

Alkaloid as Natural Products

- **Largest class of secondary metabolites, >6500 compounds known**
- **Contains N, most compounds are basic (alkaline)**
- **Often highly toxic**
- **Found in certain higher plants**
- **Little is known regarding why alkaloids are produced**
- **Biosynthesis from amino acids**

19

Many of these substances have marked physiological effects, a fact discovered by many ancient people long before organic chemistry developed.

Like, alkaloid quinine, a chief constituent of bark of Cinchona, has been used as effective antimalarial since 1639.

Alkaloids are produced by a large variety of organisms, including bacteria, fungi, plants and animals and are part of the group of natural products (also called secondary metabolites).

20