Jens Strodl Andersen - DTU Orbit (05/02/2018)

Organisations

Research Assistant, Department of Informatics and Mathematical Modeling
04/07/2003 → 03/09/2013 Former
VIP

Publications:

Proficiency testing of national reference laboratories for fish diseases

General information
State: Published
Organisations: National Veterinary Institute, Section of Fish Diseases, Division of Poultry, Fish and Fur Animals, Department of Informatics and Mathematical Modeling
Authors: Ariel, E. (Intern), Nicolajsen, N. (Intern), Skall, H. F. (Intern), Andersen, J. S. (Intern), Madsen, S. (Intern), Olesen, N. J. (Intern)
Pages: 153-158
Publication date: 2009
Main Research Area: Technical/natural sciences

Publication information
Journal: Aquaculture
Volume: 294
Issue number: 3-4
ISSN (Print): 0044-8486
Ratings:
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 2.75 SJR 1.101 SNIP 1.524
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): SJR 1.103 SNIP 1.254 CiteScore 2.12
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 2
Scopus rating (2014): SJR 1.002 SNIP 1.34 CiteScore 2.16
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.136 SNIP 1.3 CiteScore 2.18
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 1.212 SNIP 1.487 CiteScore 2.32
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 1.294 SNIP 1.542 CiteScore 2.39
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 1.151 SNIP 1.394
Web of Science (2010): Indexed yes
Workforce gender, company size and corporate financial support are predictors of availability of healthy meals in Danish worksite canteens

Objective: Environmental strategies at worksites may help consumers (change dietary behaviour towards a more healthy diet. The present study aimed to evaluate the availability of healthy meal options at Danish worksite canteens and to identify predictors of worksite canteens providing healthy meals. Design: A self-administered questionnaire was randomly mailed to 1967 worksite canteen managers. Besides information and characteristics about the canteen and the worksite, the canteen managers specified the Menus available Two different health groups (Healthy and Less Healthy) were defined in three different meal categories (Sandwiches, Jet meals and Salads) as well as a combined category (Combined) combining all the three meal categories. The characteristics of the worksites were compared With regard to the different health groups. Setting: Randomly selected Danish worksite canteens. Subjects: 553 Danish worksite canteen managers replied, resulting in a response rate of 29% Results: Only 12% of the canteens applied to the Healthy group combining all the three meal categories. In particular, worksites with more than 75% female employees served healthy menus on a frequent basis. The size of the worksite was positively correlated with more healthy meal options. Furthermore, the present study suggests a positive relationship between corporate financial support and the availability of healthy meal options. Conclusions: Among the selected variables, workforce gender, company size and corporate financial support were significant predictors of the availability of healthy meal options in worksite canteens. More research is needed oil the role that variance in organisation environment. plays for the potential of worksite intervention, to make a difference in terms of healthy eating.

General information
State: Published
Organisations: Division of Nutrition, National Food Institute, Department of Informatics and Mathematical Modeling
Authors: Thorsen, A. V. (Intern), Lassen, A. D. (Intern), Andersen, J. S. (Intern), Mikkelsen, B. E. (Intern)
Pages: 2068-2073
Publication date: 2009
Main Research Area: Technical/natural sciences

Publication information
Journal: Public Health Nutrition
Volume: 12
Estimating the parameters of a stochastic differential equation model of bacterial growth

General information
State: Submitted
Organisations: Mathematical Statistics, Department of Informatics and Mathematical Modeling
Authors: Christiansen, L. E. (Intern), Andersen, J. S. (Intern), Wegener, H. C. (Ekstern), Madsen, H. (Intern)
Publication date: 2008
Main Research Area: Technical/natural sciences

Publication information
Journal: Biometrics
ISSN (Print): 0006-341X
Ratings:
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 2
Scopus rating (2016): SJR 1.632 SNIP 1.115 CiteScore 1.35
BFI (2015): BFI-level 2
Scopus rating (2015): SJR 2.005 SNIP 1.393 CiteScore 1.66
BFI (2014): BFI-level 2
Scopus rating (2014): SJR 2.241 SNIP 1.398 CiteScore 1.57
BFI (2013): BFI-level 2
Scopus rating (2013): SJR 2.07 SNIP 1.285 CiteScore 1.57
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): SJR 1.719 SNIP 1.39 CiteScore 1.69
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): SJR 2.134 SNIP 1.514 CiteScore 1.73
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 2
Scopus rating (2010): SJR 2.102 SNIP 1.282
BFI (2009): BFI-level 2
Scopus rating (2009): SJR 2.176 SNIP 1.478
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 2.22 SNIP 1.646
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 1.802 SNIP 1.466
Scopus rating (2006): SJR 1.695 SNIP 1.582
Scopus rating (2005): SJR 1.939 SNIP 1.507
Scopus rating (2004): SJR 1.915 SNIP 1.342
Scopus rating (2003): SJR 2.116 SNIP 1.541
Scopus rating (2002): SJR 1.879 SNIP 1.191
Scopus rating (2001): SJR 1.559 SNIP 1.39
Web of Science (2001): Indexed yes
Scopus rating (2000): SJR 1.896 SNIP 1.421
Web of Science (2000): Indexed yes
Scopus rating (1999): SJR 1.934 SNIP 1.724
Original language: English
Links:
http://www2.imm.dtu.dk/pubdb/p.php?3573
Antimicrobial drug resistance of Salmonella isolates from meat and humans, Denmark

We compared 8,144 Salmonella isolates collected from meat imported to or produced in Denmark, as well as from Danish patients. Isolates from imported meat showed a higher rate of antimicrobial drug resistance, including multidrug resistance, than did isolates from domestic meat. Isolates from humans showed resistance rates lower than those found in imported meat but higher than in domestic meat. These findings indicate that programs for controlling resistant Salmonella spp. are a global issue.

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy, Department of Informatics and Mathematical Modeling, Division of Microbiology and Risk Assessment, National Food Institute, Section of Poultry Diseases, Division of Poultry, Fish and Fur Animals, National Veterinary Institute
Authors: Skov, M. (Intern), Andersen, J. S. (Intern), Aabo, S. (Intern), Ethelberg, S. (Ekstern), Aarestrup, F. M. (Intern), Sørensen, A. M. H. (Intern), Sørensen, G. (Intern), Pedersen, K. (Intern), Nordentoft, S. (Intern), Olsen, K. E. P. (Ekstern), Gerner-Smidt, P. (Ekstern), Baggesen, D. L. (Intern)
Pages: 638-641
Publication date: 2007
Main Research Area: Technical/natural sciences
Spatial scan statistics using elliptic windows

The spatial scan statistic is widely used to search for clusters in epidemiologic data. This paper shows that the usually applied elimination of secondary clusters as implemented in SatScan is sensitive to smooth changes in the shape of the clusters. We present an algorithm for generation of set of confocal elliptic windows and propose a new way to present the information when a spatial point process is considered. This method gives smooth changes for smooth expansions of the set of clusters. A simulation study is used to show how the elliptic windows outperforms the usual circular windows. The proposed method for graphical representation of the information in a set of clusters contain more information than just presenting non-overlapping clusters. The authors suggest that more than one graphical representation of a set of clusters should be used to easily extract more information and to avoid pitfalls of the selected method.

General information
State: Published
Organisations: Mathematical Statistics, Department of Informatics and Mathematical Modeling, National Food Institute
Authors: Christiansen, L. E. (Intern), Andersen, J. S. (Intern), Wegener, H. C. (Intern), Madsen, H. (Intern)
Publication date: 2007
Event: Abstract from 1st Nordic-Baltic Biometric Conference 2007, Foulum, Denmark.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 214356
Publication: Research - peer-review › Journal article – Annual report year: 2007

Odds model med ordinal polynomial respons til testning af effekten af interventioner omhandlende sund mad på arbejdspladsen

General information
State: Published
Organisations: Division of Microbiology and Risk Assessment, National Food Institute, Department of Informatics and Mathematical Modeling, Division of Nutrition
Authors: Sommer, H. M. (Intern), Andersen, J. S. (Intern), Lassen, A. D. (Intern)
Publication date: 2006

Host publication information
Title of host publication: Symposium i anvendt statistik
Spatial scan statistics using elliptic windows
The spatial scan statistic is widely used to search for clusters. This article shows that the usually applied elimination of secondary clusters as implemented in SatScan is sensitive to smooth changes in the shape of the clusters. We present an algorithm for generation of a set of confocal elliptic windows and propose a new way to present the information when a spatial point process is considered. This method gives smooth changes for smooth expansions of the set of clusters. A simulation study is used to show how the elliptic windows outperforms the usual circular windows. The proposed method for graphical representation of the information in a set of clusters contain more information than just presenting nonoverlapping clusters. We suggest that more than one graphical representation of a set of clusters should be used to easily extract more information and to avoid pitfalls of the selected method.

General information
State: Published
Organisations: Mathematical Statistics, Department of Informatics and Mathematical Modeling
Authors: Christiansen, L. E. (Intern), Andersen, J. S. (Intern), Wegener, H. C. (Ekstern), Madsen, H. (Intern)
Pages: 411-424
Publication date: 2006
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Agricultural Biological & Environmental Statistics
Volume: 11
Issue number: 4
ISSN (Print): 1085-7117
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 0.802 SNIP 0.83 CiteScore 1
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.467 SNIP 0.629 CiteScore 0.81
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.694 SNIP 0.85 CiteScore 1.18
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 0.68 SNIP 0.54 CiteScore 0.97
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.645 SNIP 0.759 CiteScore 1.38
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 0.603 SNIP 0.908 CiteScore 0.88
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 0.67 SNIP 0.748
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 0.514 SNIP 0.831
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 0.768 SNIP 0.895
Scopus rating (2007): SJR 0.79 SNIP 1.184
Scopus rating (2006): SJR 0.78 SNIP 1.122
Web of Science (2006): Indexed yes
Estimating the number of undetected multi-resistant Salmonella Typhimurium DT104 infected pig herds in Denmark

In Denmark, the detection of multi-resistant Salmonella Typhimurium DT104 (MRDT104)-infected pig herds relies on the national Salmonella surveillance programme at the farm and slaughterhouse levels of production. With the surveillance sampling protocol and the diagnostic methods currently used, some herds might remain undetected. The number of undetected Danish pig 0 herds infected with MRDT104 in the period 1 August 2001-31 July 2002 was estimated and compared with the number of culture-confirmed detected herds. A How chart was constructed to illustrate where infected herds will go undetected in the surveillance system and Monte Carlo simulation was used to model the actual number of pig herds infected with MRDT104. We estimated that 52 (90% CI [28, 178]) finisher herds were infected with MRDT104 compared to 23 (44%) detected. Among sow herds with production of weaners or growers, we estimated that 38 (90% CI [23, 74]) were infected with MRDT104 compared to 7 (18%) actually detected. Among breeder and multiplier herds, we estimated that five (90% CI [3, 8]) herds were infected with MRDT104 compared to three (60%) detected. In total, we estimated that 102 pig herds were infected with MRDT104 from 1 August 2001 till 31 July 2002 (90% CI [63, 228]).

The predicted proportion of undetected herds varied considerably with herd type. We infer that the proportion of detected MRDT104 infected herds depended on the intensity of the combined serological and bacteriological testing.
Principles, application areas and an example of risk assessment conducted at the Danish Institute for Food and Veterinary Research

The Department for Epidemiology and Risk Analysis at the Danish Institute for Food and Veterinary Research (DFVF) is concerned with risk analyses in the areas of food safety, zoo noses, antimicrobial resistance and OIE (World Organisation for Animal Health) list A and B diseases. The DFVF is responsible for the risk assessment component of the risk analysis process and provides advice and support for the risk management and risk communication component, which is generally under the auspices of the Danish Veterinary and Food Administration (DVFA). The paper presents guidelines for the conduct of risk assessments at the DFVF. Important elements of these guidelines are the independence between risk assessment and risk management, the commitment to science-based, transparent and fully documented procedures and
adherence to a protocol that regulates the cooperation between DFVF and DVFA. Typical steps of a quantitative risk assessment are the description of the risk scenario, information retrieval, mathematical modelling with stochastic simulation, final risk estimation with a sensitivity analysis and reporting. The procedure is exemplified using a Monte Carlo simulation model for the assessment of the risk of BSE transmission to calves by tallow-based calf milk replacer.

**General information**

**State:** Published

**Organisations:** Section for Veterinary Epidemiology and public sector consultancy, Division of Veterinary Diagnostics and Research, National Veterinary Institute, National Food Institute, Department of Informatics and Mathematical Modeling, Division of Microbiology and Risk Assessment

**Authors:** Greiner, M. (Ekstern), Paisley, L. (Intern), Nørgaard, J. H. (Intern), Wong, D. L. F. (Intern), Andersen, J. S. (Intern), Stockmarr, A. (Intern), Korsgaard, H. (Intern), Sommer, H. M. (Intern), Hald, T. (Intern)

**Pages:** 177-181

**Publication date:** 2004

**Main Research Area:** Technical/natural sciences

**Publication information**

**Journal:** BERLINER UND MUNCHENER TIERARZTLICHE WOCHENSCHRIFT

**Volume:** 117

**Issue number:** 5-6

**ISSN (Print):** 0005-9366

**Ratings:**

- BFI (2018): BFI-level 1
- Web of Science (2018): Indexed yes
- BFI (2017): BFI-level 1
- Web of Science (2017): Indexed Yes
- BFI (2016): BFI-level 1
- Scopus rating (2016): SJR 0.308 SNIP 0.272 CiteScore 0.6
- BFI (2015): BFI-level 1
- Scopus rating (2015): SJR 0.438 SNIP 0.389 CiteScore 0.7
- BFI (2014): BFI-level 1
- Scopus rating (2014): SJR 0.391 SNIP 0.55 CiteScore 0.77
- BFI (2013): BFI-level 1
- Scopus rating (2013): SJR 0.366 SNIP 0.514 CiteScore 0.79
- ISI indexed (2013): ISI indexed yes
- BFI (2012): BFI-level 1
- Scopus rating (2012): SJR 0.362 SNIP 0.424 CiteScore 0.72
- ISI indexed (2012): ISI indexed yes
- BFI (2011): BFI-level 1
- Scopus rating (2011): SJR 0.386 SNIP 0.639 CiteScore 0.8
- ISI indexed (2011): ISI indexed yes
- BFI (2010): BFI-level 1
- Scopus rating (2010): SJR 0.344 SNIP 0.735
- BFI (2009): BFI-level 1
- Scopus rating (2009): SJR 0.471 SNIP 0.663
- BFI (2008): BFI-level 1
- Scopus rating (2008): SJR 0.385 SNIP 0.49
- Scopus rating (2007): SJR 0.313 SNIP 0.57
- Scopus rating (2006): SJR 0.276 SNIP 0.501
- Scopus rating (2005): SJR 0.317 SNIP 0.614
- Scopus rating (2004): SJR 0.406 SNIP 0.651
- Web of Science (2004): Indexed yes
- Scopus rating (2003): SJR 0.305 SNIP 0.626
- Scopus rating (2002): SJR 0.244 SNIP 0.663
- Web of Science (2002): Indexed yes
- Scopus rating (2001): SJR 0.246 SNIP 0.668
- Web of Science (2001): Indexed yes
Spatial Scan Statistic: Selecting clusters and generating elliptic clusters

The spatial scan statistic is widely used to search for clusters. This paper shows that the usually applied elimination of overlapping clusters to find secondary clusters is sensitive to smooth changes in the shape of the clusters. We present an algorithm for generation of set of confocal elliptic clusters. In addition, we propose a new way to present the information in a given set of clusters based on the significance of the clusters.

General information
State: Published
Organisations: Mathematical Statistics, Department of Informatics and Mathematical Modeling
Authors: Christiansen, L. E. (Intern), Andersen, J. S. (Intern)
Publication date: 2004

Association between the porcine Escherichia coli F18 receptor genotype and phenotype and susceptibility to colonisation and postweaning diarrhoea caused by E-coli O138 : F18

Porcine postweaning Escherichia coli enteritis is a cause of significant morbidity and mortality in pigs worldwide, and effective prevention remains an unsolved problem. This study examined the correlation between susceptibility of pigs to experimental infection with an E. coli F18 strain and the porcine intestinal F18 receptor genotypes. Thirty-one pigs classified as either belonging to the susceptible or the resistant genotype were inoculated with cultures of an E. coli 0138:F18 isolated from a pig with postweaning diarrhoea. Susceptibility to colonisation and diarrhoea was assessed by clinical observations, faecal shedding of the challenge strain, histopathology and microscopic adhesion tests. Ten of 14 (71.4%) genetically susceptible pigs and one of 17 (5.9%) resistant pigs developed diarrhoea attributable to the challenge strain. There was no difference in susceptibility between homozygotic and heterozygotic susceptible pigs. Faecal shedding of the challenge strain correlated with the genetic receptor profile. Twenty pigs examined immunohistochemically revealed focal to extensive small intestinal mucosal colonisation by E. coli 0138:F18 in nine of 10 susceptible and three of 10 resistant pigs. Results of in vitro adhesion assays performed with F18 cells on enterocyte preparations from 24 pigs, showed complete concordance with the F18 genotypes. In conclusion, this study showed a high correlation between the porcine intestinal F18 receptor genotypes and susceptibility to disease. However, pigs of the resistant F18 receptor genotype were not entirely protected against intestinal colonisation by E. coli F18.

General information
State: Published
Organisations: Section for Veterinary Diagnostics, Division of Veterinary Diagnostics and Research, National Veterinary Institute, Department of Informatics and Mathematical Modeling
Authors: Frydendahl, K. (Ekstern), Jensen, T. K. (Intern), Andersen, J. S. (Intern), Fredholm, M. (Ekstern), Evans, G. (Ekstern)
Pages: 39-51
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Veterinary Microbiology
Volume: 93
Issue number: 1
ISSN (Print): 0378-1135
Ratings:
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 2.65 SJR 1.326 SNIP 1.208
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): SJR 1.393 SNIP 1.21 CiteScore 2.56
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 2
Scopus rating (2014): SJR 1.281 SNIP 1.262 CiteScore 2.54
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): SJR 1.438 SNIP 1.484 CiteScore 3
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): SJR 1.437 SNIP 1.579 CiteScore 3.18
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): SJR 1.562 SNIP 1.738 CiteScore 3.27
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 2
Scopus rating (2010): SJR 1.371 SNIP 1.476
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 2
Scopus rating (2009): SJR 1.29 SNIP 1.472
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 1.169 SNIP 1.3
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 1.043 SNIP 1.322
Web of Science (2007): Indexed yes
Scopus rating (2006): SJR 1.022 SNIP 1.401
Web of Science (2006): Indexed yes
Scopus rating (2005): SJR 1.078 SNIP 1.262
Web of Science (2005): Indexed yes
Scopus rating (2004): SJR 0.869 SNIP 1.259
Web of Science (2004): Indexed yes
Scopus rating (2003): SJR 0.913 SNIP 1.186
Web of Science (2003): Indexed yes
Scopus rating (2002): SJR 0.84 SNIP 1.112
Web of Science (2002): Indexed yes
Scopus rating (2001): SJR 0.833 SNIP 1.058
Web of Science (2001): Indexed yes
Scopus rating (2000): SJR 0.82 SNIP 1.088
Web of Science (2000): Indexed yes
Scopus rating (1999): SJR 0.703 SNIP 1.078

Original language: English
F18 receptor genotype, pig-bacteria, challenge trial, Escherichia coli, postweaning diarrhoea, F18 fimbriae

DOIs:
Risk factors associated with faecal shedding of verocytotoxin-producing Escherichia coli O157 in eight known-infected Danish dairy herds

A risk-factor study was performed in eight dairy herds found to excrete verocytotoxin-producing Escherichia coli (VTEC) O157 in a former prevalence study. Associations between excretion of VTEC O157 and management factors such as housing and feeding were analysed in a generalised linear mixed model. The animals were stratified in three age groups and sampled four times during 1 year. The risk of excreting VTEC O157 was higher among weaned calves than non-weaned calves. Among the calves aged 1-4 months, the risk was reduced if the calf had suckled colostrum from the mother or if the calf had stayed >2 days with the mother after calving. Calves aged 5-24 months that had been moved within the last 2 weeks had a higher risk, but risk was reduced if fed barley silage. Cows fed grain or molasses had a higher risk of excreting VTEC O157.
Integrated fish farming combines livestock production with fish farming. Animal manure is shed directly into a fish pond as fertilizer and supports the growth of photosynthetic organisms. The livestock, mainly chickens and pigs, is often fed feed containing growth promoters. In this study we investigated the impact of integrated fish farming on the levels of antimicrobial-resistant bacteria in a pond environment. One integrated broiler chicken-fish farm was studied for 2 months immediately after the start of a new fish production cycle. A significant increase over time in the resistance to six different antimicrobials was found for the indicator organism Acinetobacter spp. isolated from composite water-sediment samples. The initial resistance levels prior to the new production cycle were 1 to 5%. After 2 months the levels of resistance to oxytetracycline and sulfamethoxazole reached 100%, and the levels of resistance to ciprofloxacin were more than 80%. The long-term effects of resistance on integrated farming were studied on seven additional farms. The resistance levels were particularly high among Enterococcus spp. and were also high among Acinetobacter spp. isolated from water-sediment samples compared to the resistance levels at four control farms. In conclusion, integrated fish farming seems to favor antimicrobial-resistant bacteria in the pond environment. This could be attributed to the selective pressure of antimicrobials in the pond environment and/or to the introduction of antimicrobial-resistant bacteria from animal manure. Potential risks to human health were not addressed in this study and remain to be elucidated.
The influence of design characteristics on statistical inference in nonlinear estimation: A simulation study based on survival data and hazard modeling

General information
State: Published
Organisations: Department of Informatics and Mathematical Modeling, Mathematical Statistics
Authors: Andersen, J. S. (Intern), Bedaux, J. J. (Ekstern), Kooijman, S. A. (Ekstern), Holst, H. (Intern)
Pages: 323-341
Publication date: 2000
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Agricultural, Biological, and Environmental Statistics
Volume: 5
Issue number: 3
ISSN (Print): 1085-7117
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 0.802 SNIP 0.83 CiteScore 1
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.467 SNIP 0.629 CiteScore 0.81
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.694 SNIP 0.85 CiteScore 1.18
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 0.68 SNIP 0.54 CiteScore 0.97
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.645 SNIP 0.759 CiteScore 1.38
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 0.603 SNIP 0.908 CiteScore 0.88
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 0.67 SNIP 0.748
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 0.514 SNIP 0.831
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 0.768 SNIP 0.895
Scopus rating (2007): SJR 0.79 SNIP 1.184
Scopus rating (2006): SJR 0.78 SNIP 1.122
Web of Science (2006): Indexed yes
Scopus rating (2005): SJR 0.582 SNIP 0.892
Scopus rating (2004): SJR 0.543 SNIP 0.642
Scopus rating (2003): SJR 0.333 SNIP 0.734
Scopus rating (2002): SJR 0.442 SNIP 0.859
Scopus rating (2001): SJR 0.341 SNIP 0.626
Scopus rating (2000): SJR 0.832 SNIP 1.09
Correcting for toxic inhibition in quantification of genotoxic response in the umuC test

General information
State: Published
Organisations: Department of Environmental Science and Engineering, Department of Informatics and Mathematical Modeling
Authors: Baun, A. (Intern), Andersen, J. (Intern), Nyholm, N. (Intern)
Pages: 171 - 180
Publication date: 1999
Main Research Area: Technical/natural sciences

Publication information
Journal: Mutation Research
Volume: 441
Original language: English
Source: orbit
Source-ID: 176437
Publication: Research - peer-review › Journal article – Annual report year: 2000

Characterization of an old municipal landfill (Grindsted, Denmark) as a groundwater pollution source: Landfill history and leachate composition

Investigations into the pollution of groundwater from old landfill have, in most cases, focused on delineating the pollution plume rather than on the landfill as a source of groundwater pollution. Landfills often cover large areas and spatial variations in leachate composition within the landfill may have great impact on the location of the main pollution plume in the downstream aquifer. The history of the Grindsted Landfill in Denmark was investigated using aerial photographs and interviews. On the basis of the aerial photographs, waste volume and age of the different areas of the landfill were evaluated. A pronounced variability in leachate composition was observed in the 31 leachate wells installed through the waste. The spatial variability was analysed by statistical methods, and a semivariogram model was able to describe the variability both on small and large scale. The spatial variations in leachate composition are very important for locating the main source of the groundwater pollution and for selection of cost-effective remedial action activities.

General information
State: Published
Organisations: Department of Environmental Science and Engineering, Department of Informatics and Mathematical Modeling
Authors: Kjeldsen, P. (Intern), Grundtvig, A. (Ekstern), Winther, P. (Ekstern), Andersen, J. S. (Intern)
Pages: 3-13
Publication date: Feb 1998
Main Research Area: Technical/natural sciences

Publication information
Journal: Waste Management and Research
Volume: 16
Issue number: 1
ISSN (Print): 0734-242X
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.76 SJR 0.655 SNIP 1.036
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.617 SNIP 0.899 CiteScore 1.53
Web of Science (2015): Indexed yes
Continuous ecotoxicological data evaluated relative to a control response

General information
State: Published
Organisations: Department of Informatics and Mathematical Modeling, Mathematical Statistics, Department of Environmental Engineering, Department of Environmental Science and Engineering
Manual for ConBio Tox - Statistical treatment of data from biotests with continuous response

General information
State: Published
Improved procedure for correcting the genotoxicity response in the umu-C test for growth inhibitory effects. ISO TC 147/SC5/WG N19

General information
State: Published
Organisations: Department of Environmental Science and Engineering, Department of Informatics and Mathematical Modeling
Authors: Baun, A. (Intern), Andersen, J. (Intern), Nyholm, N. (Intern)
Publication date: 1997

Publication information
Original language: English
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 169767
Publication: Research - peer-review › Report – Annual report year: 1997

Multivariate calibration - chlorophyll flourescens measurements

General information
State: Published
Organisations: Department of Informatics and Mathematical Modeling
Authors: Andersen, J. S. (Intern), Holst, H. (Intern), Lauritzen, M. D. (Ekstern)
Pages: 105-115
Publication date: 1997

Host publication information
Title of host publication: Anvendt Kemometri
Main Research Area: Technical/natural sciences
Conference: Anvendt Kemometri, 01/01/1997
Source: orbit
Source-ID: 199943
Publication: Research - peer-review › Article in proceedings – Annual report year: 1997

Characteristics of dose-response curves, describing serially correlated continuous ecotoxicological data

General information
State: Published
Organisations: Department of Informatics and Mathematical Modeling
Authors: Andersen, J. S. (Intern), Holst, H. (Intern)
Publication date: 1996
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 200538
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 1996

Comparison of NEC and "low effect" EC-values

General information
State: Published
Organisations: Department of Informatics and Mathematical Modeling
Authors: Andersen, J. S. (Intern), Holst, H. (Intern)
Number of pages: 14
Publication date: 1996

Host publication information
Title of host publication: Symposium i Anvendt Statistik
Publisher: Odense
Main Research Area: Technical/natural sciences
Conference: Odense, Denmark, 01/01/1996
Projects:

**Antigiotika anvendelse og tidslig og rummig spredning af antibiotikaresistens**

Department of Informatics and Mathematical Modeling  
Period: 15/08/2001 → 27/04/2005  
Number of participants: 7  
PhD Student: Christiansen, Lasse Engbo (Intern)  
Supervisor: Andersen, Jens Strodl (Intern)  
Wegener, Henrik Caspar (Intern)  
Main Supervisor: Madsen, Henrik (Intern)  
Examiner: Thyregod, Poul (Intern)  
Agger, Jens (Ekstern)  
Guttorp, Peter (Ekstern)

**Financing sources**  
Source: Internal funding (public)  
Name of research programme: DTU-lønnet stipendie  
Project: PhD

**Statistisk Behnadling af Økotoksikologiske DATA**

Department of Informatics and Mathematical Modeling  
Period: 01/07/1995 → …  
Number of participants: 3  
PhD Student: Andersen, Jens Strodl (Intern)  
Main Supervisor: Rootzén, Helle (Intern)  
Examiner: Løkke, Hans (Ekstern)

**Financing sources**  
Source: Internal funding (public)  
Name of research programme: Forskningsrådsstip.-SU, Eksp  
Project: PhD

**Statistical Treatment of Ecotoxicological Data based on Hazard Modelling**

When characterising complex chemical pollution i.e. pesticide polluted groundwater or testing the effects of chemical compounds on the environment, ecotoxicological tests are of great value. This is due to their sensitivity and their expression of the overall toxicity. Since environmental pollution is increasing it is judged that ecotoxicological assays will have increasing impact on the toxicity- and risk assessment of environmental pollution. Evaluating results from ecotoxicological tests inevitably include estimation of dose-response relations. Conclusions about toxicity of the pollution or tested chemicals are summarised in characteristics extracted from the dose-response relationship. A revision of the statistical methods for extracting these measures has been internationally recommended by the scientific community. The dose/time-response models used are based on biological considerations, the key assumption is that the hazard rate is proportional to the concentration of the chemical compound in the animal as far as it exceeds the no-effect level. The uptake dynamics are described by a one compartment model involving the uptake rate and elimination rate. The dynamic models are compared with the traditional models, regarding the number of parameters, description of experimental data etc.

Department of Informatics and Mathematical Modeling
**Statistical Treatment of Ecotoxicological Data with Continuous Response using biologically based models**

When characterising complex chemical pollution, i.e., pesticide polluted groundwater or testing the effects of chemical compounds on the environment, ecotoxicological tests are of great value. This is due to their sensitivity and their expression of the overall toxicity. Since environmental pollution is increasing, it is judged that ecotoxicological assays will have increasing impact on the toxicity- and risk assessment of environmental pollution. Evaluating results from ecotoxicological tests inevitably include estimation of dose-response relations. Conclusions about toxicity of the pollution or tested chemicals are summarised in characteristics extracted from the dose-response relationship. A revision of the statistical methods for extracting these measures has been internationally recommended by the scientific community. Generalized Nonlinear regression methods using classical dose-response models, are used to estimate the variance heterogeneous dosis-response relations and estimate endpoints and their confidence limits.

Department of Informatics and Mathematical Modeling

Department of Environmental Science and Engineering

**Activities:**

- Odds model med ordinal polynomial respons til testning af effekten af interventioner omhandlende sund mad på arbejdspiaedsen
  - Period: 1 Jan 2006 → ...
  - Jens Strodl Andersen (Speaker)

Department of Informatics and Mathematical Modeling

**Description**

Place: Symposium i Anvendt Statistik, København, Danmark

**Related external organisation**

- Unknown external organisation
  - Activity: Talks and presentations › Conference presentations