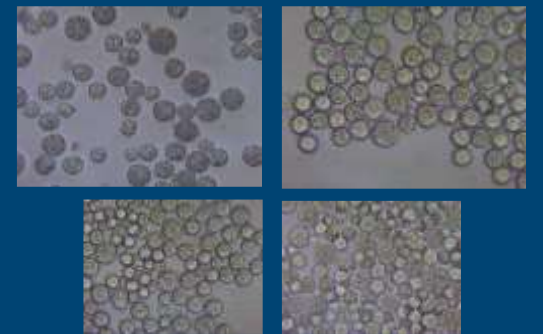


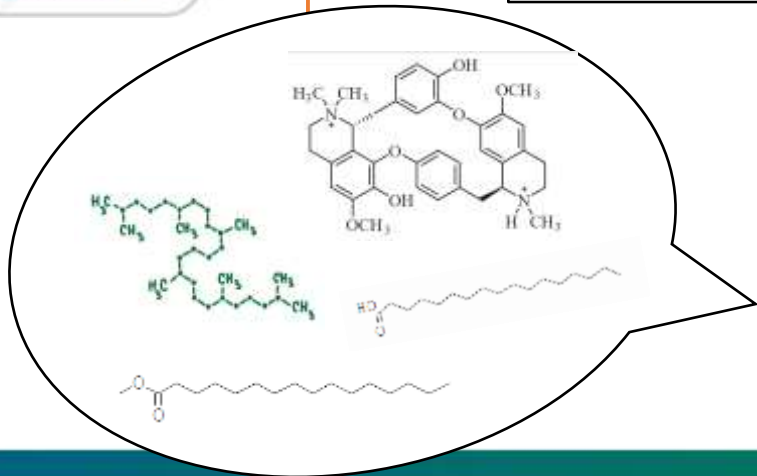
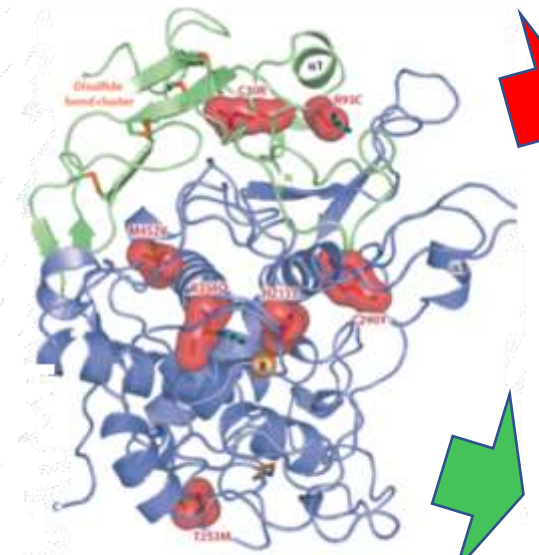
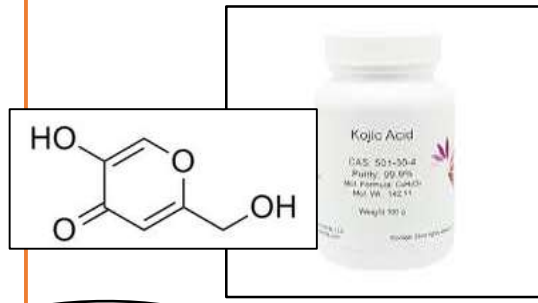
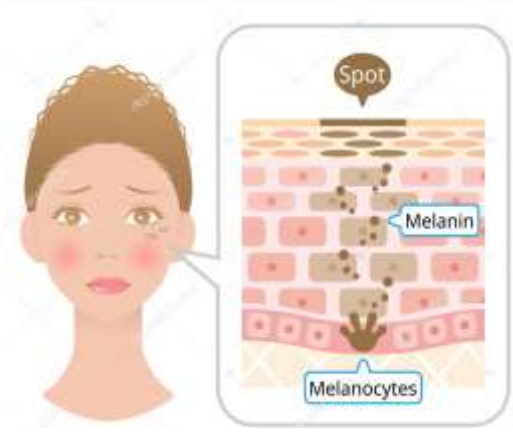
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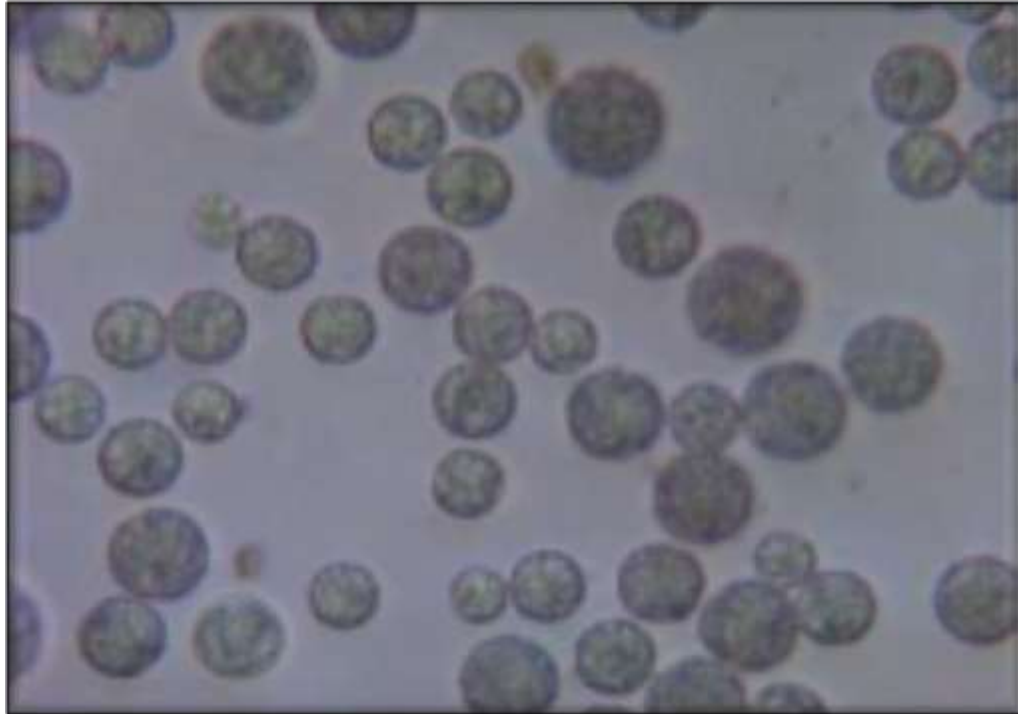
UAD
Universitas
Ahmad Dahlan

AKTIVITAS PENGHAMBATAN ENZIM TIROSINASE EKSTRAK MIKROALGA *Aurantiochytrium* sp. STRAIN RAJA AMPAT

Hardi Astuti Witasari, Silvia Febrianti, Suhendra, Nurkhasanah



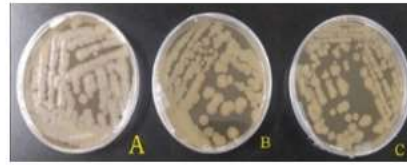




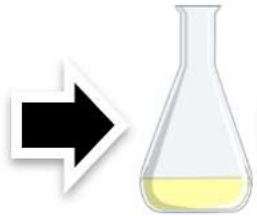
Mikroalga *Aurantiochytrium* sp.

Tujuan:

untuk mengkaji
aktivitas
penghambatan
enzim tirosinase
dari ekstrak
mikroalga
Aurantiochytrium
sp strain Raja
Ampat.



**Biakan murni
Aurantiochytrium**



*Standing
culture*



*Pre
culture*



*Main
culture*



Freze



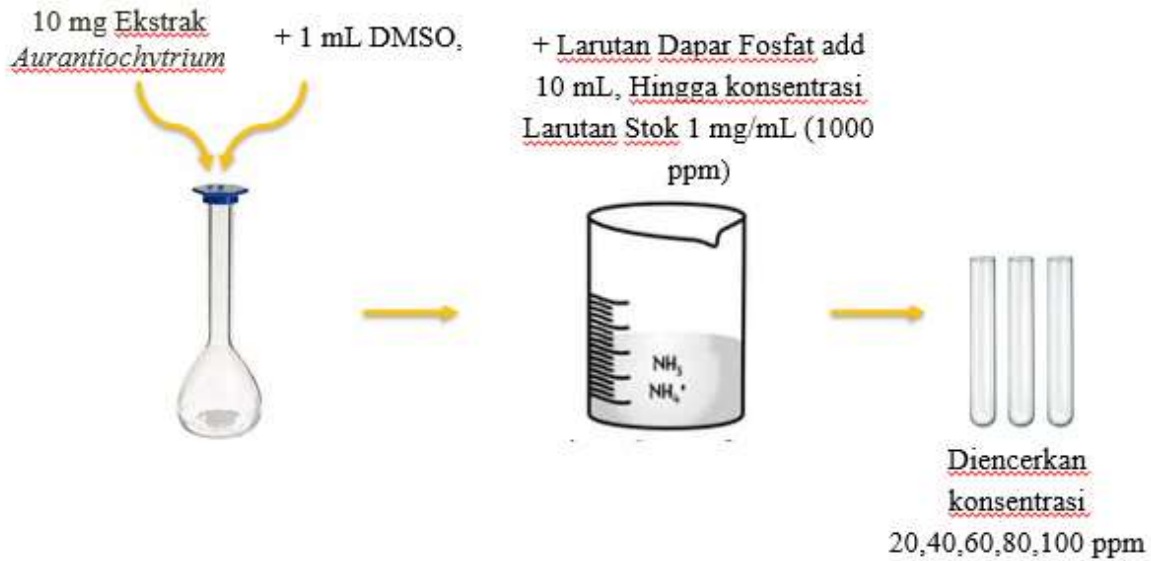
Biomass

Ekstraksi

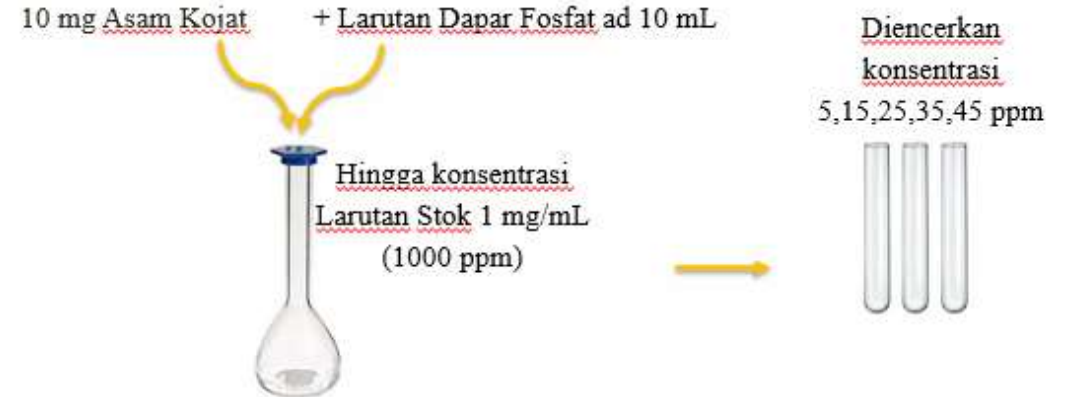
**Ekstrak
kental**

Uji Penghambatan Enzim Tirosinase

a. Pembuatan Larutan Sampel



b. Pembuatan Larutan Asam Kojat



c. Pencampuran Larutan Enzim Tirosinase

Sampel 50 μ l
Enzim Tirosinase
333 U/ml 50 μ l

20, 40, 60, 80,
100 ppm



Selama 30
menit, suhu
37oC



Tambahkan 100 μ l L-
Tyrosin, inkubasi selama 15
menit (suhu 37oC)

Dilakukan secara triplo
lalu dihitung nilai
persen inhibisi



d. Pencampuran Larutan Asam Kojat

Asam kojat 50 μ l, 50 μ l
Enzim Tirosinase 333
U/mL

5, 15, 25,
35, 45 ppm



Selama 30
menit, suhu
37oC



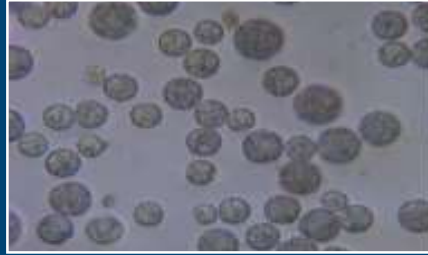
Tambahkan 100 μ l L-
Tyrosin, inkubasi selama 15
menit (suhu 37oC)

Dilakukan secara triplo
lalu dihitung nilai
persen inhibisi



Sampel	Hasil		
	Konsentrasi	% inhibisi	IC ₅₀
Asam Kojat	5	28,81	22,64 ± 0,47* (kategori sangat kuat)
	15	41,14	
	25	53,97	
	35	66,88	
	45	72,46	
Ekstrak <i>Aurantiochytrium</i> sp.	20	26,82	134,13 ± 0,66 * (kategori lemah)
	40	30,64	
	60	32,92	
	80	37,75	
	100	44,26	

*) p < 0,05



Kesimpulan

Nilai IC_{50} ekstrak mikroalga
Aurantiochytrium sp. sebesar:
 $134,13 \pm 0,66$ (kategori lemah)

Nilai IC_{50} Pembanding asam kojat sebesar :
 $22,64 \pm 0,47$ (kategori sangat kuat).

Terima Kasih