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## LIST OF ABBREVIATIONS

Temp.w	Temperature of water
Temp.a	Temperature of air
Cond.	Conductivity
DO	Dissolved oxygen
BOD	Biochemical oxygen demand
Alk.	Alkalinity
Turb.	Turbidity
NO <sup>3-</sup>	Nitrate nitrogen
PO <sub>4</sub> <sup>3-</sup> /SRP	Soluble reactive phosphorus
NH <sub>4</sub> <sup>+</sup>	Ammonium nitrogen
Chla.	Chlorophyll <i>a</i>

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## ข้อความแห่งการริเริ่ม

- 1) วิทยานิพนธ์นี้ได้นำเสนอการศึกษาความหลากหลายทางชีวภาพของยูกลีโนอิดในภาคเหนือของประเทศไทย โดยการศึกษากลุ่มยูกลีโนอิดในแหล่งน้ำต่างๆ และศึกษาการกระจายตัวของยูกลีโนอิดโดยเปรียบเทียบกับคุณสมบัติทางกายภาพและเคมีของแหล่งน้ำนั้น งานวิจัยนี้ได้นำเสนอฐานข้อมูลที่เชื่อถือได้ของยูกลีโนอิดในประเทศไทย
- 2) เพื่อจัดทำดัชนีบ่งชี้คุณภาพน้ำที่เรียกว่า euglenoid index ซึ่งจะเป็นต้นแบบที่ดีสำหรับ euglenoid index ของประเทศไทยหรือทวีปเอเชียและพื้นที่เขตร้อนโดยทั่วไป นอกจากนี้ยังเป็นดัชนีบ่งชี้ทางชีวภาพอย่างง่ายสำหรับการประเมินคุณภาพน้ำซึ่งจะมีประโยชน์สำหรับทุกคนในชุมชน

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## STATEMENT OF ORIGINALITY

- 1.) This thesis was conducted to study the biodiversity of euglenoids in Northern Thailand by studying euglenoid communities that occur in various types of water bodies and distribution of euglenoids in comparison with the physico-chemical properties of the water was also studied. This research also presented a reliable database of euglenoids in Thailand.
- 2.) In order to establish the water quality assessment reference, which is known as the “euglenoid index”. It will be a good model for the euglenoid index of Thailand or Asia, and tropical areas in general. Moreover, it will be an easy bioindicator for the assessment of water quality, which can be useful for all member of the community.

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