KEANEKARAGAMAN DAN KELIMPAHAN COLLEMBOLLA DI KEBUN BOTANI UPI

ABSTRAK

Collembola merupakan salah satu serangga tanah yang mempunyai peranan pentingdalam lingkungan hidup disekitarnya. Keberadaan Collembola dapat mencerminkan tingkat kesuburan dan kestabilan ekosistem di suatu lingkungan tertentu. Penelitian ini bertujuan untuk mengetahui keanekaragaman dan kelimpahan Collembolla di Kebun Botani UPI. Metode penelitian yang digunakan adalah metode kuadrat dengan pengambilan sampel dilakukan secara *pit fall trap*. Pengambilan sampel dilakukan sebanyak tiga kali dengan tiga kali pengulangan di tiga lokasi pengamatan yang tersebar di kawasan Kebun Botani UPI. Pada penelitian ini dilakukan pula pengukuran faktor abiotik yang meliputi suhu tanah, kelembaban tanah dan pH tanah. Hasil penelitian menunjukkan terdapat empat genus Collembola yang terdiridari tiga famili, yakni Famili Entomobryidae, Isotomidae, dan Paronellidae. Genus Acrocyrtus dari Famili Entomobryidae mempunyai kelimpahan tertinggi dibandingkan genus yang lainnya yakni sebesar241 individu/ 900m^2, genus pada Isotomurus dari Famili Isotomidae yakni sebesar 4 individu/ 900m^2, genus Homidia dari Famili Entomobryidae sebesar 188 individu/ 900m^2, dan genus Salinadari Famili Paronellidaesebesar 6 individu/ 900m^2. Adapun nilai keanekaragaman Collembola di Kebun Botani UPI termasuk kedalam kategori rendah yakni sebesar *H'* = 0.309.

Kata kunci :*Collembola, Kelimpahan, Keanekaragaman dan Kebun Botani UPI*

DIVERSITY AND ABUNDANCE OF COLLEMBOLA IN THE UPI BOTANICAL GARDEN

ABSTRACT

Collembola are one of the soil insects that play important role in the environment. The presence of Collembola can refresenting the level of ecosystem fertility and stability in some environment. The objective of this research is to determine diversity and abundance of Collembola in the UPI Botanical Garden. The method of this research was using quadrate method by pit fall traps. The sample was performed three times with three replications in three locations around the UPI Botanical gardens. In this study, measurement of abiotic factors includes soil temperature, soil moisture and soil pH. The results showed that there are four Collembolagenus which consists of three families, that are the Family Entomobryidae, Isotomidae, and Paronellidae. Acrocyrtus genus from Entomobryidae Family has the highest abundance than the others with value 241 individuals / 900m2. The abundance of Isotomurus genus from Isotomidae Family is 4 individuals / 900m2. The abundance of Homidia genus from Entomobryidae family is 188 individuals / 900m2, and the abundance Salina genus from Paronellidae Family is 6 individuals / 900m2. The diversity of Collembola in the UPI Botanical gardens included to low category which the value of *Shannon-Wiener* is *H'*=0309.

Keyword : *Collembola, diversity, abundance, and UPI botanical garden.*