

**PENGGUNAAN SECANG, UBI UNGU, LABU KUNING DAN UMBI BIT
SEBAGAI PEWARNA ALAMI PADA PEMBUATAN KUE LIDAH
KUCING RAINBOW DITINJAU DARI SIFAT FISIK, ORGANOLEPTIK
DAN KADAR ANTIOKSIDAN**

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ABSTRAK

Latar Belakang: Masih banyak masyarakat di Indonesia menggunakan pewarna sintetis sebagai tambahan makanan dalam pembuatan kue kering. Dalam mengatasi penggunaan pewarna sintetis pada makanan, pembuatan kue lidah kucing rainbow dapat menjadi makanan inovasi baru. Pewarna alami yang digunakan yaitu ubi ungu, labu kuning, bit, dan secang. Diharapkan kue lidah kucing rainbow dapat meningkatkan pengetahuan masyarakat dalam pemilihan konsumsi makanan yang sehat.

Tujuan Penelitian: Diketahuinya sifat fisik, sifat organoleptik dan kadar antioksidan pada penggunaan pewarna alami dalam pembuatan kue lidah kucing rainbow.

Metode Penelitian: Jenis penelitian ini eksperimental murni dengan menggunakan Rancangan Acak Sederhana, meliputi 4 perlakuan, 2 kali ulangan dan 3 unit percobaan. Perlakuan komposisi adonan pewarna alami dan tepung terigu yaitu 10%:90%, 15%:85%, 20%:80% dan 0%:100%. Pengujian terhadap sifat fisik dianalisis secara deskriptif, sifat organoleptik dianalisis dengan uji *Kruskal-Wallis*, jika ada perbedaan dilanjutkan dengan *Mann-Whitney* dan kadar antioksidan menggunakan metode DPPH dianalisis secara deskriptif.

Hasil Penelitian: Sifat fisik kue lidah kucing rainbow menunjukkan bahwa semakin banyak campuran warna semakin tua, aroma harum cookies yang dioven, rasa semakin manis khas kue lidah kucing sedikit getir, dan tekstur renyah. Sifat organoleptik kue lidah kucing rainbow dengan variasi penggunaan pewarna alami 15% memiliki tingkat kesukaan panelis paling tinggi. Kadar antioksidan paling tinggi adalah kue lidah kucing rainbow dengan variasi penggunaan pewarna alami 20%.

Kesimpulan: Diketahuinya sifat fisik dan ada perbedaan sifat organoleptik dan kadar antioksidan pada kue lidah kucing rainbow dengan variasi penggunaan pewarna alami.

Kata kunci: Kue Lidah Kucing Rainbow, Secang, Ubi Ungu, Labu Kuning, Bit, Sifat Fisik, Sifat Organoleptik, Kadar Antioksidan.

THE USE OF SAPPANWOOD, PURPLE SWEET POTATO, YELLOW PUMPKIN, AND BEETROOT AS NATURAL FOOD COLORING IN PRODUCING RAINBOW LIDAH KUCING COOKIES REVIEWED IN TERMS OF PHYSICAL CHARACTERISTICS, ORGANOLEPTICS, AND ANTIOXIDANT CONTENT

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ABSTRACT

Background of the Study: Artificial food coloring is widely used in cookies production in Indonesia. As an attempt to reduce the use of such coloring, rainbow lidah kucing cookies is believed to be an innovative solution. The cookies is produced using natural food coloring made of sweet potato, butternut, beetroot, and sappanwood. It is expected to become healthier choice of food for people and improve the community's overall health level.

Research Objective: To find out physical characteristics, organoleptic properties, and antioxidant level of rainbow lidah kucing cookies produced with natural food coloring.

Research Method: This research belongs to experimental study which used random sampling. There were 4 treatments, 2 reduplications, and 3 trial units. The treatments employed the following ratio of natural food coloring and wheat flour batter 10%:90%, 15%:85%, 20%:80% and 0%:100%. The physical characteristics were analysed using descriptive analysis. The organoleptic properties were analysed using *Kruskal-Wallis* and *Mann-Whitney* if any differences were found. The antioxidant level was calculated using DPPH method and analysed using descriptive analysis.

Research Findings: The physical characteristics of rainbow lidah kucing cookies shows that the more mixture, more of darker colors. It had typical aroma of baked cookies. The flavor was more sweet and a little bitter with crispy texture. The organoleptic properties of rainbow lidah kucing cookies with 15% of natural food coloring were rated best by panelists. The cookies with highest antioxidant level was the one using 20% of natural food coloring.

Conclusion: Find out physical characteristics and there are differences in organoleptic properties and antioxidant level found in rainbow lidah kucing cookies made with natural food coloring.

Key words: Rainbow Lidah Kucing Cookies, Sappanwood, Purple Sweet Potato, Yellow Pumpkin, Beetroot, Physical Characteristics, Organoleptic Properties, Antioxidant Content.