



INTISARI

Latar belakang: Tikus mempunyai peranan dalam penyebaran penyakit tular rodensia terutama penyakit pes yang menjadi *reservoir* dari pinjal (*Xenopsylla cheopis*) sebagai vektor penyakit pes. Pes masuk ke Indonesia tahun 1911 melalui pelabuhan dan alat transportasi laut terbawa kapal pengangkut beras dari Myanmar melalui pelabuhan Tanjung Perak Surabaya. Dengan meningkatnya arus transportasi barang dan penumpang antar Negara atau antar pulau melalui pelabuhan laut sehingga pelabuhan berpotensi terjadi penularan pes, sehingga diperlukan sistem kewaspadaan dini pes di Pelabuhan.

Tujuan: Penelitian ini bertujuan mengetahui jenis tikus, *trap success*, tikus terinfestasi pinjal dan indeks pinjal, untuk menentukan potensi penularan pes di Pelabuhan Merak Banten.

Metode: Penelitian ini bersifat diskriptif analitik dengan pendekatan *cross sectional*. Pengumpulan tikus dilakukan dengan memasang perangkap hidup di daerah *perimeter* dan *buffer* kemudian tikus disisir untuk mendapatkan pinjal. Untuk menentukan perbedaan kepadatan tikus dan indeks pinjal dengan uji *chi-square* ($\alpha = 5\%$).

Hasil: Di pelabuhan Merak Banten ditemukan tiga jenis tikus yaitu *R. tanazumi*, *R. norvegicus*, *Mus musculus* dan cecurut (*Suncus murinus*). Keberhasilan penangkapan tikus (*trap succes*) antara 13,3% - 33,3%, tertinggi kantin 33,3%. Tikus tertangkap dominan jenis *R. norvegicus* 49%, dengan jenis kelamin betina 62,8%. Tikus terinfestasi pinjal 68,9%, indeks khusus pinjal *X. cheopis* 2. Berdasarkan indikator sistem kewaspadaan dini terhadap penularan penyakit pes yaitu *trap success* $> 7\%$, tikus terinfestasi pinjal $> 30\%$ dan Indeks khusus pinjal $X. cheopis \geq 1$ maka pelabuhan Merak Banten berpotensi terjadi penularan pes.

Kata kunci: Tikus, Pinjal, *Xenopsylla cheopis*, Pes, Pelabuhan



ABSTRACT

Background: Mice have major role in transmitting mouse-borne diseases, especially plague, by being the reservoir of flea (*Xenopsylla cheopis*) as primary vector of plague. Plague itself has extended to Indonesia since 1911 through seaports and naval vehicles carrying rice from Myanmar to Tanjung Perak Port in Surabaya. Increasing number of international human and commodity transportation through seaports will cause potential risk of plague transmission, hence plague early warning systems in seaports are required.

Objectives: The study aims to identify mouse species, trap success, flea-infested mice and flea index in order to determine plague disease transmission potential in Banten Seaport.

Methods: The study is a descriptive analytic study with cross sectional design. Mouse collection was carried out using live mousetrap in perimeter and buffer area. The collected mice were brushed to obtain the fleas subsequently. The chi square test ($\alpha = 5\%$) was used to rule out mouse density and flea index difference.

Results: Three species of mice had been identified in Merak Seaport Banten, namely *R. tanazumi*, *R. norvegicus*, *Mus musculus* and *Suncus murinus*. Obtained trap success rate was between 13.3 - 33.3%, with the highest rate found in cafeterias (33.3%). Collected mice were mainly *R. norvegicus* (49%), with female predominance (62.8%). As many as 68.9% samples were infested with fleas of which the specific *X. cheopis* flea index of 2 was obtained. Based on the plague disease transmission early warning system criteria, trap success rate of $>7\%$, flea-infested mice of $>30\%$ and specific *X. cheopis* flea index of ≥ 1 , thus Banten Seaport is categorized as potential site of plague transmission.

Keywords: mouse, flea, *Xenopsylla cheopis*, plague, port