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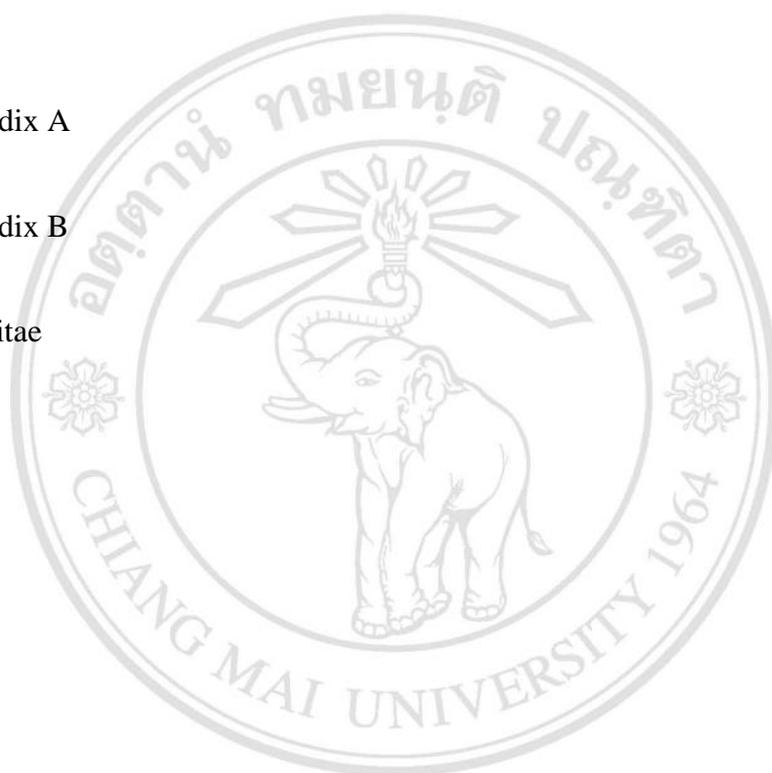
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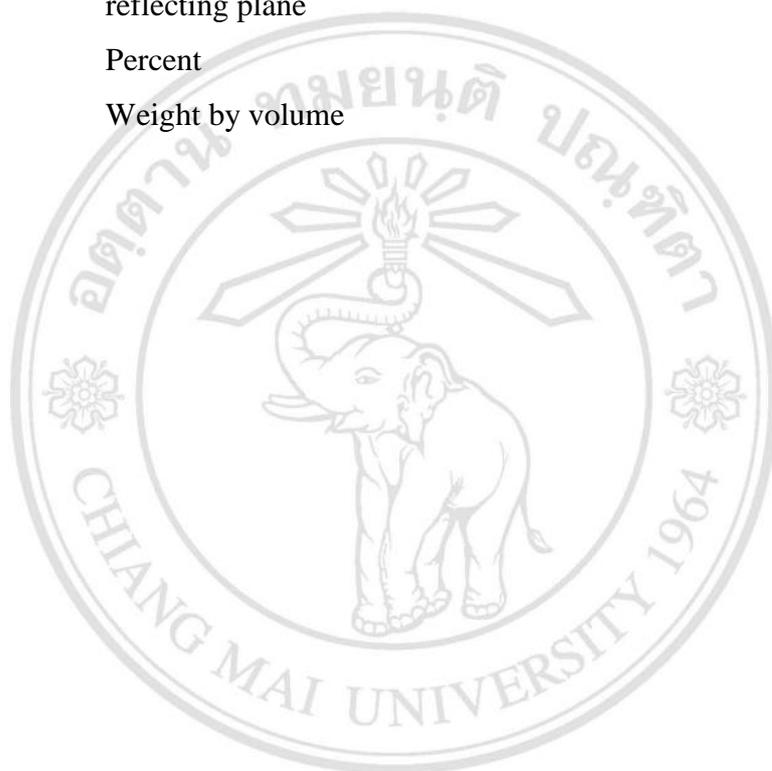
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LIST OF ABBREVIATIONS

BHI	Brian Heart Infusion
CFU	Colony forming unit
DMSO	Dimethyl sulfoxide
DSC	Differential Scanning Calorimetry
FTIR	Fourier-Transform Infrared
GAE	Gallic acid equivalent
GTFs	Glucosyltransferases
HPC	Hydroxypropyl cellulose
LM	Light microscope
MBC	Minimum bactericidal Concentration
MIC	Minimum Inhibitory Concentration
MW	Molecular weight
OD	Optical density
PVA	Polyvinyl alcohol
PVP	Polyvinyl pyrrolidone
RH	Relative humidity
SEM	Scanning electron microscope
<i>S. mutans</i>	<i>Streptococcus mutans</i>
UV	Ultraviolet
XRD	X-ray Diffractogram

LIST OF SYMBOLS

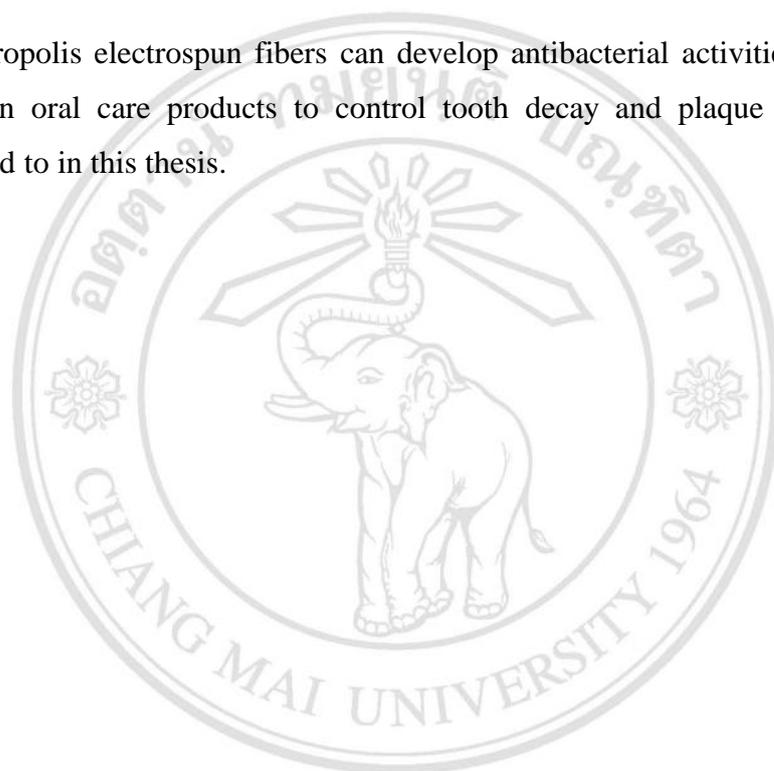
$^{\circ}\text{C}$	Degree Celsius
μm	Micrometer
θ	The angle of the diffraction of the radiation relative to the reflecting plane
%	Percent
(w/v)	Weight by volume



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STATEMENTS OF ORIGINALITY

- 1) This thesis presents an alternative technique to produce propolis electrospun fibers that can be used as oral fast dissolving fibers by using an electrospinning technique.
- 2) The propolis electrospun fibers can develop antibacterial activities that can be used in oral care products to control tooth decay and plaque formation, as referred to in this thesis.



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ข้อความแห่งการริเริ่ม

- 1) วิทยานิพนธ์นี้ได้นำเสนอกรรมวิธีในการผลิตเส้นใยที่ประกอบด้วยโปรพอลิสเพื่อใช้เป็นรูปแบบยาละลายเร็ว ซึ่งได้จากการเตรียมเส้นใยโดยกระบวนการอิเล็กโทรสปินนิง
- 2) เส้นใยที่เตรียมจากการกระบวนการอิเล็กโทรสปินนิงที่มีโปรพอลิสมีประสิทธิภาพในการต้านเชื้อแบคทีเรีย จึงสามารถนำมาใช้เป็นผลิตภัณฑ์ดูแลช่องปากเพื่อควบคุมการเกิดฟันผุ และการก่อให้เกิดคราบหินปูนได้ ซึ่งได้นำเสนอไว้ในวิทยานิพนธ์นี้



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