

เอกสารอ้างอิง

สันต์ พิธิชยกด. ๒๕๑๐. "การศึกษาแยกพิษงูแมวเซาออกเป็นส่วน ๆ เพื่อการศึกษาทางเอนไซม์ (Isolation, Purification and Enzymatic Studies of Russell's Viper Venom.)" วิทยาลัยแพทยศาสตร์พระมงกุฎเกล้า (สาขาชีวเคมี) จุฬาลงกรณ์มหาวิทยาลัย

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ภาคผนวกผนวก ก.

ตารางโปรบิตใช้สำหรับคำนวณ  
lethal dose (ตาม Weiss 1948) จำนวน  
สัตว์ทดลอง ๒๕ ตัว  
สำหรับการทดลองที่ใช้สัตว์น้อยกว่า  
๒๕ ใช้เทียบส่วน เช่น โปรบิตของ  
 $1/5 = 5/25$ ,  $3/5 = 15/25$  เป็นต้น  
สำหรับค่า ๐ และ ๑๐๐ responses ใช้คำนวณ  
โดยใช้ rule of thumb คือ เพิ่มหรือหักออก  
๐.๕ จากค่า probit ของ ๑ หรือ  $(n - 1)$   
respondents เช่น โปรบิตของ  
 $0/25 = (3.25 - 0.5) = 2.75$   
หรือ  $25/25 = (6.75 + 0.5) = 7.25$

number of respondents	probit
1	3.25
2	3.54
3	3.82
4	4.01
5	4.16
6	4.29
7	4.42
8	4.53
9	4.64
10	4.75
11	4.85
12	4.95
13	5.05
14	5.15
15	5.25
16	5.36
17	5.47
18	5.58
19	5.71
20	5.81
21	5.95
22	6.10
23	6.41
24	6.75

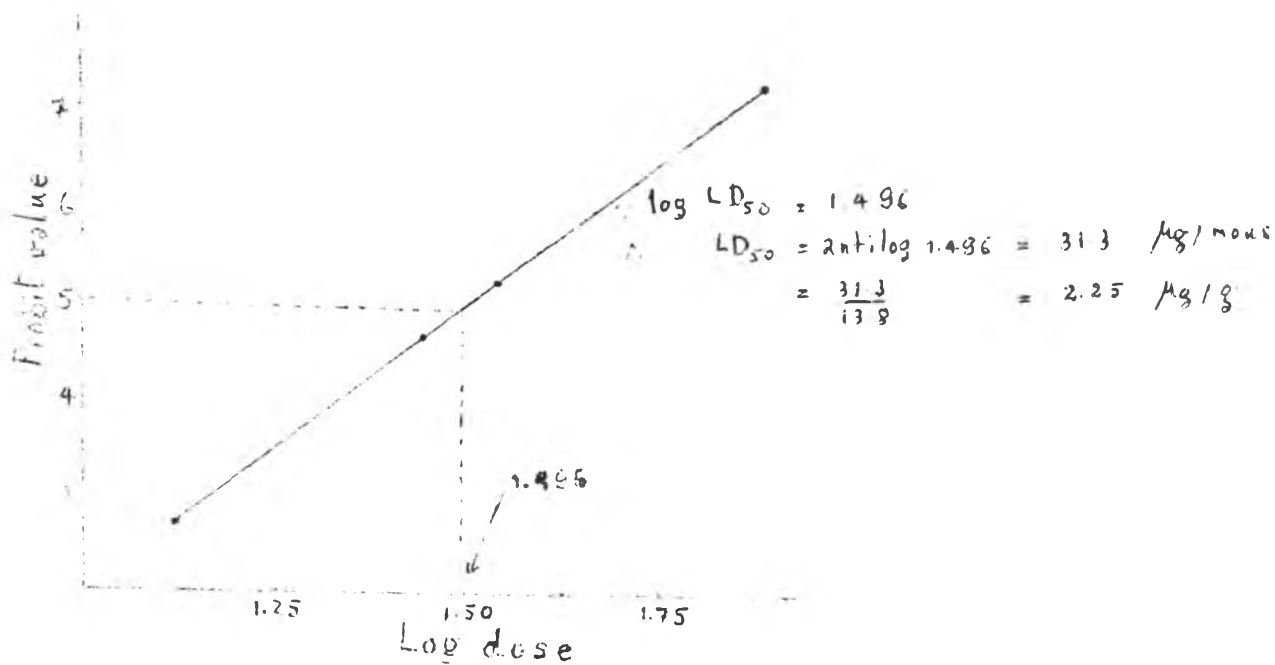
ผนวก ข. ตัวอย่างการหา  $LD_{50}$  มีเคียนลีรัลโคส

ในการทดลองหา  $LD_{50}$  ของพิษงูส่วนที่ I ซึ่งได้จากการแยกพิษงูแมวเซา จัดสารละลายพิษงูใน 0.๑๕ M NaCl เขาเส้นเลือดที่หางหนู ไซทูน น้ำหนักเฉลี่ย ๑๓.๕ กรัม กลุ่มละ ๕ ตัว ปล่อยหนูตายหลังจากฉีด ๒๔ ชม. ปรากฏผลดังนี้

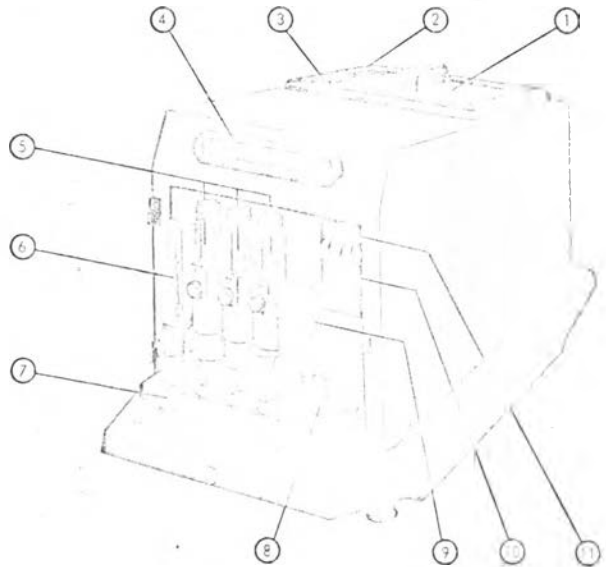
dose ( $\mu$ g )	61.00	33.89	30.50	15.25
จำนวนหนูตาย	5	3	2	0

จากผลการทดลองที่ได้นำมาหาค่า  $LD_{50}$  ได้ โดยเขียน lethal dose curve

dose ( $\mu$ g )	response ratio	log dose	probit(อ่านจากผนวก ก.)
61.00	5/5	1.820	(6.75 + 0.50)
33.89	3/5	1.530	5.25
30.50	2/5	1.484	4.75
15.25	0/5	1.173	(3.25 - 0.50)

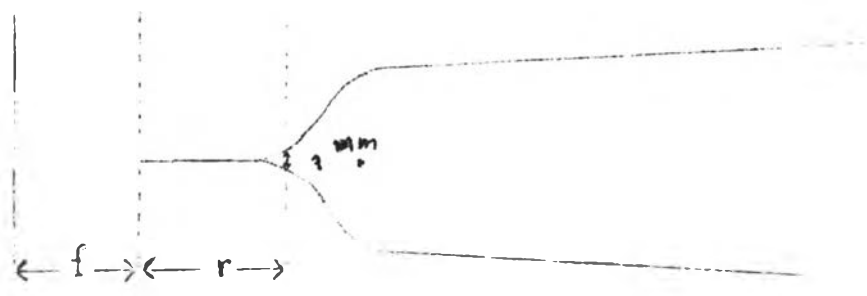


แผนภาพ ค. รูปเครื่องมือชั่งมวลผลาสโตกราฟ



- |   |                              |
|---|------------------------------|
| 1. Recording camera   | 6. Contact thermometer       |
| 2. Counter for used paper                                   | 7. Metal thermostat          |
| 3. Control knob for camera drive and manual paper transport | 8. Lighting indicator        |
| 4. Ground glass plate and scale                             | 9. Light-proof box           |
| 5. Measuring units  | 10. Handles for cover plates |
|   | 11. Indicator lamps          |

ผนวก ง. ตัวอย่างภาพถ่ายของครรชนี่แสง ที่ปรากฏบนกระจกฉายรูปของธรมบ์-อิลาสโตกราฟ



f = filling time คือ เวลาตั้งแต่เริ่มกดเข็มแก๊สไปส่วแล้วถ่าย  
 พลาสมาไปใส่ในเซลล์ของธรมบ์-อิลาสโตกราฟ จนถึงเวลาที่เปิด  
 เครื่องมือบันทึกภาพ

r = reaction time คือ เวลานั้นตั้งแต่เปิดเครื่องมือบันทึกภาพ จนถึง  
 เวลาที่พลาสมาเริ่มแข็งตัว ซึ่งครรชนี่แสงบนกระจกฉายรูปจะเบน  
 ออกจากกันเป็นระยะ ๑ มม. และเวลานี้วัดได้จากความยาวของ  
 กระจกที่บันทึกแสง ซึ่งใช้อัตราเร็วของกระจกที่บันทึก ๒ มม.ต่อ  
 นาที

และ recalcification time = filling time + reaction-  
 time



ประวัติการศึกษา

ชื่อ นาย ชัยฤทธิ์ โพธิ์สุข  
วันเดือนปีเกิด ๔ พฤศจิกายน ๒๔๗๘  
สถานที่เกิด กรุงเทพฯ ประเทศไทย  
สถานศึกษา  
โรงเรียนเตรียมอุดมศึกษา  
กุมภาพันธ์, ๒๔๘๗.....ประกาศนียบัตรประโยคเตรียมอุดมศึกษา  
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วิทยาลัยวิชาการศึกษา ประสานมิตร  
มีนาคม, ๒๕๐๗.....การศึกษาระดับบัณฑิต (กศ.บ.), เกียรตินิยม

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