BÖLÜM

17 RENKLENDİRİCİLER

Fatma İNAL [1]
Oğuzhan KAHRAMAN [2]

RENKLENDİRİCİLERİN TANIMI VE KULLANIM AMAÇLARI

Gıda katkı maddeleri içerisinde önemli bir yere sahip olan renklendiriciler, Uluslararası Gıda Kodeksi Komisyonu tarafından "gıdanın rengini düzenleyen veya renk vermek amacıyla eklenen madde" olarak tanımlanmaktadır. Gıda rengi, tüketici tarafından yiyeceğin çekiciliği ve tercihi ile doğrudan ilişkili olan temel özelliktir. Renk, ürünün lezzeti, güvenliği ve besin değeri ile de ilişkilidir. Doğal ve sentetik renklendiriciler (pigmentler, boyalar) gıda, yem, ilaç, tekstil ve kozmetik gibi çeşitli sektörlerde kullanılmaktadır. Renklendiriciler, yem katkı maddeleri sınıflandırmasında, duyusal yem katkı maddeleri içerisinde yer almaktadır. Bu maddeler; yem maddelerine renk veren ya da rengini düzenleyen maddeler, hayvanlara yedirildiğinde hayvansal gıdalara renk veren maddeler, süs balıkları ve kuşlarının renklerini geliştiren maddeler olarak gruplandırılmaktadır. Renkler hayvanlar aleminde önemli bir biyolojik rol oynar. Örneğin kuşlarda parlak renkler, çekicilik, eş seçimi ve sağlıkla ilişkilidir.

İlk renklendirici maddeler doğadan elde edilen ve sonrasında oldukça popüler olan safran, kırmızı biber, zerdeçal ve çeşitli çiçeklerdir. 1856'da ilk sentetik renklendirici olan leylak renginin geliştirilmesi, diğerlerinin de keşfedilmesine yol açmıştır. Sentetik renklendiriciler, düşük üretim maliyetleri, yüksek renklendirici özellikleri ve kimyasal stabiliteleri nedeniyle popülerlik kazanmıştır. Günümüzde kullanılan sentetik renklendiriciler güvenlik konusunda uzun yıllardır kontrol edilmesine rağmen; gıda endüstrisinde değişen pazar talepleri ve getirilen kısıtlamalardan dolayı alternatif arayışları devam etmektedir. Tüketici talebi, yapay renklendiriciler yerine doğal kaynaklardan elde edilenlerin kullanılmasını zorlamaktadır.

Hayvancılıkta, yem sanayiinde, su ürünleri yetiştiriciliğinde yemlere ve sulara renklendirici ilavesi yapılmaktadır. Özellikle geleneksel olmayan yem bileşenlerinin kullanımının artması durumunda, onların kötü rengini örtmek, hayvanların alışkanlıklarına hitap etmek ve pazardaki rekabet gücünü arttırmak için renklendirici maddeler eklenmektedir. Renklendiriciler aynı zamanda iştahı uyarma ve yemleri çekici hale getirme rolü de oynamaktadır. Hayvanlara yedirilen renklendiriciler etlik piliçlerin derisi, yumurta sarısı, süt yağı ve balıkların rengine etki ederek, karides gibi su ürünlerinin etine daha canlı görünüm kazandıra-

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Tablo 7. Hayvan beslemede kullanılan AB tarafından onaylı renklendiricilerin listesi

Renklendirici alt grubu	Kodu	Adı [Kullanılan hayvanlar]
Yemlere renk veren maddeler	2a124	Ponceau 4R [Köpek, kedi]
	2a124	Ponceau 4R [Süs balıkları]
	2a127	Erythrosine [Köpek, kedi]
	2a129	Allura Red AC [Köpek, kedi]
	2a133	Brilliant Blue FCF [Köpek, kedi]
	2a102	Tartrazine [Kedi, köpek, tahılla beslenen süs kuşları, küçük kemirgenler]
Hayvanlara yedirildiğinde hayvansal gıdalara renk veren maddeler	2a165	Astaxanthin dimethyldisuccinate [Balık ve kabuklular]
	2a(ii)167	Red carotenoid rich Paracoccus carotinifaciens [Somon, alabalık]
	2a161b	Lutein-rich extract of Tagetes erecta [Etlik piliç (hindi hariç) ve küçük etlik kanatlılar, yumurtacı kanatlılar (hindi hariç)]
	2a161bi	Lutein/zeaxanthin extract of Tagetes erecta [Etlik piliç (hindi hariç) ve küçük etlik kanatlılar, yumurtacı kanatlılar (hindi hariç)]
	2a161g	Canthaxanthin [Etlik piliç ve küçük etlik kanatlılar, yumurtacı kanatlılar]
	2a161j	Astaxanthin [Balık, kabuklular]
Süs balıkları veya kuşlarına renk veren maddeler	2a161j	Astaxanthin [Süs balıkları]
	2a102	Tartrazine [Süs balıkları]
	2a161g	Canthaxanthin [Süs balıkları ve damızlıklar hariç süs kuşları]
Diğer renklendiriciler	E 127	Erythrosine [Süs balıkları]
	2a110	Sunset yellow FCF [Kedi, köpek, süs balıkları, tahılla beslenen süs kuşları, küçük kemirgenler]
	E 132	Indigotine [Süs balıkları]
	E 172	Demir oksit, kırmızı [Süs balıkları]

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