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MOSAIC DISEASE AND CHILLI PRODUCTION ON DIFFERENT

ALTITUDES IN SOUTH SUMATRA, INDONESIA

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ABSTRACT

The study was aimed to investigate the symptoms, severity and effect on the yield by mosaic virus disease attack on chilli planted on different altitudes in South Sumatra, Indonesia. Survey method and direct observation in the fields were conducted. Samples were taken on purposive samplings. The parameters measured were mosaic symptoms and disease severity in the
field, identification of virus pathogen with ELISA and chili production at first harvest. Chilli in all plantations in three altitudes
experienced attack by mosaic virus that is Cucumber Mosaic Virus (CMV) with the most severe was at the low altitude,
followed by medium and high altitude; that severity of the disease attack had effect on yield. The highest severity in viral
attack had lowest yield of chilli was being at the lowest altitude, although not different from the medium altitude, was
significantly different from that of highest altitude of the observed chilli plantation. The discrepancy in the severity is apparently

due to the influence of environmental factors. Differences in altitude will cause differences in environmental factors such as
temperature, rainfall and humidity can affect a host, pathogen and vector.

Key words: Mosaic virus, disease severity, chilli production, altitudes