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Study the impact of climate change on the spread of pests in soybeans field in the upper Northern, Thailand

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The climate change has an effect on the spreading of soybean insects. The research was to investigate outbreak severity and type of insects in the farmer field that was conducted in the upper north region of Thailand; Chiangmai, Phrae, and Mae Hongson provinces. The results of the years 2014-2016 revealed that changing the climate condition (warmer temperature and temperature was higher 1 Degree Celsius, deficit precipitation, and drought) resulted in a fast growth of soybean insect population. Chiangmai showed the highest quantity of *Spodoptera litura* Fabricius in 2014 and a few of *Aphis glycines* Matsumura, *Archips micaceana* Walker, *L.indicata* Fabricius, and *Bemisia tabaci* Gennadius in 2015. While, only *Spodoptera litura* Fabricius was prevalent in rainy season and insect dormancy and then multiplied themselves in the next season or when stayed in the favorable condition. Phrae expressed the highest number of *Aphis glycines* Matsumura in dry season, 2016. Which this has temperature was higher 1 Degree Celsius, deficit precipitation. Total Rain fall was 35.3 mm. Two years ago (2014-15), showed the highest quantity of *Archips micaceana* Walker, *L.indicata* Fabricius. In rainy seasons for three year has showed amount of *Archips micaceana* Walker, *L.indicata* Fabricius, and *Bemisia tabaci* Gennadius. Then, highest of total Rain fall was 1,123 mm in 2014. Since 2014-2016, Mae Hongson found large amount of Aphis population (*Aphis glycines* Matsumura). Which aphis population were more than economic threshold (250 Aphis per plant). Another insect pest were *Archips micaceana* Walker, *L.indicata* Fabricius, and *Melanagrowyza sojae* Zehntner; *Ophiomyia phaseoli* Tryon. Also, the climate condition was drought and has low total rainfall between 28.4-69.7 mm.