

ABSTRACT

Thirty awassi ewes Of age 3-3.5 years and A-B-W of 50 ± 1.27 kg were selected from flock of abu kamal town SAR ,The animals were divided into three equal group of ten as Follows:

- 1- Group T1 were given vitamin E.
- 2- Group T2 were given vitamin E and E\selenium.
- 3- Group C control .

vitamin E and vitamin E\selenium were given to these animals intra muscularly for 8 weeks (4befor mating and 4 after mating) estrus sincronization operated by progestagen sponges .Befor one week of treatment starting ,blood samples were taken from these animals from each group and countinued for 8 weeks to investigate some blood parameters (WBC, Differential count , PCV) .

estrus sincronization ,conception rate , fertility , litter size and birth weight of lamb , were calculated ,and data showed the following :

Concerning the blood parameters,it wasobserved the WBC increased significantly in T2,T1 during the treatment.

Lymphocytes effected by vitamin E and vitamin E\selenium treatment and significantly increased in T2,T1 compared to control in all the weeks of the treatment.

Neutrophils decreased significantly in T2 and T1 comparatively with the control in all the weeks of the treatment.

Little effect on monoytes and no effect of basophyls ,eosonophyls were observed in the treatment
PCV increased significantly in T1, T2 during

Concerning the reproduction performance for the experimental animals it has been observed that the firtility rate ,conception rate and litter size increased significantly in all treatment

ewes compared to the control group but the lamb birth weight T1 (vit E) showed significant increase compared to (vit E&Se) and the control group.