The distribution of cathinone and d-norpseudoephedrine in Catha edit/is plants from 2 different geographical localities have been investigated. There was no difference in the chemical constituents of Catha material from 2 localities. D-norpseudoephedrine was present in all parts of the plant examined except the root but cathinone was only detected in the young shoots and bran-chlets. It is concluded that the psychostimulant effect following chewing of young Catha shoots is due to both cathinone and d-norpseudoephedrine with the cathinone being more important since it is 7-10 times more potent than d-norpseudoephedrine.