirmiş ve mikrobiyota ile konak ilişkisinin moleküler mekanizmalarına açıklık getirmiştir. Bu araştırmalar kapsamında çok sayıda probiyotik bakteri, maya ve mantar kültürü türü/suşu izole edilerek farklı hayvan türleri üzerinde denenmiştir. Farklı tür hayvanlar üzerindeki etkileri denenen bazı mikroorganizmaların doğrudan ya da dolaylı olarak konakçıya farklı mekanizmalar aracılığı ile çok sayıda fayda sağladığı görülmüştür. Söz konusu mikroorganizmaların olumlu etkilerden bazıları şu şekilde sıralanabilir: *Farklı hayvan türlerinin gastrointestinal sistemlerinde bulunan yararlı mikroorganizmaların çoğalmasının teşvik edilmesi, ruminantlarda rumen pH düzeyinin stabilizasyonu, sindirim sisteminde meydana gelen fermantasyon süreçlerinin düzenlenmesi ve fermantasyon son ürünlerinin iyileştirilmesi, besin madde akışının düzenlenmesi, yemlerin sindirilebilirliğinin ve besin maddelerinin emiliminin arttırılması, stres koşulları altında barındırılan veya farklı metabolik stres süreçlerinden geçen hayvanlarda stresin metabolik etkilerinin (oksidatif hasar gibi) hafifletilmesi, immun sistem işlevlerinin desteklenmesi ve geliştirilmesi, gastrointestinal sistemde patojen mikroorganizmaların çoğalmasının önüne geçilmesi ve disbiyozisin engellenmesi, sindirim sisteminde homeostatik dengenin sağlanması ve verimin arttırılması vb*. Hayvan besleme alanında mikroorganizmaların yem katkı maddesi olarak kullanılmasına

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