

ABSTRAK

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KARAKTERISTIK FISIKOKIMIA DAN ORGANOLEPTIK *JELLY* DENGAN PENAMBAHAN BAHAN PANGAN SUMBER ANTIOKSIDAN
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(xii+77 halaman; 14 gambar; 6 tabel; 1 lampiran)

Jelly merupakan produk pangan semi padat berbahan baku air, gula, asam, dan *gelling agent* yang banyak dikonsumsi masyarakat kalangan anak-anak hingga dewasa, namun kurang memiliki nilai tambah. Penambahan bahan pangan sumber antioksidan, seperti buah-buahan dan daun-daunan pada produk *jelly* dapat berpotensi sebagai pangan fungsional dari senyawa antioksidan. *Literature review* ini bertujuan untuk mengkaji data beberapa jenis bahan pangan dan pengaruh perbedaan bahan pangan terhadap aktivitas antioksidan, karakteristik fisikokimia, dan organoleptik *jelly*. Metode penyusunan laporan adalah *literature review* dari hasil penelitian yang dipublikasikan pada jurnal terakreditasi Sinta dan terindeks Scopus. Bahan pangan sumber antioksidan buah-buahan yang dibahas adalah buah jeruk, *blackberry*, bluberi, stroberi, goji beri, aronia atau *chokeberry*, *raspberry* merah, sapota, delima, pir, dan anggur dalam bentuk jus, serta buah *honeyberry* dalam bentuk bubuk. Bahan pangan ekstrak daun-daunan pada pembuatan *jelly* adalah daun jengkol, daun pucuk merah, daun mangga, daun cokelat, daun kayu manis, daun sirih, dan daun suji. Penambahan bahan pangan, kombinasi antar bahan pangan, dan jenis kultivar bahan pangan berpengaruh terhadap aktivitas antioksidan dan karakteristik *jelly*. Penambahan dan kombinasi bahan buah-buahan dan daun-daunan berpengaruh terhadap kenaikan aktivitas antioksidan, total fenolik, flavonoid, antosianin, total padatan terlarut, total asam tertitrasi, tekstur, dan karakteristik organoleptik uji hedonik dan skoring (warna, tekstur, rasa, dan penerimaan keseluruhan). Penambahan dan kombinasi ini juga berpengaruh terhadap penurunan kecerahan (L) dan derajat keasaman (pH), serta memiliki pengaruh terhadap tingkat kemerahan (a^*) dan kekuningan (b^*). Tingkat kesukaan rasa pada karakteristik organoleptik *jelly* bahan pangan buah-buahan secara hedonik semakin disukai dan nilai skoring pada bahan pangan daun-daunan mengalami kenaikan.

Kata Kunci : *jelly*, aktivitas antioksidan, pangan fungsional, daun, buah

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PHYSICOCHEMICAL AND ORGANOLEPTIC CHARACTERISTICS OF JELLY WITH ADDITIONAL FUNCTIONAL FOOD SOURCES OF ANTIOXIDANT

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Jelly is a semi-solid food product made from water, sugar, acid, and gelling agent which is widely consumed by the society from children to adults, but has lack of added value. The addition of food sources of antioxidants in jelly products, such as fruits and leaves can potentially serve as functional foods from antioxidant compounds. This literature review aims to examine data on several types of food ingredients and the effect of different foodstuffs on antioxidant activity, physicochemical characteristics, and organoleptic characteristics of jelly. The method of preparing the report is a literature review of research results published in an accredited journal Sintia and indexed by Scopus. Food sources of fruit antioxidants discussed are citrus fruits, blackberries, blueberries, strawberries, goji berries, aronia or chokeberries, red raspberries, sapota, pomegranate, pear, and grapes in the form of juice, and honeyberry fruit in the form of powder. Food ingredients for leaf extracts in making jelly are jengkol leaf, red shoots leaf, mango leaf, chocolate leaf, cinnamon leaf, betel leaf, and suji leaf. The addition of food ingredients, the combination of food ingredients, and the type of food cultivar affect the antioxidant activity and characteristics of jelly. The addition and combination of fruit and leaf ingredients have an effect on increasing antioxidant activity, total phenolics, flavonoids, anthocyanins, total dissolved solids, total titrated acid, texture, and hedonic and scoring test of organoleptic characteristics (color, texture, taste, and overall acceptability). This addition and combination also affects the decrease in brightness (L) and acidity (pH), also have effects on the level of redness (a*) and yellowness (b*). The level of taste on the hedonic score of fruits *jelly* more preferred and the scoring test increased on leaves *jelly*.

Keywords : jelly, antioxidant activity, functional foods, leaves, fruits

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