

INDILACT - Extended voluntary waiting period in primiparous dairy cows. Part 1: randomized controlled trial - compiled data and R-scripts with statistical calculations

SND-ID: 2022-131-3.

Citation

Edvardsson Rasmussen, A INDILACT - Extended voluntary waiting period in primiparous dairy cows. Part 1: randomized controlled trial - compiled data and R-scripts with statistical calculations [Data set]. Swedish University of Agricultural Sciences. Available at: <https://hdl.handle.net/20.500.12703/3996>

Alternative title

INDILACT - Part 1

Creator/Principal investigator(s)

[Anna Edvardsson Rasmussen](#) - Swedish University of Agricultural Sciences, Department of Animal Nutrition and Management

Research principal

[Swedish University of Agricultural Sciences](#) - Department of Animal Nutrition and Management

Principal's reference number

SLU.huv.2017.4.1-111

Description

The objective of the study is to investigate how an extended voluntary waiting period between calving and first insemination in primiparous cows would affect milk production and fertility during their first and second calving interval.

The data is registered between August 2018 to September 2021.

Data from 2 different sources. Access to these data is restricted due to the agreement with the principal owner of the data Växa Sverige.

1. Data (.txt files) from the Swedish Official Milk Recording System, operated by Växa Sverige regarding breed, calvings, inseminations, 305-d lactation yields, test-day yields, and dry-off dates from 16 farms. The inclusion criteria for the farms included herds with >100 dairy cows in production and a herd average milk production of at least 9 000 kg ECM/cow/year, a mean CI of < 14 months, and a system for daily milk yield registration.
2. Daily milk yields from the milking systems on the farms (three different types of systems: DeLaval, Lely and GEA), Excel files.

Metadata available:

One file with metadata, describing the data processing steps for each category of data, is provided. Also available are Code-lists for reading the data from the text files and for decoding the codes in the

text files. R scripts with statistical calculations are also available.

R-script with statistical methods and aggregated data used for statistical calculations for lactation 1 and 2.

Raw data have been analyzed, summarized and new variables have been calculated in one Excel file per lactation from which data for the statistical calculations in R are taken.

The R script needs access to the Excel-files with summarized data to work.

Linear models for calculation of:

1. 305d yield (kg + ECM),
2. Whole lactation yield (kg + ECM)
3. Milk yield per day in the first and second calving interval
4. Milk yield per day in 2 calving intervals
5. Calving interval
6. Lactation length
7. Milk yield at test milking 50-20 days before calving
8. Dry-off yield

Binomial models for calculation of:

1. Dry period length class

Data contains personal data

Yes

Type of personal data

Far identity number which can be connected to other personal information such as owner address, contact details etc.

Code key exists

Yes

Language

[English](#)

[Swedish](#)

Time period(s) investigated

2018-08-01 - 2021-09

Data format / data structure

[Text](#)

Species and taxons

[Bos taurus taurus linnaeus, 1758](#)

Geographic spread

Geographic location: [Sweden](#)

Geographic description: The farms where the data is collected is situated in the south of Sweden in Västergötland, Småland, Västmanland, Närke, Östergötland, Gotland, Uppland, Värmland, Södermanland and Dalsland.

Responsible department/unit

Department of Animal Nutrition and Management

Contributor(s)

Kjell Holtenius - Swedish University of Agricultural Sciences, Department och Animal Nutrition and Management

Erling Strandberg - Swedish University of Agricultural Sciences, Department of Animal Breeding and Genetics

Renée Båge - Swedish University of Agricultural Sciences, Department of Clinical Sciences

Cecilia Kronqvist - Swedish University of Agricultural Sciences, Department och Animal Nutrition and Management

Maria Åkerlind - Växa Sweden

Växa Sweden

Funding

- Funding agency: Swedish farmers' foundation for agricultural research
- Funding agency's reference number: O-17-20-957
- Project name on the application: Individuellt anpassad laktationslängd för lönsam och hållbar mjölkproduktion

Ethics Review

Uppsala - Ref. Dnr 5.8.18-10126/2018

There is an approved Ethical review application, but in this part of the project we have not used information that needed ethical approval, only collection of data.

Research area

[Animal and dairy science](#) (Standard för svensk indelning av forskningsämnen 2011)

Keywords

[Milk production](#), [Fertility](#), [Dairy cattle](#), [Dairy cow](#), [Dairy farm](#), [Lactation](#), [Extended](#), [Extended lactation](#), [Calving interval](#), [Voluntary waiting period](#), [Extended calving interval](#), [Extended voluntary waiting period](#), [Cow](#), [Lactation yield](#)

Polygon (Lon/Lat)

11.159554, 58.983748

11.425454, 57.668911

13.006174, 56.425793

17.66669, 55.912008

19.82108, 57.668658

18.985704, 60.14127

17.314953, 60.554346

12.214766, 59.833538

11.159554, 58.983748

Accessibility level

Access to data through an external actor

Access to data is restricted

Homepage

[INDILACT - project homepage](#)

[Information about Swedish Official Milkt Recording System from Växa Sweden](#)

Contacts for questions about the data

arkiv@slu.se

Anna Edvardsson Rasmussen

anna.edvardsson.rasmussen@slu.se

Institutionen för Husdjurens Utfodring och Vård

HUV.Administration@slu.se

Related research data in SND's catalogue

[INDILACT - Extended voluntary waiting period in primiparous dairy cows. Part 1: randomized controlled trial - Daily milk yield](#)

[INDILACT - Extended voluntary waiting period in primiparous dairy cows. Part 1: randomized controlled trial - SOMRS data - calvings, inseminations, parentage, culling, test milkings, lactation yields and yearly yields](#)

Download metadata

[DataCite](#)

[DDI 2.5](#)

[DDI 3.3](#)

[DCAT-AP-SE 2.0](#)

[JSON-LD](#)

[PDF](#)

[Citation \(CLS\)](#)