

## Soybean Selection Against Cercospora Leaf Blight Disease Caused By Cercospora kikuchii Based on Anatomical Resistance

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<b>Abstract</b>	<p>Soybean (<i>Glycine max</i> L. Merr.) is the third food crop commodity after rice and maize in Indonesia. This plant is also known as the most important source of vegetable protein, which is relatively inexpensive, but a decrease in soybean productivity can occur due to infection with disease-causing pathogens, one of is <i>Cercospora kikuchii</i> which causes <i>Cercospora</i> leaf blight (CLB). The research objectives were to determine the anatomical resistance and disease severity of soybean cultivars against CLB. The method was an experiment with a completely randomized design (CRD) factorial pattern; factor 1 being soybean cultivars (Dering, Slamet, Grobogan, Wilis) and factor 2, namely pathogen inoculation (0 conidiospores/mL and 105 conidiospores/mL). Anatomical method preparations using paraffin, staining with 1% safranin. Disease criteria are based on the council of scientific and industrial research (CSIR) assessment method. Data were analysis used analysis of variance (<math>p &lt; 0.05</math>) and the least significance difference (LSD). The results showed that Dering and Slamet cultivars had the largest cuticle, epidermis, and palisade ratios and the smallest stomata length and width with the largest number of stomata and trichomes compared to Grobogan and Wilis. The disease severity (DS) of the cultivars Dering 14.6%, Slamet 24.64%, Grobogan 24.80% (classified as a resistant with low infection), while Wilis cultivar was 31.08% as a moderately susceptible cultivar with moderate infection. The novelty of soybean cultivar selection against CLB is important and its effectiveness for increasing soybean productivity. Dering, Slamet and Grobogan are likely to be further developed with their resistance to CLB disease.</p>
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