

NRL for Escherichia coli of Czech Republic



Veterinary Research Institute, Brno, Czech Republic



NRL for *E. coli*, Czech Republic

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Veterinary Research Institute

2006 commemorated - 50th anniversary of its foundation

research projects sponsored by

- Ministry of Agriculture
- State Veterinary Administration of the Czech Republic
- Ministry of Environment
- Grant Agency of the Czech Republic
- other

NRL

- ◆ **the part of department of Bacteriology**
- ◆ **staff**
 - 3 veterinarians (bacteriologists)
 - 1 technician
- ◆ **research grants**
 - The pathogenesis of enteric colibacillosis and salmonellosis in pigs
 - Immunization against colibacillosis
- ◆ **other activities**
 - diagnostics
 - typization of *E. coli*
 - detection of virulence factors

Methods

◆ O-antigen

- serology

◆ Adhesins

- serology – F4, F5, F6, F18ab
- PCR – F4ab, ac, ad

◆ Toxins

- PCR - stx, eae, LT, STa, STb, EAST1
- Vero cells – stx
- Y1 cells – LT

VTEC detection 2006

◆ stx1

- 3 isolates - O111, O156, O?

◆ stx2

- 4 isolates – 1x O51, 3x O?

◆ stx1+stx2

- 6 isolates – O26, O71, O111, O153, 2x O?

◆ stx2e

- 16 isolates (piglets) – O141, O?