UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

LEAVES PATTERN GENERATED BY BEZIER AND NB1 CURVES
(P13M22)

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IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

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ABSTRACT

Recent studies on generating leaves design rarely can be met. Researchers tend to design other complex shape compared to leaves design. This lack of study will decrease the source of reference. Existing study does not highlight much about the perfect shape of the leaves hence making it less in information. The objectives of this research are to generate the Bezier curve for different degree in generating leaves design and to identify the best degree to represent the leaves by using Bezier curve and NB1 curve. This study highlights the use of Bezier curve and NB1 through MATLAB software to produce the best curves to represent selected leaves. Based on the resulting shape, the use of these two curves, namely Bezier curves and NB1 curve, succeeded in producing a good and beautiful curve to represent the shape of the leaf. Nevertheless, it is true that the use of Bezier curve can represent the leaves more realistically and resemble the selected leaves. This research provides the fundamental knowledges on the best degree to represent an individual leaf.