

Immunostimulatory Efficacy of Ingredient of PHYTOCEE® : *Ocimum sanctum*

OBJECTIVE

To investigate the effect of aqueous extract of leaves of *Ocimum sanctum* on hematological parameters viz. total leukocytes count and hemoglobin concentration.

MATERIALS AND METHODS

Wistar rats (100-120 mg) were used for *in-vivo* study. The rats were randomly divided into two groups with 10 rats in each group and administered with aqueous leaves extract of *Ocimum sanctum* at 250 mg/kg for 20 days in experimental group. While, in control group equal volume of water was given as placebo. Blood was collected from the orbital plexes and hematological parameters viz. total leukocyte count (heamocytometer), and hemoglobin levels was estimated using standard analytical estimation method.

RESULTS

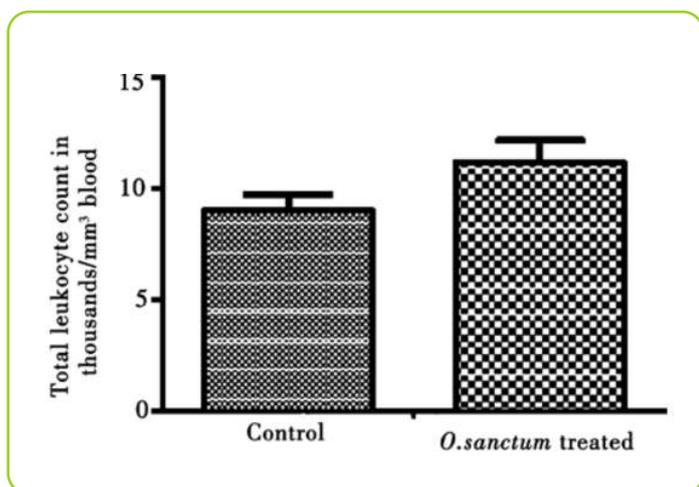


Figure 1 : Effect of *Ocimum sanctum* aqueous leaves extract on total leukocyte count in blood

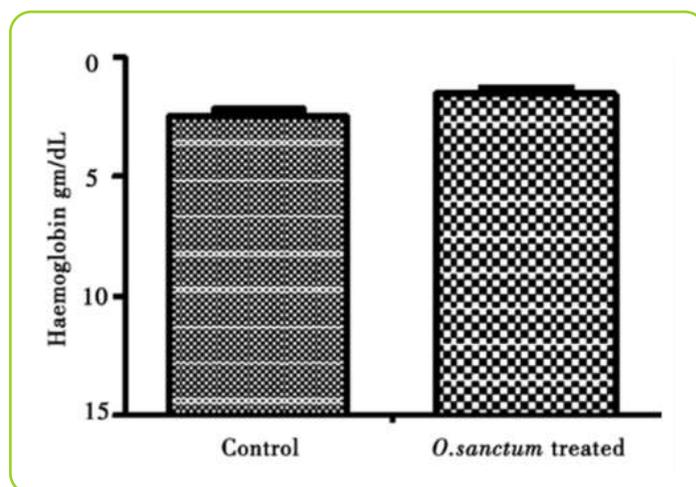


Figure 2 : Effect of *Ocimum sanctum* aqueous leaves extract on hemoglobin levels in blood

CONCLUSIONS

- The study findings depicted that the pretreatment for 20 days with *Ocimum sanctum* extract produced a striking leukocytosis.
- Elevated level of hemoglobin level (4-5%) was also recorded in *Ocimum sanctum* fed animals.

OUTCOME

Hence, *Ocimum sanctum* exhibited immunostimulatory properties.

Reference:

Goel A, Singh DK, Kumar S *et al.* Immunomodulating property of *Ocimum sanctum* by regulating the IL-2 production and its mRNA expression using rat's splenocytes. Asian Pac. J. Trop. Med. 2010;3(1):8-12.