

Table 1) Comparison between Mean Values of Sperm and Testis Parameters in Wister Rats in by the Groups

Parameters	Healthy Control Group	Diabetic Control Group	Treatment with Launaea Acanthodes
Mean Percentage of Sperm Progressive Motility			
Fast	52.68±4.21	^a 8.67±4.61	^{bc} 32.41±5.12
Slow	28.36±3.02	^a 11.24±2.25	^c 24.86±2.68
No Motility	18.96±6.82	^a 80.09±7.75	^{bc} 42.73±5.88
Mean Percentage of Normal and Abnormal Sperm Forms			
Normal	92.28±2.48	^a 23.43±2.85	^{bc} 68.93±3.37
Abnormal Head	2.64±0.06	^a 35.68±0.08	^{bc} 12.28±1.87
Abnormal Neck	4.21±0.11	^a 12.48±0.84	^c 6.81±0.18
Abnormal Tail	0.87±0.09	^a 28.41±0.92	^{bc} 11.98±0.63
Average Sperm Number			
×10 ⁶ (million per ml)	12.04±1.01	^a 2.73±0.31	^{bc} 7.38±0.51
Mean Testes Parameters			
Weight (gr)	1.86±0.07	^a 0.87±0.04	^{bc} 1.33±0.06
Length (cm)	1.98±0.05	^a 1.02±0.03	^{bc} 1.73±0.02
Width (cm)	1.21±0.06	^a 0.68±0.04	^{bc} 0.98±0.09
Seminiferous Tubules Diameter (µm)	318.48±18.94	^a 146.51±11.73	^{bc} 287.15±14.38
Seminiferous Tubules Epithelial Thickness (µm)	108.35±5.57	^a 45.33±7.84	^{bc} 82.26±4.86

a. Significant Difference between Diabetic and Healthy Control Groups; b. Significant Difference between Experimental and Healthy Control Groups; c. Significant Difference between Control and Experimental Groups

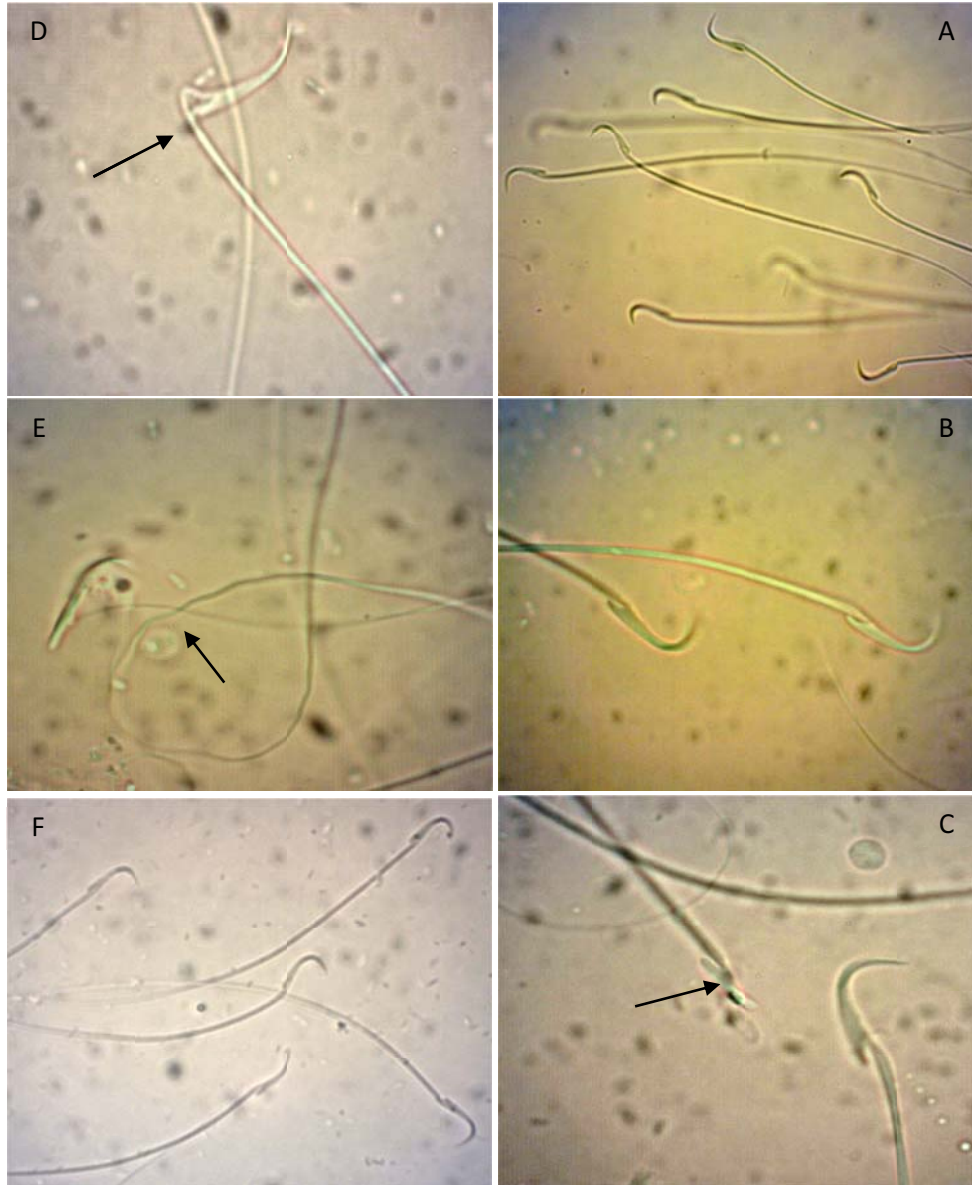


Figure 1) A: Healthy Control Group (Normal Forms of Sperm $\times 400$). B: Healthy Control Group (Normal Sperm Forms $\times 1000$). C: Diabetic Control Group (a Sperm with an Abnormal Head $\times 1000$). D: Diabetic Control Group (a Sperm with an Abnormal Neck $\times 1000$). E: Diabetic Control Group (an Abnormal Sperm Tail $\times 1000$). F: Diabetic Rats Treated by 300 mg/ kg Aunaea Centhodes Extract (Natural Sperm Forms $\times 400$). The arrows indicate the damaged areas of sperm.

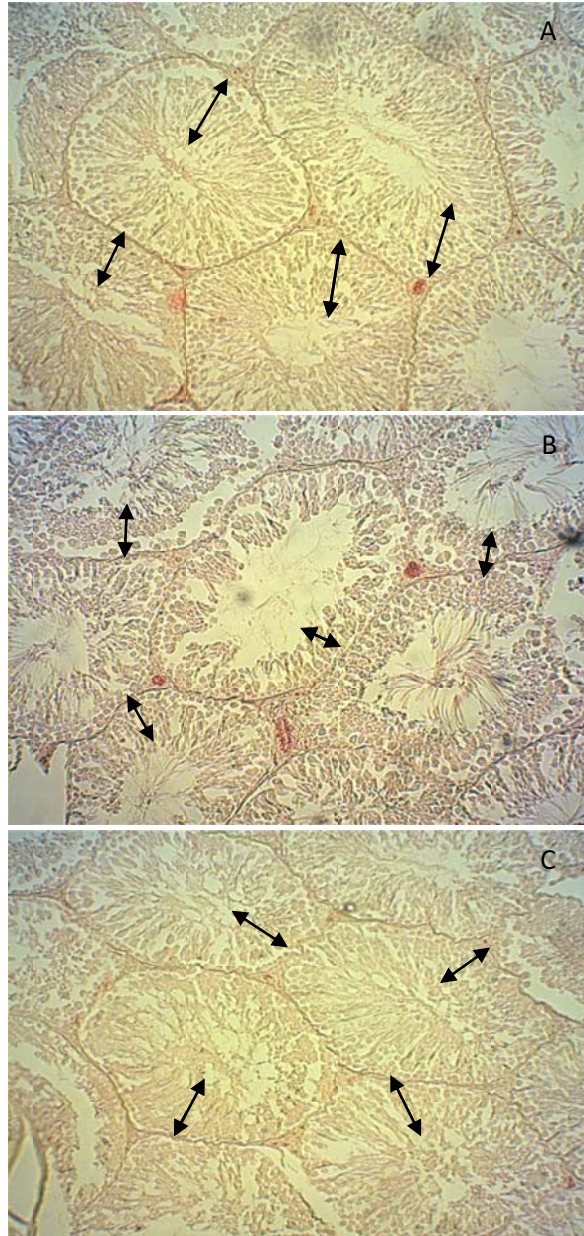


Figure 2) A Photomicrograph of Testicular Tissue Cross Section ($\times 100$). A: Healthy Control Group; B: Diabetic Control Group; C: Diabetic Rats Treated with 300 mg /kg Extract of *Lunaea Acenthodes*. In the picture above, the arrows indicate the diameter of the seminiferous tubules epithelium. As it can be seen, the maximum diameter of the epithelium belongs to healthy control group and the experimental group treated with the extract of *Launaea acenthodes*.

