

Biosafety Clearing-House (BCH)

ORGANISM (ORGA)

BCH-ORGA-SCBD-14930-5

LAST UPDATED: 26 FEB 2014

Organism information

Scientific name

Escherichia coli

Taxonomic Classification

Kingdom Bacteria
Phylum Proteobacteria
Class Gammaproteobacteria
Order Enterobacteriales
Family Enterobacteriaceae
Genus Escherichia
Species Escherichia coli

Alternate scientific name(s) (synonym(s))

Bacillus coli communis

Common name(s)

ECOLX

EN

Type of organism

Bacteria

Characteristics related to biosafety

Centre(s) of genetic diversity

Escherichia coli is one of the main species of bacteria that live in the lower intestines of mammals. They are necessary for the proper digestion of food and are part of the intestinal flora. The number of individual E. coli bacteria in the feces that one human passes in one day averages between 100 billion and 10 trillion. All the different kinds of fecal coli bacteria and all the very similar bacteria that live in the ground (in soil or decaying plants, of which the most common is Enterobacter aerogenes) are grouped together under the name coliform bacteria.

EN

Additional Information

Colibacillosis is a common systemic disease of economic importance in poultry and occurs

EN

worldwide. *Escherichia coli* infection occurs as an acute fatal septicemia or subacute pericarditis and airsacculitis, as well as perihepatitis, arthritis, and also cellulitis. Among bacterial infections, colibacillosis is very often the first cause of morbidity and mortality in poultry. Large numbers of *E. coli* are maintained in the poultry house environment through fecal contamination. Systemic infection occurs when large numbers of pathogenic *E. coli* gain access to the bloodstream via the respiratory tract or intestine. Bacteremia progresses to septicemia and death, or the infection extends to serosal surfaces, pericardium, joints and other organs. Uncontrolled, avian *E. coli* represents a serious animal welfare concern and risk to public health as it is a zoonotic organism with avian *E. coli* species known to adapt to humans.

Other relevant website addresses and/or attached documents

? [Wikipedia - Escherichia coli](#) (*English*)

[BCH-ORGA-SCBD-14930-5](#)

Further Information

Questions about the Cartagena Protocol on Biosafety or the operation of the Biosafety Clearing-House may be directed to the Secretariat of the Convention on Biological Diversity.

**Secretariat of the Convention
on Biological Diversity**

413 rue Saint-Jacques, suite 800
Montreal, Québec, H2Y 1N9
Canada
Fax: +1 514 288-6588
Email: secretariat@cbd.int