THE TICK ABUNDANCE (Parasitiformes: Ixodidae) IN SUMATRAN RHINO WAY KAMBAS NATIONAL PARK LAMPUNG AND ITS ROLE IN DISEASES TRANSMITTING TO SUMATRAN RHINOCEROS (*Dicerorhinus sumatrensis*)

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Introduction

Sumatran rhinoceros (*Dicerorhinus sumatrensis*) is highly protected species lived in Way Kambas National Park, as wild and in sanctuary. Disease agent including ectoparasite could threated the existence of these animals. The ectoparasite data - especially Ixodid ticks-at Sumatran rhinoceros hasn't researched yet comprehensively. A study of Ixodid ticks on sumatran rhino became an important thing related to its role as a vector of various diseases. The study has revealed 2 species from a different genus.

Materials and Methods

Larvae and nymph were collected by drag sampling method in the whole Sumatran Rhino Sanctuary (SRS) paddock areas and outside the areas using tick flag. The observation of adult ticks predilection on rhinoceros's body was carried out to all rhinoceros in SRS (Rosa, Torgamba, Bina, and Ratu), while the specimen processing and identification were done at FKH-IPB Entomology Laboratory.

Results and Discussion

The results showed two ticks' species in rhinoceros, there were *Haemaphysalis hystricis* and *Amblyomma testudinarium* with the highest predilection at neck and shoulder fold region. From 513 specimen collected from inside the SRS paddock areas were identified about 80.70% and 19.30% as *H. hystricis* and A. *testudinarium*, respectively. Whereas, there were 30.68% H. *hystricis* and 69.32% *A. testudinarium* identified from 608 specimens collected from outside the areas. In the same time, Stokes-Greene (2006) was found a blood parasitemia disease in the rhinoceros causing by the protozoa at SRS there are *Anaplasma marginale* (≥27 % in each rhinoceros); *Anaplasma centrale* (≥10 % in **each** rhinoceros); and *Theileria* sp. (≥15 % in **each** rhinoceros). Homer et al. (2000) was found that all of these protozoa species recognized as a disease agent transmitted by Ixodid ticks.

Conclusion

The Ixodid ticks were considered as vector that transmits blood protozoa diseases to Sumatran rhinoceros in SRS.

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