

INTISARI

Kurkumin merupakan kandungan tanaman yang tergolong dalam genus *Curcuma*. Tanaman genus ini banyak dimanfaatkan menjadi bahan obat tradisional. Seiring perkembangan zaman telah dilakukan pengembangan formulasi menjadi sediaan topikal. Penelitian ini bertujuan untuk mendapatkan dan menganalisis informasi terkait aktivitas kurkumin dari genus *Curcuma* (*C. longa*, *C. heyneana*, *C. zedoaria* dan *C. xanthorrhiza*) sebagai antioksidan dan antiinflamasi yang diformulasikan dalam sediaan topikal serta sifat fisik sediaan yang dihasilkan.

Penelitian ini menggunakan metode studi literatur yang disusun menjadi *narrative review*. Artikel dikumpulkan melalui database yang relevan meliputi Google Scholar, Scopus, Wiley, dan ScienceDirect dengan menggunakan kata kunci *curcumin + Curcuma + topical*. Periode penelitian dilakukan selama bulan Mei-Juni 2020. Data yang diperoleh disajikan dalam bentuk grafik, gambar, maupun tabel dan selanjutnya dianalisis dan dibandingkan untuk mendapatkan kesimpulan.

Sebanyak 28 artikel dipilih setelah melewati proses skrining. Berdasarkan literatur yang didapatkan hasil uji aktivitas antioksidan dan antiinflamasi kurkumin dalam sediaan topikal terbukti memiliki potensi yang sangat baik. Metode uji aktivitas antioksidan yang digunakan yaitu metode uji total fenolik, ORAC, DPPH, uji stress oksidatif, FRAP, dan ex vivo. Metode uji aktivitas antiinflamasi yang digunakan yaitu pengukuran aktivitas SOD, NO, IL-1 β , IL-6, TNF- α , dan in vivo. Jenis sediaan topikal yang banyak dipilih dalam penelitian yaitu gel dan krim yang telah terbukti baik secara fisik.

Kata kunci: aktivitas kurkumin, topikal, evaluasi fisik

ABSTRACT

Curcumin is a compound contained in plants belonging to the genus *Curcuma*. This genus plant is widely used as ingredients of traditional medicine. As the times, the development of formulations into topical preparations has been carried out. This study aims to obtain and analyze information related to curcumin activity of the genus *Curcuma* (*C. longa*, *C. heyneana*, *C. zedoaria* and *C. xanthorrhiza*) as antioxidants and anti-inflammatory formulated in topical preparations and the physical properties of preparations.

This research uses literature study method which is arranged into a narrative review. Articles collected through relevant databases include Google Scholar, Scopus, Wiley, and ScienceDirect using the keywords *curcumin* + *Curcuma* + *topical*. This research was conducted from May to June 2020. The data obtained were presented in graphs, figures, or tables then were analyzed and compared to get conclusions.

This study got 28 articles after passing the screening process. Based on the literature, the results of antioxidant and anti-inflammatory activities test of curcumin topical preparations have proven to have very good potential. The antioxidant activity test methods that were used are total phenolic test, ORAC, DPPH, oxidative stress test, FRAP, and ex vivo. The anti-inflammatory activity test method that were used are measuring of SOD, NO, IL-1 β , IL-6, TNF- α , and in vivo activity. The types of topical preparations that are often chosen in research are gels and creams that have been proven physically good.

Keywords: curcumin activity, topical, physical evaluation