

**KERAGAMAN SERANGGA DIURNAL PADA PERKEBUNAN JERUK
DI DESA TONGKOH, KECAMATAN DOLAT RAYAT,
KABUPATEN KARO**

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui keanekaragaman, kelimpahan, indeks dominansi, indeks keseragaman serangga dan faktor fisika-kimia lingkungan pada kawasan perkebunan jeruk di Desa Tongkoh, Kecamatan Dolat Rayat, Kabupaten Karo. Pengambilan sampel dengan *purposive sampling*. Dilakukan pemasangan yellow sticky trap dan sweep net pada daerah tinggi dan rendah pada luas areal masing-masing 2500 m². Identifikasi serangga dilakukan di laboratorium entomologi jurusan biologi UNIMED. Hasil penelitian menunjukkan adanya 16 jenis serangga yang berasal dari 5 ordo (*Coleoptera*, *Diptera*, *Hemiptera*, *Homoptera*, dan *Orthoptera*). Serangga diurnal yang mendominasi adalah *Bactrocera dorsalis* (D = 0,8378%). Indeks dominansi serangga menggunakan metode yellow sticky trap pada daerah (T) tinggi D = 0,65 dan daerah (R) rendah D = 0,86 tergolong tinggi. Untuk metode sweep net pada daerah (T) tinggi D = 0,31 dan daerah (R) rendah D = 0,15 keduanya tergolong rendah. Indeks keanekaragaman serangga diurnal pada kawasan perkebunan jeruk di Desa Tongkoh, Kecamatan Dolat Rayat, Kabupaten Karo tergolong sedang ($H' = 2,003$). Indeks keanekaragaman serangga menggunakan sweep net pada daerah (R) rendah H = 0,93 dan daerah (T) tinggi H = 0,84 tergolong rendah. Serangga diurnal yang paling melimpah pada kedua metode adalah *Bactrocera dorsalis* pada metode sweep net ($\bar{Y} = 11$, 83%) dan pada metode yellow sticky trap ($\bar{Y} = 93,66\%$). Indeks keseragaman pada daerah rendah (R) (E = 0,641) dan pada daerah tinggi (T) (E = 0,620) tergolong tinggi. Berdasarkan pengukuran faktor fisika kimia lingkungan yang dilakukan pada kawasan perkebunan jeruk di Desa Tongkoh, Kecamatan Dolat Rayat, Kabupaten Karo, memiliki rata-rata suhu 21-21,3 °C, kelembaban 85-85,3% dan pH tanah rata-rata 6,3-6,8.

Kata kunci : Serangga Diurnal, Yellow Sticky Trap, Sweep Net.

**DIURNAL INSECT DIVERSITY IN ORANGE PLANTATION
IN THE TONGKOH VILLAGE, DISTRICT DOLAT RAYAT,
KARO DISTRICT**

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ABSTRACT

The aims of the research were to determine the diversity, abundance, dominance index, uniformity index and environmental physico-chemical factors in citrus plantation areas in Tongkoh Village, Dolat Rayat District, Karo Regency. Sampling with *purposive sampling*. Installation of yellow sticky trap and sweep net at high and low areas in the area of each 2500 m². Insect identification was carried out in the entomology laboratory of the UNIMED biology department. The results showed 16 species of insects from 5 orders (*Coleoptera*, *Diptera*, *Hemiptera*, *Homoptera*, and *Orthoptera*). The predominant diurnal insect is *Bactrocera dorsalis* (D = 0.8378%). The insect dominance index uses the yellow sticky trap method in the area (T) high D = 0.65 and the area (R) is low D = 0.86 was high category. For the sweep net method in the high area (T) D = 0.31 and the area (R) is low D = 0.15 both were low category. The diversity index of diurnal insects in citrus plantation areas in Tongkoh Village, Dolat Rayat District, Karo District was in the moderate category ($H' = 2,003$). Insect diversity index using sweep net in low area (R) H = 0.93 and area (T) high H = 0.84 classified as low. The most abundant diurnal insects in both methods were *Bactrocera dorsalis* in the sweep net method $Y' = 11$, 83% and in the yellow sticky trap method Y = 93.66%. The uniformity index in the low area (R) (E = 0.641) and in the high area (T) (E = 0.620) was high category. Based on measurements of environmental physical chemical factors carried out in citrus plantation areas in Tongkoh Village, Dolat Rayat District, Karo Regency, it has an average temperature of 21-21.3⁰ C, humidity 85-85.3% and soil pH averaged 63-6,8.

Keywords: Diurnal Insects, Yellow Sticky Trap, Sweep Net.

