

ABSTRACT

*The research aimed to study chitosan as an antimicrobial and cooling treatment to maintain quality of tomato. The experimental was conducted in factorial design and arranged in completely randomized design (CRD). First factor was storage temperature is room temperature and 15°C. Second factor was chitosan concentration, is 2%, 4% and 6%. The results showed indicate the isolation and identification of the tomatoes rot fungi, allegedly entered in the genus *Alternaria*. The result showed that chitosan was able to inhibit microbes srowth. Treathment with chitosan 6% at 15°C gave best result in suspressing microbes growth. Cooling treatment was more effective in maintaining the quality of tomato than coating treatment with chitosan. The average of microbes at 6388×10^7 CFU/ml during the 16-day storage.*

Keyword : microbes decompose of isolate, tomato, chitosan, temperature