# RINGKASAN

Penelitian ini bertujuan untuk mengetahui: (1) gejala serangan, (2) sifat sebaran, (3) populasi dan intensitas serangan *S. frugiperda* pada tanaman jagung di Kabupaten Banyumas, serta (4) jenis dan populasi musuh alami.

Penelitian ini dilaksanakan pada bulan Oktober 2019 sampai dengan Januari 2020 di Kabupaten Banyumas dan Laboratorium Perlindungan Tanaman Fakultas Pertanian Universitas Jenderal Soedirman Purwokerto. Penelitian menggunakan metode survei dengan teknik pengambilan sampel *Modified Purposive Stratified Random Sampling*. Wilayah terpilih yaitu Kecamatan Sumbang, Kecamatan Kembaran, Kecamatan Baturaden dan Kecamatan Kalibagor. Sebanyak 3 desa setiap kecamatan dan setiap desa diambil 2 lahan meliputi lahan tanaman jagung stadia vegetatif dan stadia generatif. Pengambilan sampel tanaman di lahan dengan metode diagonal, zig-zag dan leter U dimana terdapat 5 titik pengamatan, setiap titik terdapat 10 tanaman sampel. Variabel yang di amati meliputi gejala serangan, populasi dan intensitas serangan *S. frugiperda* serta jenis dan populasi musuh alami.

Hasil penelitian menunjukkan bahwa gejala serangan *S. frugiperda* pada tanaman jagung yaitu terdapat bekas gerekan pada daun tanaman yang menggulung dan kotoran bekas gerekan. Sifat sebaran hama *S. frugiperda* pada stadia vegetatif maupun stadia generatif adalah mengelompok. Populasi dan intensitas tertinggi pada stadia vegetatif dan stadia generatif di Desa Linggasari masing-masing 2.76 ekor/tanaman dan 0.568% serta 1.02 ekor/tanaman dan 0.204%. Jenis musuh alami yang ditemukan yaitu predator dari spesies *Paederus fuscipes*, *Euborellia annulipes*, *Doru luteipes*, dan *Micraspis frenata* sedangkan Parasitoid yang ditemukan meliputi parasitoid larva (*Tetrastichus* sp), parasitoid pupa *(Brachymeria lasus)*, lalat Tachinidae (*Winthemia* sp).



Kata kunci: *Spodoptera frugiperda*, jagung, sebaran, populasi dan intensitas, musuh alami.

## *SUMMARY*

This research aims to determine: (1) *attack symptoms*, (2) distribution characteristics, (3) population and intensity of *S. frugiperda* attacks on corn plants in Banyumas Regency, and (4) species and population of natural enemies.

This research was conducted from October 2019 to January 2020 in Banyumas Regency and the Plant Protection Laboratory at Faculty of Agriculture, Jenderal Soedirman University, Purwokerto. The research used was a survey method with the sampling technique of *Modified Purposive Stratified Random Sampling*. The selected areas were Sumbang Sub-district, Kembaran Sub-district, Baturaden Sub-district and Kalibagor Sub-district. The total of 3 villages per sub-district and 2 lands were taken for each village, including corn plantations in the vegetative stage and the generative stage. Sampling of plants in the land using the diagonal, zigzag and U-letter method that there were 5 observation points, then there were 10 sample plants for each point. The variables observed included attack symptoms, population and intensity of *S.frugiperda* attacks, species and population of natural enemies.

Results showed that the symptom of *S. frugiperda* attack on corn plants was that there were scars the rolled leaves of the plants and the dirt from the scars. The distribution characteristic of *S. frugiperda* pests at both the vegetative and generative stages was clustered. The highest population and intensity at the vegetative stage and generative stage were in Linggasari Village, respectively 2.76 individuals/plant and 0.568% as well as 1.02 individuals/plant and 0.204%. Species of natural enemies found were predators of the species *Paederus fuscipes, Euborellia annulipes, Doru luteipes,* and *Micraspis frenata,* while parasitoids found included larval parasitoids (*Tetrastichus sp*), parasitoid pupa (*Brachymeria lasus*), and Tachinidae flies (*Winthemia sp*).



Keywords: *Spodoptera frugiperda, c*orn, distribution, population and intensity, natural enemies.