

عنوان مقاله:

Isolation and characterization of *Ornithobacterium rhinotracheale* in the commercial turkey, quail flocks and domestic pigeons by bacteriological and molecular methods

محل انتشار:

مجله آرشیو رازی، دوره 66، شماره 2 (سال: 1390)

تعداد صفحات اصل مقاله: 7

نویسندگان:

M.H. BozorgmehriFard

M. Hassanzdeh

S. Mirzaie

M. Banani

خلاصه مقاله:

Ornithobacterium rhinotracheale (ORT) is a respiratory pathogen which has been isolated throughout the world from numerous bird species. The present study was designed to isolate and characterize the ORT from domestic turkeys, quails and pigeons. For this purpose, ۲۵۰ samples from each bird species (turkey, quail and pigeon) with or without respiratory signs were tested by taking of tracheal swabs. In addition, respiratory tissue samples (tracheal and lung), from ۲۵۰ slaughtered turkeys, ۵۰ slaughtered quails and ۱۰۰ dead pigeons were also subjected to culture for ORT as tracheal swabs. Respiratory tissues were also tested for bacterial DNA by using polymerase chain reaction (PCR). In general, ۳۰ isolates including ۴ isolates from turkeys, ۳ isolates from quails and ۲۳ isolates from pigeons were identified as ORT by bacteriological method and then confirmed by PCR. Bacterial DNA was detected in ۲۰%, ۵۰% and ۳۵% of respiratory tissues in turkeys, quails and pigeons respectively. Five ORT isolates from pigeon and all four isolates from turkey showed smaller colony size, while other isolates had larger colonies when cultured in blood agar. Fifty percent of the isolates with larger colony but none of the isolates with small colony size could agglutinate red blood cells (RBCs). All of the isolates were sensitive to danofloxacin and chloramphenicol while more than ۹۰% of pigeon isolates were resistant to ampicillin. All of turkey and quail and ۳۰% of pigeon isolates were resistant to tetracycline. Our ORT isolates showed high identity (۹۸%- ۱۰۰%) in sequence of ۱۶S rRNA gene to related data in GeneBank.

کلمات کلیدی:

Ornithobacterium rhinotracheale, Turkeys, Quails, pigeon, Polymerase Chain Reaction

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1868893>

