

INTISARI

Rimpang temulawak (*Curcuma xanthorrhiza* Roxb) adalah bahan baku yang banyak digunakan dalam pembuatan obat tradisional karena merupakan salah satu tanaman obat unggulan yang ditetapkan Badan Pengawas Obat dan Makanan Republik Indonesia (BPOM RI). Rimpang dan serbuk sebagai bahan baku obat tradisional harus memenuhi persyaratan berdasarkan Kepmenkes No. 661/Menkes/SK/VII/1994 (Anonim, 1994) dan untuk ekstrak berdasarkan Monografi Ekstrak Tumbuhan Obat Indonesia (Anonim, 2004). Salah satu persyaratan keamanan tersebut adalah jumlah cemaran kapang khamir ≤ 10 CFU/gram.

Penelitian ini bertujuan untuk mengetahui angka kapang khamir (AKK) dari rimpang segar temulawak, serbuk rimpang temulawak, dan ekstrak etanolik rimpang temulawak, selain itu mengetahui apakah nilai AKK masing-masing sampel memenuhi persyaratan Kepmenkes No. 661/Menkes/SK/VII/1994 (Anonim, 1994) dan Monografi Ekstrak Tumbuhan Obat Indonesia (Anonim, 2004), dan mengetahui perbandingan nilai AKK pada sampel.

Penelitian ini termasuk eksperimental quasi dengan rancangan deskriptif-komparatif dengan analisis statistik uji T. Rimpang temulawak yang digunakan berasal dari Samigaluh, Kulon Progo, Yogyakarta diperoleh pada bulan November 2009 dengan kondisi rimpang masih segar untuk menghindari penyimpanan yang lama. Uji cemaran kapang khamir dilakukan pada rimpang segar temulawak hasil pencucian, serbuk rimpang temulawak kering hasil pengeringan, dan ekstrak etanolik rimpang temulawak.

Hasil penelitian didapatkan nilai AKK rimpang segar temulawak $2,2 \pm 0,57 \times 10^5$ CFU/g, serbuk rimpang temulawak $5,0 \pm 5,0 \times 10^4$ CFU/g, dan ekstrak etanolik rimpang temulawak <10 CFU/g. Uji T pada sampel menunjukkan nilai AKK rimpang segar temulawak lebih besar daripada serbuk rimpang temulawak dan nilai AKK serbuk rimpang temulawak lebih besar daripada nilai AKK ekstrak etanolik rimpang temulawak. Nilai AKK rimpang segar dan serbuk rimpang temulawak tidak memenuhi persyaratan, sedangkan pada ekstrak etanolik rimpang temulawak jumlah cemaran kapang khamir memenuhi persyaratan.

Kata kunci: temulawak (*Curcuma xanthorrhiza* Roxb), angka kapang khamir (AKK), rimpang segar temulawak, serbuk rimpang temulawak, ekstrak etanolik rimpang temulawak

ABSTRACT

Curcuma xanthorrhiza Roxb (Javanese turmeric) rhizome is one of the most popular material that is used in the production of traditional medicine, because it has included one of special plant that is published by *Badan Pengawas Obat dan Makanan Republik Indonesia* (BPOM RI). Rhizome and powder as a starting material to produce traditional medicine, it must fulfill the requirement from *Kepmenkes No. 661/ Menkes/SK/VII/1994* (Anonim, 1994) and for extract must fulfill requirement from *Monografi Ekstrak Tumbuhan Obat Indonesia* (Anonim, 2004). One of the safety requirement is the number of mold/yeast contamination ≤ 10 CFU/gram.

This research were aimed to calculate number of yeast/mold contamination from fresh rhizome, powder, etanolic extract of *C. xanthorrhiza*, to know that the number of mold/yeast contamination from sample are fulfill the requirement or not, and to know the comparison of number mold/yeast contamination from samples.

This research was a quasi experimental research with descriptive – comparative design and statistical analysis by T test. *C. xanthorrhiza* rhizome that used in this research were come from Samigaluh, Kulon Progo, Yogyakarta collected in November 2009 in the fresh condition to avoid from long term storage. The number of mold/yeast contamination were tested in the material of fresh rhizome after washing process, powder of drying crude drug, and etanolic extract of *C. xanthorrhiza*.

Based on the quantification the number of mold/yeast contamination from fresh *C. xanthorrhiza* rhizome was $2,2 \pm 0,57 \times 10^5$ CFU/g, from powder of dry symplicia was $5,0 \pm 5,0 \times 10^4$ CFU/g, and from etanolic extract was <10 CFU/g. Based of the result of t test, the number of mold/yeast contamination of fresh rhizome higher than the powder, and the number of mold/yeast contamination of powder higher than extract. Fresh rhizome and dry powder didn't fulfill the requirement, but for extract fulfilled the requirement.

Key words : *Curcuma xanthorrhiza* (Javanese turmeric), number of mold / yeast contamination, fresh rhizome, powder , extract