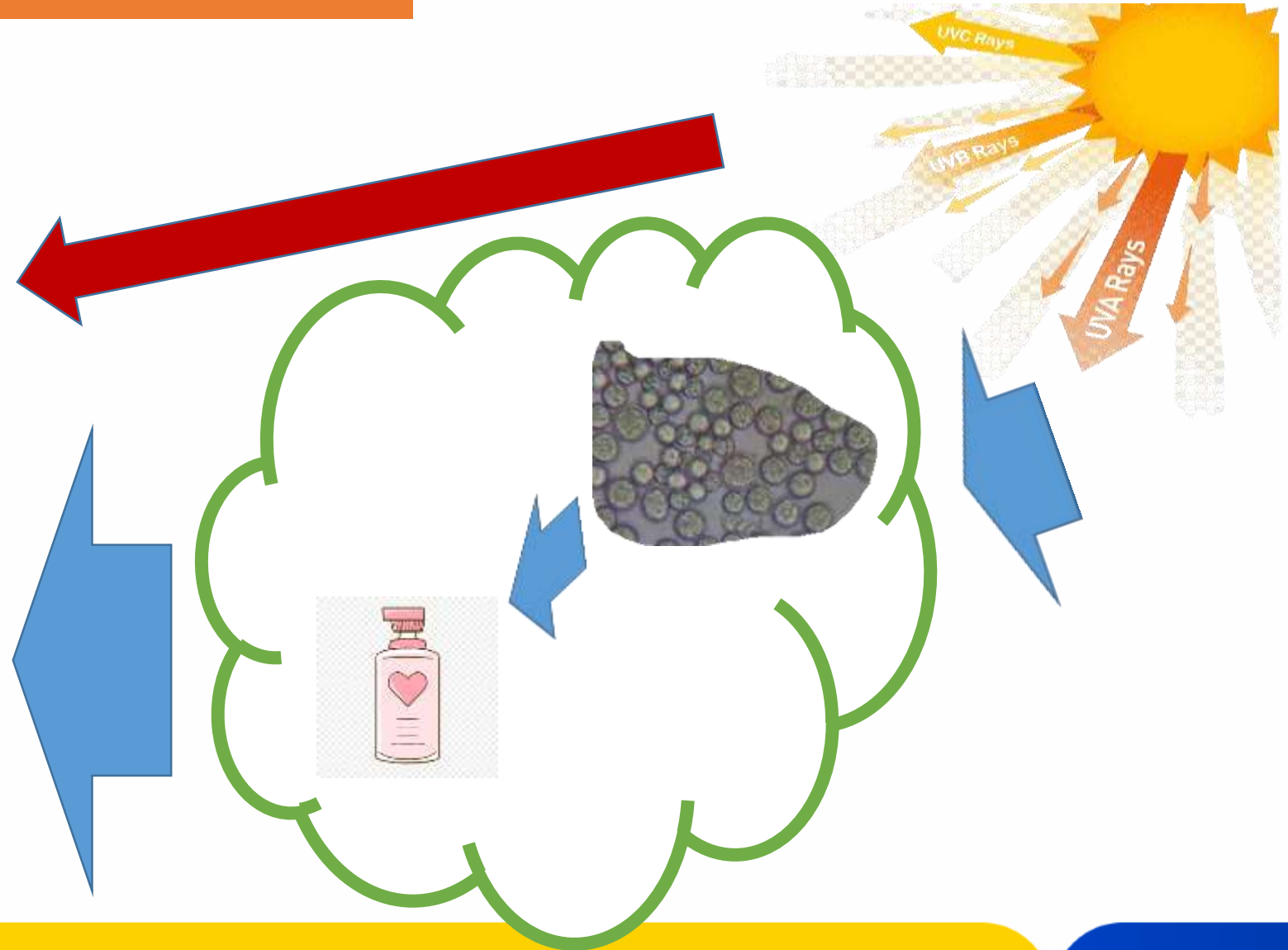


ANTI-AGING ACTIVITY OF MICROALGAE *Aurantiochytrium* sp. EXTRACT

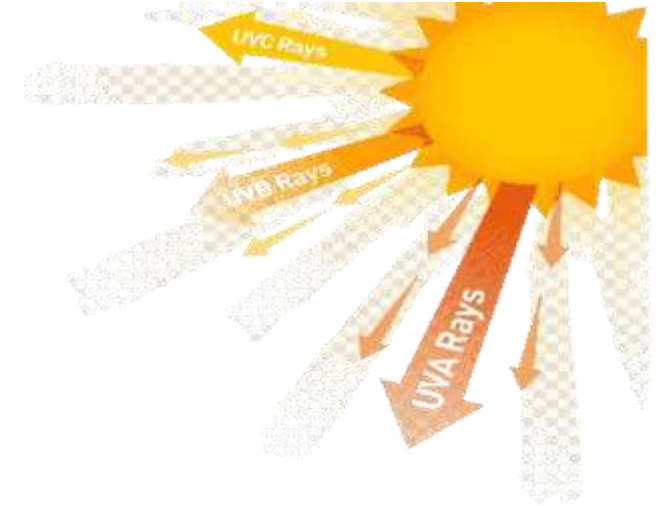
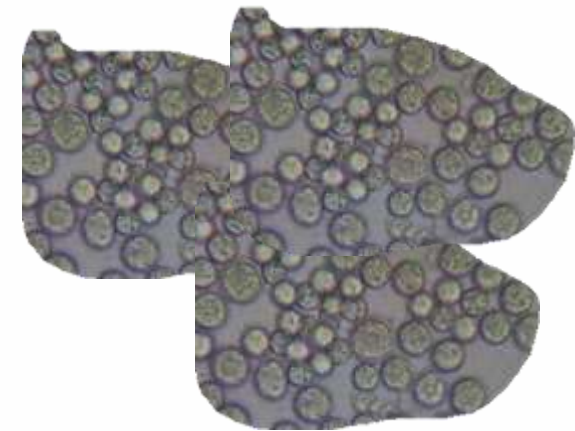
Hardi Astuti Witasari*, Mita Utami, Suhendra, Nurkhasanah

Background



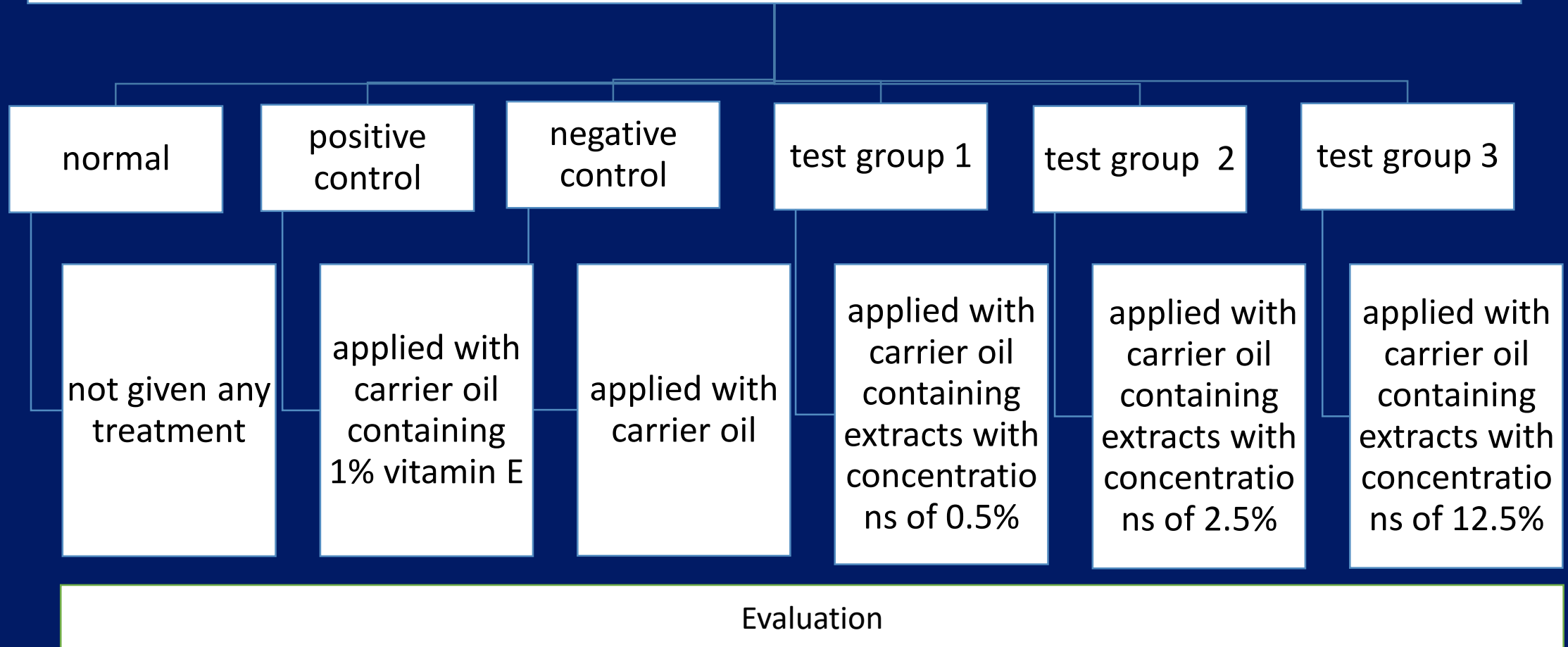
Objective

This research was conducted to determine
The anti-aging activity of the Microalgae *Aurantiochytrium* sp.
extract on the skin of mice exposed to UV-B light.



Metode

30 test animals had their backs shaved Divided into 6 groups



Result

Wrinkle assessment

Group	0 day	14 day
normal	0,91 ± 0,49	0,91 ± 0,27
positive control,	0,50±0,62	0,50±0,27
negative control	0,33±0,23*	2,00± 0,52* ^a
Test 1	0,91±0,49	1,00±0,23
Test 2	0,83±0,37	0,75±0,27
test 3	0,75 ± 027	0,66±0,23

*) p< 0,05

Skin pigmentation



Group	0 day	14 day
normal	2,25 ± 0,59	2,67 ± 0,23
positive control	1,25±0,68*	0,75±0,50*
negative control	1,83 ± 0,37	1,75±0,27
Test 1	1,67±0,37	1,08±0,36
Test 2	2,16±0,76	0,83±0,37
test 3	1,41 ± 0,92	0,58±0,27

*) p< 0,05

Skin moisture

Group	0 day	14 day
normal	1,00 ± 0,00	1,00 ± 0,00
positive control	1,25±0,43	2,60±1,47
negative control	1,00±0,00	1,25±0,43
Test 1	1,00±0,00	1,75±0,82
Test 2	1,00±0,00	2,00 ± 0,70
test 3	1,00± 0,00	3,00 ± 0,70

The value of oil content

Group	0 day	14 day
normal	1,00 ± 0,00	1,00 ± 0,00
positive control,	1,25±0,43	2,80±1,500
negative control	1,00 ± 0,00	1,25±0,43
Test 1	1,00 ± 0,00	2,25±1,63
Test 2	1,00 ± 0,00	2,25±1,63
test 3	1,00 ± 0,00	3,75 ± 1,63

The skin smoothness value

Group	0 day	14 day
normal	1,00 ± 0,00	1,00 ± 0,00
positive control,	1,25±0,43	3,00±1,50
negative control	1,00 ± 0,00	1,25±0,43
Test 1	1,00 ± 0,00	2,00±1,22
Test 2	1,00 ± 0,00	2,00±1,22
test 3	1,00 ± 0,00	3,25±1,29

Conclusion

The group of 0.5%, 2.5%, 12.5% microalgae *Aurantiochytrium* sp. extract and positive control test did not experience a significant increase in wrinkles and hyperpigmentation ($p > 0.05$) in contrast the negative control experienced a considerable increase ($p < 0.05$).

Thank you

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