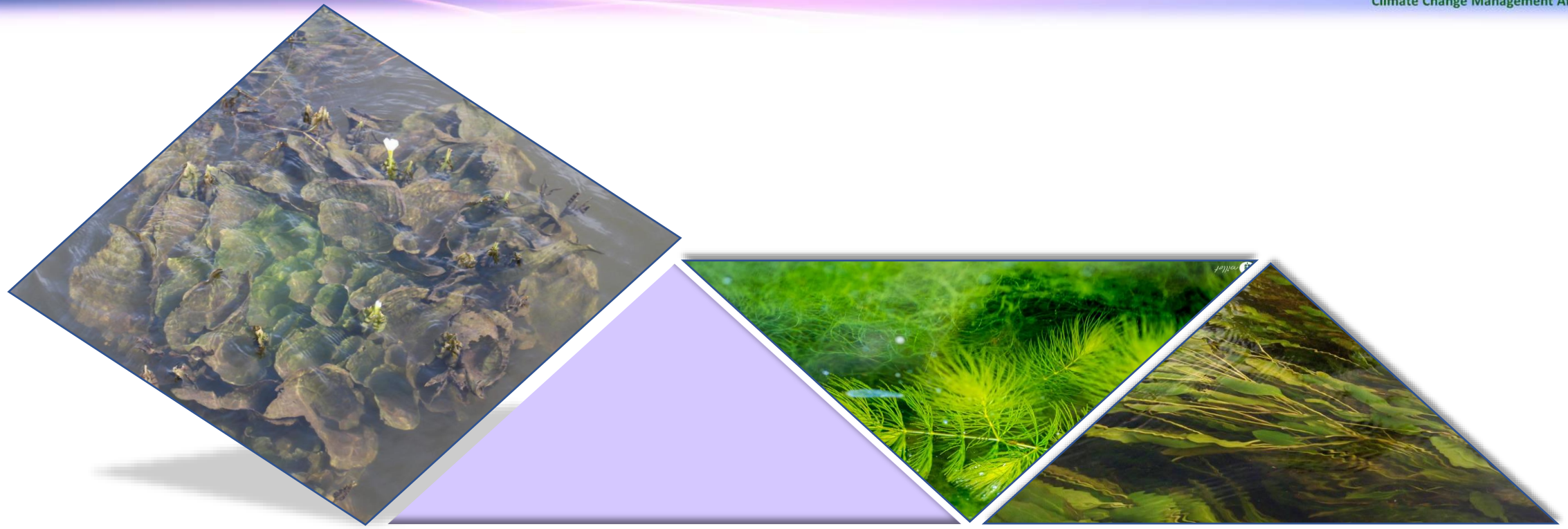

Aquatic weed removal with a rake to optimize water delivery

Jirawat Phuphanutada
Regional Irrigation Office 13
Royal Irrigation Department

ROYAL IRRIGATION DEPARTMENT

BACKGROUND

ROYAL IRRIGATION DEPARTMENT

BACKGROUND

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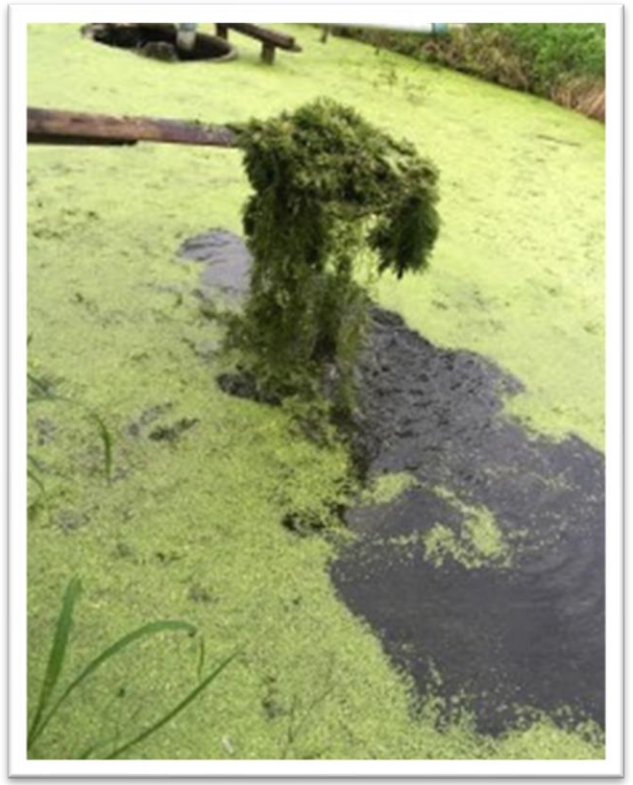
Hydrilla verticillate



Potamogeton nodosus Poir

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Ottelia alismoides

OBJECTIVES

- To research and develop submerged weed removal tools in irrigation canals **2.1**
- To innovate submerged weed removal tools including (their) usability testing **2.2**
- To disseminate the inventions used for the duties of the Royal Irrigation Department and other departments within the Ministry of Agriculture and Cooperatives **2.3**

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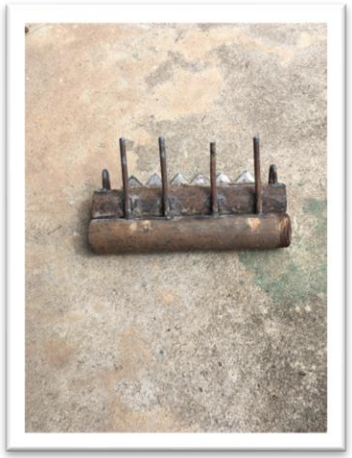
Process of Aquatic Weed Removal

RESEARCH METHODOLOGY



Weed Rake-I

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Process of eliminated submerged weeds

Conclusion

No.	Canals	Distance (kms)	Amount of weeds (tons)
1	2R-1R-1L-5L	1.60	9.28
2	2R-1R-1L-5L	1.00	5.63
3	2L-5L	1.50	8.45
4	2R-1R-1L-5L	1.70	9.69
5	2L-5L	0.98	5.52
6	2L-5L	1.20	7.08
7	2R-1R-1L-5L	1.10	6.60
8	2L-5L	1.10	6.19
9	2L-5L	0.70	4.20
10	2L-5L	1.10	6.44
11	2L-5L	1.30	7.93
Total		13.28	76.99

Weed method	Number of operational workers	Cost/Day (Baht)	Weeding distance (km./day)	Amount of weeds (tons/day)	Amount of money per ton
Manpower	6	2,264	0.4-0.5	2.25-2.80	896
Weed rake tools and manpower	6	2,568	1.1-1.7	5.52-9.69	337
Backhoe machine	1	8,000	0.7-0.8	3.90-4.50	1,904

Thank you