ABSTRAK

PENGARUH LAMA FASE INOKULASI *Aphis gossypii* TERHADAP KECEPATAN MUNCULNYA SIMPTOM VIRUS PADA TANAMAN *Capsicum frutescen* UNTUK PEMBUATAN BUKU AJAR MIKROBIOLOGI

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Penelitian ini bertujuan untuk mengetahui lama waktu inokulasi *Aphis gossypii* terhadap kecepatan munculnya virus pada tanaman *Capsicum frutescen* dengan luaran berupa buku ajar Mikrobiologi. Penelitian dilaksanakan di Laboratorium Biologi FKIP UISU Medan sejak bulan Juni sampai Agustus 2021. Penelitian bersifat eksprimental dengan analisis deskriftif tanpa membandingkan perbedaan signifikasi antar perlakuan lama fase inokulasi. Penelitian ini menggunakan 4 perlakuan lama fase inokulasi *Aphis gossypii* pada tanaman *Capsicum frutescen* yaitu selama 15 menit, 30 menit, 45 menit dan 60 menit. Masing –masing perlakuan menggunakan 3 ulangan. Hasil penelitian menunjukan bahwa semua tanaman *Capsicum frutescen* setelah perlakuan inokulasi *Aphis gossypii* menunjukkan munculnya symptom (gejala) serangan virus. Makin lama fase inokulasi makin cepat munculnya symptom pada tanaman. Pada fase inokulasi 15 dan 30 menit symptom muncul pada hari ke tiga, sedang pada fase inokulasi 45 menit, symptom muncul pada tanaman cabe dihari ke dua dan pada fase inokulasi 60 menit symptom muncul pada hari pertama. Symptom virus pada tanaman *Capsicum frutescen* ditandai dengan ciri-ciri yang sama yaitu daun tanaman *Capsicum frutescen* lebih mengkilat, daun berkerut tidak rata atau keriting, terdapat belang-belang hijau gelap, tangkai daun membengkok dan lebar daun menyempit (*shoe string*) warna daun *Capsicum frutescen* relatif hijau gelap. Dari penelitian ini juga diketahui bahwa virus tanaman *Capsicum frutescen* yang ditransmisikan oleh *Aphis gossypii* bersifat non persisten.

Katakunci : Fase akuisisi, Fase inokulasi, *Capsicum frutescent*, virus tanaman, *Aphis gossypii*, dan Non persisten.

ABSTRACT

THE EFFECT OF APHIS GOSSYPII INNOCULATION PHASE ON THE RATE OF VIRUS SYMPTOMS APPEARANCE IN Capsicum frutescen PLANTS FOR MICROBIOLOGY TEXTBOOKS

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This study aims to determine the length of time inoculation of *Aphis gossypii* on the speed of virus emergence in *Capsicum frutescen* plant with the output in the form of a Microbiology textbook. The study was carried out at the Biologi Laboratory of the Faculty of Teacher Training and Education, UISU Medan from June to August 2021. The research was experimental with descriptive analysis without comparing the difference in significance. Between treatments during the inoculation phase. This study used 4 treatments for the length of the *Aphis gossypii* inoculation phase in *Capsicum frutescen* plants, namely 15 minutes, 30 minutes, 45 minutes, and 60 minutes. Each treatment used 3 replications. The results showed that all *Capsicum frutescen* plant, after *Aphis gossypii* inoculation treatment showed symptoms of viruses attack. The longer the inoculation phase, the faster the symptoms will appear in plants. In the 15 and 30 minutes inoculation phase, symptoms appeared on the third day, while in the 45 minutes inoculation phase, the symptoms appeared on *Capsicum frutescen* plant on the second day and in the 60 minutes inoculation phase symptoms appeared on the first day. Virus symptom in *Capsicum frutescen* plant are characterized by the same characteristics, namely the leaves of the *Capsicum frutescen* plant are shiny, the leaves are wrinkled unevenly of curly, there are dark green stripes, the leaf stalk is bent and the leaf width is narrow (*shoe string*), the color of the chili leaf is relatively green dark. From this study it was also know, that the *Capsicum frutescen* plant viruses transmitted by *Aphis gossypii* was non-persistent.

Keyword : Acquisition phase, Inoculation phase, *Capsicum frutescen*, Plant viruses, *Aphis gossypii* and Non Persistent.

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Chairperson

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