



Cucumbers naturally produce chemicals called Cucurbitacins (one of them is on picture Cucubita-5-ene with standard carbon numbering.), which is very bitter and, in large quantities, can make a person ill. Most of the time,

these chemicals are confined to the leaves and stem of the plant, but can work their way into the fruit of the plant in certain conditions causing bitter cucumbers. Cucurbitacin is any of a class of biochemical compounds that some plants — notably members of the family Cucurbitaceae, that includes the common pumpkins and gourds — developed in order to defend themselves from herbivores. Cucurbitacins are chemically classified as steroids, formally derived from cucurbitane, a triterpene hydrocarbon — specifically, from the unsaturated variant cucurbita-5-ene, or 19-(10→9β)-abeo-10α-lanost-5-ene. They often occur as glycosides.