

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

Results have shown that physical properties of date fruits are different with different brands of dates and a good indicator in differentiation among date. Atomic AAS combined with chemometric techniques such as Principal Components Analysis (PCA) and k -mean cluster can be used to class different brands of dates into 4 classes based on minerals composition. Brand No. 10 has the highest quality of minerals content such as Fe, Cu, Mn and Mg than the others brands. This class is formed only by Ajwa dates, the prophet's favorite dates.

In future, this study can be extended to cover different batch of dates to see any variations of result. This can be done by collecting batches of different brands of dates for example every 3 months