

The Cucurbitaceae is a family of dicotyledonous plants. For a long time the plants in this family have been cultivated as source of vegetables and fruits. Many of the wild species are reported to be used locally as sources of vegetables, while others are given to domestic animals as fodder. Some of the wild species however, have been reported to poison people as well as domestic animals that may feed on them. Cases of poisoning could be as a result of misidentification of these species.

For investigation into this problem a total of 23 cucurbitaceous species were collected from Nairobi area as well as from the surrounding areas. These plants were identified and voucher specimens deposited at EA.

Cases of poisoning in cucurbitaceous species have been attributed to the occurrence of a group of triterpenoid compounds called cucurbitacins. The presence or absence of these compounds in the various organs of these cucurbitaceous species is determined firstly by triphenyltetrazolium chloride precipitate test and secondary by the infrared absorption spectrophotometer. Individual cucurbitacins were provisionally identified by thin-layer chromatography with authentic samples. Presence or absence of the toxic cucurbitacins was assessed in the various organs which are used locally as sources of vegetables or herbal medicines. It is possible from this work to distinguish the plant parts with toxic cucurbitacins and identify the plants in the field using the key presented.

To make the results of this study available to the local people who use them an identification key was constructed. This key avoided a technical botanical term which implies that people without botanical training to identify the plants in the field can use it. Simple illustrations are included in the key to aid identification. In addition, the local uses, distribution and flowering times of these species were investigated. It is hoped that the results of this work will reduce incidence of poisoning.