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**LIST OF ABBREVIATIONS**

|  |  |
| --- | --- |
| **Abbreviations** | **Elaborations** |
| % | Percent |
| ° | Degree  |
| °C | Degree Celcius |
| μm | Micrometre |
| BBS | Bangladesh Bureau of Statistics |
| cm | Centimetre |
| gmKOHKg | GramPotassium hydroxideKilogram |
| m | Metre |
| mm | Mili metre |
| ml | Mili litre |
| PO2 | Partial pressure of oxygen |
| PCO2 | Partial pressure of carbon dioxide |
| SAE | Surface Area Available for Exchange |
| SPBB | Statistical Pocket Book of Bangladesh |

**ABSTRACT**

This study was conducted to reveal the gross morphological characteristics of the lung and air sacs in *Coturnix coturnix japonica* (Japanese quails) in anatomy laboratory of CVASU. The sacs of 10 birds were cast by injection of latex via the trachea and it stored in refrigerator for two months. Then it corroded with 30% KOH at 40°C for 24 hours. The lungs were located in the dorsal part of the thorax and very close to the thoracic vertebrae and ribs. Shorter than the dorsal border, the ventral border lied between the 3rd and 6th ribs. Cervical, clavicular, cranial thoracic, caudal thoracic and the abdominal sacs were identified. Cervical sacwas located on the left and right portions of the cervical and thoracic vertebrae with a pronounced communication ventromedially. The cervical sac aeration of only cervical vertebrae was present in this study. Humerus was a non aerated bone. Cranial thoracic sac connected to the 1st, 2nd and 4th medioventral bronchi and gave no diverticulum for aeration. Left and right abdominal sacs paramedially produced *diverticulum femorale,*but this diverticulum did not enter the femur.

**Key words:** Air sacs, japannese quails, gross morphology, lung