

Contribution d'Hydro-Québec au dossier des CÉM

Effets sur le bétail, les cultures incluant la pisciculture et l'apiculture

[Pour consulter ces documents](#)

Angell, R.F., Schott, M.R., Raleigh, R.J., Bracken, T.D. 1990

Effects of a high-voltage direct-current transmission line on beef cattle production.
Bioelectromagnetics, 11:273-282

Awad, R., Renaud, F., Major, N., Turgeon, A. 1986

Comparaison des lignes aériennes et souterraines pour le transport d'énergie électrique en courant alternatif en milieu agricole.
Montréal (Qc) : Hydro-Québec, 11p.

Block E. 1988

Propositions de recherche pour étudier les effets des lignes haute tension à courant alternatif sur la santé des vaches laitières et sur leur production de lait. Rapport préparé par le Collège Macdonald de l'Université McGill pour Hydro-Québec
Montréal (Qc) : Hydro-Québec, 36 p.

Block, E. 1988.

Proposed research protocols to study the effects of electrical high tension AC power lines on the health and production of dairy cows. Report prepared by Macdonald College of McGill University for Hydro-Québec.
Montréal (Qc) : Hydro-Québec, 25 p.

Brouard, D., Harvey, C., Goulet, D., Nguyen, T., Champagne, R., Dubé, P. 1996

Evaluation of potential effects of stray voltage generated by alternating current on hatchery-raised rainbow trout
The Progressive Fish-Culturist , 58:47-51

Brouard, D., Harvey, C. 1993

Évaluation des effets des tensions électriques parasites en courant alternatif sur la truite arc-en-ciel d'élevage : Bioessais d'exposition subchronique. Rapport préparé par le Groupe Environnement Shoener inc. pour Hydro-Québec.
Montréal (Qc) : Hydro-Québec, 31p. et annexes.

Burchard, J.F., Nguyen, D.H., Rodriguez, M. 2006

Plasma concentrations of thyroxin in dairy cows exposed to 60 Hz electric and magnetic fields.
Bioelectromagnetics, 27(7):553-559.

Burchard, J.F., Nguyen, D.H., Monardes, H., Petitclerc, D. 2004

Lack of effect of 10 kV/m 60 Hz electric field exposure on pregnant dairy Heifer hormones
Bioelectromagnetics, 25(4):308-312

Burchard, J.F., Monardes, H., Nguyen, D.H. 2003

Effect of 10 kV/m, 30 μ T, 60 Hz electric and magnetic fields on milk production and feed intake in nonpregnant dairy cattle.
Bioelectromagnetics, 24(8):557-563

- Burchard, J.F., Nguyen, D.H., Block, E. 1999
Macro and trace element concentrations in blood plasma and cerebrospinal fluid of dairy cows exposed to electric and magnetic fields.
 Bioelectromagnetics, 20(6):358-364
- Burchard, J.F., Nguyen, D.H., Block, E. 1998
Progesterone concentrations during oestrous cycle of dairy cows exposed to electric and magnetic fields.
 Bioelectromagnetics, 19(7): 438-443
- Burchard, J.F., Nguyen, D.H., Block, E. 1998
Effects of electric and magnetic fields on nocturnal melatonin concentrations in dairy cows.
 Journal of Dairy Science, 81(3):722-727
- Burchard, J..F, Nguyen, D.H., Richard, L., Young, S.N., Heyes, M.P., Block, E. 1998
Effects of electromagnetic fields on the levels of biogenic amine metabolite, quinolinic acid, and b-endorphin in the cerebrospinal fluid of dairy cows.
 Neurochemical Research, 23(12):1527-1531
- Burchard, J..F, Nguyen, D.H., Richard, L., Block, E. 1996
Biological effects of electric and magnetic fields on productivity of dairy cows.
 Journal of Dairy Science, 79:1549-1554
- Burchard, J.F. 1996
Effects of 60 Hz electric and magnetic fields on productivity, reproductive hormones and cerebrospinal fluid in dairy cattle. Thèse de doctorat.
 Montréal (Qc) : Macdonald Campus of McGill University , 295p.
- Cardinal, C. 1988
Revue des études sur le bétail.
 Montréal (Qc) : Hydro-Québec, pagination variée.
- Gamroth, M.J. 1990
A review of high voltage, direct current transmission line effects on dairy cattle health and performance.
 Portland (OR) : Oregon State University, 8 p.
- Ganskopp, D., Raleigh, R.J., Schott, M.R., Bracken, T.D. 1991
Behavior of cattle in pens exposed to \pm 500 kV DC transmission lines.
 Applied Animal Behaviour Science, 30:1-16
- Lee, J.M., Stormshak, F., Thompson, J.M., Hess, D.L., Foster, D.L. 1995
Melatonin and puberty in female lambs exposed to EMF: A replicate study.
 Bioelectromagnetics, 16(2):119-123
- Lee, J.M., Stormshak, F., Thompson, J.M., Thinesen, P. 1993
Melatonin secretion and puberty in female lambs exposed to environmental electric and magnetic fields.
 Biology of Reproduction, 49:857-864
- Nguyen, D-H., Richard, L., Burchard, J.F. 2005
Exposure chamber for determining the biological effects of electric and magnetic fields on dairy cows
 Bioelectromagnetics, 26(2):138-144

Oregon State University. 1992
Joint HVAC transmission EMF environmental study: final report on experiment 1. Report prepared for Bonneville Power Administration.
Portland (OR) : BPA, 169 p.

Oregon State University. 1993
Joint HVAC transmission EMF environmental study: final report on experiment 2. Report prepared for Bonneville Power Administration.
Portland (OR) : BPA, 61p.

Pelletier, C., Cloutier, I., Goulet, D., Renaud, F. 1994
Revue des études sur les effets biologiques des champs électriques et magnétiques sur les abeilles. Rapport préparé par le Groupe S.M. inc. et Hydro-Québec.
Montréal (Qc) : Hydro-Québec, 37p. et annexes.

Raleigh, R.J. 1988
Joint HVDC agricultural study : final report. Prepared by Oregon State University for Bonneville Power Administration.
Portland (OR) : BPA, 2 vol.

Renaud, F., Goulet, D., Bousquet, R. 1999
Les effets des champs électriques et magnétiques sur la santé et la productivité du bétail = Effects of Electric and Magnetic Fields on Livestock Health and Productivity.
Montréal (Qc) : Hydro-Québec, 16 p.

Renaud, F. 1987
Recherche des projets de ligne présentant les caractéristiques agricoles les plus compatibles à une étude des effets des lignes à haute tension sur la vache laitière du Québec.
Montréal (Qc) : Hydro-Québec, 17p. et annexes

Rodriguez, M., Petitclerc, D., Burchard, J.F., Nguyen, D.H., Block, E. 2004
Blood melatonin and prolactin concentrations in dairy cows exposed to 60 Hz electric and magnetic fields during 8 h photoperiods.
Bioelectromagnetics, 25(7): 508-515

Rodriguez, M., Petitclerc, D., Burchard, J.F., Nguyen, D.H., Block, E., Downey, B.R. 2003
Responses of the estrous cycle in dairy cows exposed to electric and magnetic fields (60 Hz) during 8-h photoperiods.
Animal Reproduction Science, 77(1-2): 11-20

Rodriguez, M.A. 2003
Physiological responses to 60 Hz electric and magnetic fields in dairy cows under short term photoperiod conditions. Thesis.
Montréal (Qc) : Macdonald College of McGill University, 223p.

Rodriguez, M., Petitclerc, D., Nguyen, D.H., Block, E., Burchard, J.F. 2002
Effect of Electric and Magnetic Fields (60Hz) on production, and Levels of Growth Hormone and Insulin-Like Growth Factor 1, in Lactating, Pregnant Cows Subjected to Short Days.
Journal of Dairy Science, 85:2843-2849

Thomson, J.M., Stormshak, F., Lee, J.M., Hess, D.L., Painter, L. 1995
Cortisol secretion and growth in ewe lambs chronically exposed to electric and magnetic fields of a 60 Hz 500 kilovolt AC transmission line
Journal of Animal Science, 73:3274-3280.

Vézina, D., Brouard, D. 1991

Effets des champs électriques chez les poissons : Revue de la documentation scientifique et résultats de l'enquête menée auprès des pisciculteurs. Rapport préparé par le Groupe Environnement Shoener inc. pour Hydro-Québec.
Montréal (Qc) : Hydro-Québec, 34 p. et annexes.

Il est possible de consulter ces documents sur place en prenant rendez-vous :

Centre de documentation

Direction principale – Environnement et affaires corporatives
Hydro-Québec
75 boul. René-Lévesque ouest, 2^e étage
Montréal (Québec)
Téléphone : (514) 289-2211 poste 4929

Pour en savoir plus sur les CÉM, communiquer avec le personnel de l'Électrium
<http://www.hydroquebec.com/visitez/monteregie/electrium.html>