College Name	College of science			
Department	chemistry			
Full Name as written in Passport	Nada kadhim ahmed al-husseini			
e-mail	Zaa2005@yahoo.com			
Career	ເຼົາ Assistant Lecturer	• Lecturer	C Assistant Professor	ି Professor
	Master		💬 PhD	
Thesis Title	Biochemical classification of leishmania			
Year	1981			
Abstract	The study of the classification of leishmania was based on intrinsic biochemical characters namely the variation of the enzymes ALT and AST a total of 39 stocks of leishmania were invesigated28 visceral and 6 cutaneous from Iran 3 other viscera stoclcs one visceral stock from Ethiopia Each stock was grown on a modified 3N medium and subjected to three different methods for the determination of variations in the enzymes ALT and AST. These methods were :thin layer horizontal starch gel electrophoresis, iso electric focusing in ampholine polyacrylamide gel plates and molecular weight determination in concentration gradient polyacrylamid gel electrophoresis.Although the enzyme patterns obtained for any one stock were different in the three methods the grouping of isolates was identical by the three techniques and thus confirm the present classification .The visceral stocks fell into 9 groups. The cutaneous stock were classified into 4 groups. For afirm and sound basis of a classification scheme how ever an extensive study should be carried out on a large number of stocks utilizing Many intrinsic characteristics it is obvious that with the increase in the characters investigated new subgroups will emerge and calls for means of relating them. by the use of numerical taxonomy it is possible to classify a large number of organism and to relate the erected groups on the bases of their over all similarity using a large number of phenotypic and genotypic characters. The data obtained from the present study together with that obtained from Rassam et al (1979). Each enzyme band is considered as a character are denotes by 1 and 0 respectively. The organisms and their characters are tabulated			