

STOMACH IN BIRDS-A GENERALISED STUDY

The stomach of birds is divided into two parts, proventriculus and gizzards. The proventriculus secretes digestive enzymes. The gizzards, lined with a horny membrane, is simply a grinding mill that makes a mash of food mixed with gastric secretion. Pebbles that have been swallowed are usually retained in the gizzard where they assist in macerating the food.

STOMACH OF *Columba*- A TYPE STUDY

Stomach of *Columba* is divided into 2 distinct parts-

1. PROVENTRICULUS

2. GIZZARD

PROVENTRICULUS- It is the first part of the stomach to receive the esophagus. It is tubular and internally lined by numerous gastric glands. A red colored small spleen remains morphologically attached to the outer side of proventriculus.

GIZZARD- It is the second part of the stomach and is semicircular in outline. The wall of the gizzard is highly muscular. It contains very little inner space. Internally the wall contains numerous ridges and its epithelial lining becomes very thick and tough. It has numerous small tubular glands. A few stones which are swallowed by the bird remain within the lumen and are responsible for crushing the food.

Function- The function of gizzard is purely mechanical and acts mainly as the grinding machine to crush the food. The gizzard compensates the role of teeth in pigeon. In grain-eating birds the gizzard is highly muscular while that of piscivorous birds is simple and thin walled.