



Fig. 6: Mass spectra for 4-chloro-N-benzylidene aniline obtained with grapes juice shows fragment ion peaks



Fig. 5: Mass spectra for N-benzylidene aniline obtained with grapes juice shows molecular ion peak and base peak



Fig. 7: Mass spectra for 4-chloro-N-benzylidene aniline obtained with grapes juice shows molecular ion peak and base peak

In the spectra of 4-chloro-N-benzylidene aniline (Sb II) molecular ion peak observed at the m/z 216.0 with 100 % abundance which correspond to the $(M + H)^+$ ion i.e. one additional molecular weight of the respective compound because calculated molecular weight of the compound is 215.68 gm/mol, it is also the most abundant peak of spectra so the molecular ion peak and base peak both are also same. With this molecular ion peak one extra peak also seen at m/z 218.0 with 24.5 % relative abundance which produced due to the isotopic form of chlorine into it.¹⁴

5. Summary and Conclusion

The present work focuses the importance of fruit juice as natural and biocatalyst in organic transformations. The growing interest of fruit juice in organic synthesis is mainly due to their acidic properties, enzymatic activity, benign environmental character, inexpensive, and commercial availability. The catalytic activity including the application of fruit juices in various organic transformations such as formation of C-C, C-N bonds in different synthetically important organic compounds have been studied. Although many observations have not received by application of fruit juice in synthesis of natural products or complex structured molecules in details, it is believed that in near future the chemistry of natural catalysts will continue to attract significant research activity. Therefore, the present review would serve the need of organic chemists in searching new applications of fruit juice for organic synthesis.

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