

THE EFFECT OF *BRASSICA OLERACEA* VAR. *CAPITATA* EXTRACT ON LEUCOCYTE COUNT AND PERCENT HEMATOCRITE VALUES

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PURPOSE:

The antitumoral effect and blood parameters of *Brassica oleracea* var.

acephala was described earlier(1,2). In this work the *in vivo* effect of the extract isolated from *Brassica oleracea* var. *capitata* on the leucocyte count and hemotocrite values of *Mus musculus* balb/c mice is studied.

MATERIALS AND METHODS :

Isolation of the active extract is summarized in fig 1 (3,4).

Leucocyte count: The tail of rats were cut at the end and 0.5 ml blood was withdrawn in to leucocyte pipette. 2 % acetic acid was added and leucocytes were counted under microscope.

Hematocrite values are determined using hematocrite centrifuge.

RESULTS:

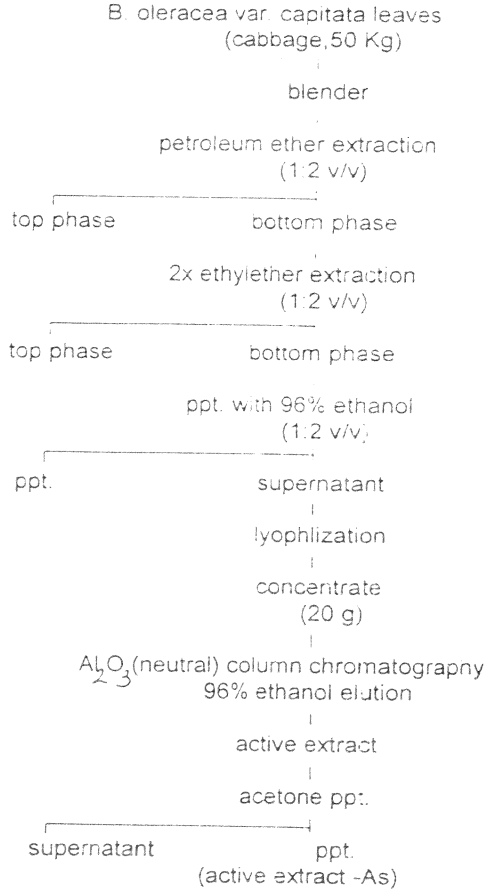
The *in vivo* effect of extract on leucocyte count is seen in Table 1. The leucocyte count was increased upon administration of the extract each day for 10 days at 200 mg/0.5 ml serum physiologic concentration *intra peritonally* (fig 2), It had no effect on hematocrite % values (fig 3).

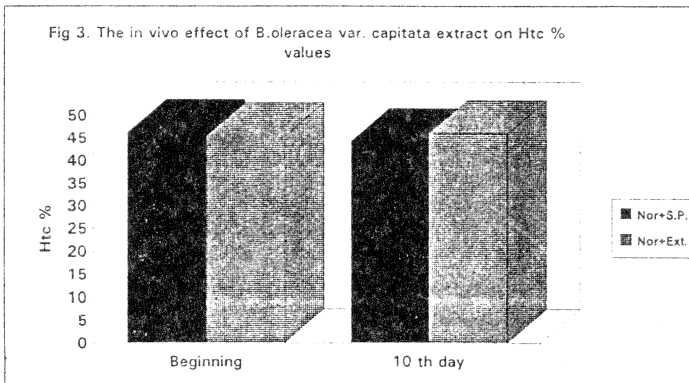
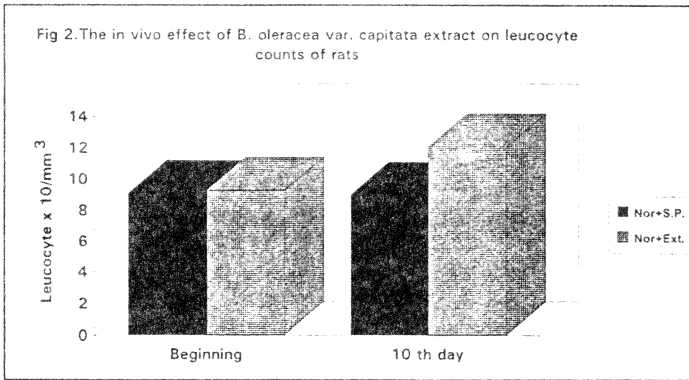
Table 1. The *in vivo* effect of *Brassica oleracea* var. *capitata* extract on leucocyte count and % Htc values.

	Leucocyte $\times 10^3 / \text{mm}^3$		Htc%	
	Beginning	10 th day	Beginning	10 th day
Normal+Ş.P.	9.10 \pm 1.00	9.00 \pm 0.60	46.28 \pm 1.30	44.28 \pm 2.38
Normal+Extract	9.30 \pm 0.50	12.10 \pm 0.90	45.40 \pm 1.90	46.00 \pm 1.60

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Fig 1. Isolation procedure of the biologically active extract from *B. oleracea* var. *capitata*





DISCUSSION:

As we reported earlier the extract of *Brassica oleracea* var. *acephala* leaves showed antitumoral activity both on Ehrlich ascites solid and liquid tumors induced on *Mus musculus* balb/c mice(1,2). This extract increased the γ - globulin fraction(5) and leucocyte count , but had no effect hematocrite % and hemoglobine values(6,7). As shown with this work *B. oleracea* var. *capitata* extract has increased leucocyte count in vivo, but had no effect on Hemotocrite % values. These results made us think that this extract might be effective immunologically.

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