



ÉTUDE « DOUBLE - OVSYNCH FACTREL-FERTILINE »

...Résultats préliminaires

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ÉTUDE DOUBLE-OVSYNCH POURQUOI ?



- ◎ L'intérêt de VC et CVC
 - Déjà fait beaucoup d'efforts sur $\uparrow$ T S
 - Un PSR avec $\uparrow$ TC !!! Ah oui ???
 - Marche vraiment dans nos conditions ???
 - On l'essaie... impression clinique...
- ◎ Recherche clinique en MP: Optimise la valeur de nos dossiers de santé pour:
 - Nous
 - Nos clients
 - La communauté laitière

RECHERCHE CLINIQUE À LA CVC

Effect of removal of follicular cyst contents on success of Ovsynch in dairy cows: a clinical trial in private practice.

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INTRODUCTION

- Follicular cysts in dairy cows cause abnormal ovarian cyclicity and decrease reproductive performances in dairy herds, particularly in management systems that rely on heat detection.
- Many treatments have been developed and tested to manage follicular ovarian cysts; among these, ovulation synchronization (GnRH-PGF2-GnRH-Timed AI; Ovsynch) is an option that is easy to implement and gives acceptable results. It has been anecdotally suggested that removal of cyst contents by needle puncture could improve treatment outcome.
- The purpose of this study was to evaluate the effect of removing cyst contents by needle puncture on conception rate in dairy cows treated for follicular cysts with Ovsynch. The trial was conducted using data collected over regular herd health visits in a private practice.

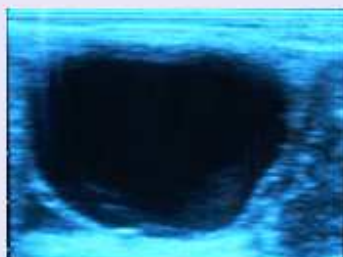


Figure 1. Follicular ovarian cyst (ultrasound view)

MATERIALS AND METHODS

MATERIALS AND METHODS

Treatments:

Cases were alternatively submitted to two treatments:

- A: Ovsynch and simultaneous removal of cyst contents by needle puncture (on day 0)
- B: Ovsynch without puncture.



Figure 2. Needle-mounted rod for cyst puncture



Figure 3. Rod ready for use (inserted in sleeve)

Data collection:

All data were collected over a 12-month period and were compiled in the herd health monitoring software DSA.

RESULTS

Table 1. Descriptive statistics

	Treatment A Ovsynch + puncture	Treatment B Ovsynch
Initial number of cows included	162	156
Cases rejected (non-conformity)	114	105
Cows included in analysis	48	51
Average DIM at breeding	157	121
Average LN (lactation number)	3.7	3.4
Average AI number (#1, 2 nd ...)	2.3	1.7
Conception rate	45.8 %	43.1 %

Descriptive statistics:

The total number of cows started on treatments A or B was 328. Cow record screening revealed that 229 cases did not comply to the protocol, principally due to incorrect reported breeding date (cows not bred exactly 10 days after onset of ovsynch) or DIM < 45 at treatment onset.

The final database included 48 cows for treatment A and 51 cows for treatment B. Conception rates were 45.8 % for treatment A and 43.1 % for treatment B.

Table 2. Logistic regression analysis

RESULTS

- Categorized variables were generated based on cross-tabulation against the outcome variable: DIMCAT (1 = 75 < DIM < 200; 0 = < 75 or > 200); LNCAT (1 = LN < 5; 0 = LN > 4); AINUMCAT (1 = AINUM > 1; 0 = AINUM = 1) and MOCAT (1 = October to April; 0 = May to September). Variables retained (P < 0.20) in the complete model included: TRT, DIMCAT, LNCAT, TRT * DIMCAT and TRT * LNCAT. Analysis revealed that all interaction terms could be deleted from the model.

- The final model included TRT, DIMCAT and LNCAT and showed that treatment had no significant effect on the outcome (P = 0.63). Odds Ratio = 1.23, 95 % confidence interval: 0.53 to 2.86. The corrected conception rates, considering the logistic model, were 47.0 % for treatment A and 41.9 % for treatment B.

CONCLUSION

- The results of this study suggest that removal of follicular cyst contents by needle puncture does not significantly improve conception rate after an Ovsynch treatment. However, the small sample size (n = 99) greatly limits the interpretation of the results since type-2 error may have made it impossible to reveal a significant effect.

A non-significant 5.1 % improvement in conception rate was found with cyst contents removal. Could such a slight improvement justify the use of this labor-intensive approach? If so, the study should be repeated with a more appropriate sample size. This trial also underlines the importance of data recording and compliance monitoring in clinical research.

RECHERCHE CLINIQUE À LA CVC



Title:

Relationship between Keto-Test results and health and reproduction variables: a retrospective study using data from herd health visits in private practice.

Authors.

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Introduction

Cows in negative energy balance (NEB) can develop subclinical ketosis (SCK) and elevated Beta-hydroxybutyrate (BHB) concentrations in milk. A milk strip cow-side test (Keto-Test; KTST) can be used to measure BHB and initiate vet-client discussions about transition cow management and energy issues during regular herd health visits. The purpose of this study was to relate KTST results to first-breeding conception rate and to the incidence of some metabolic diseases.

Materials and Methods

In 22 herds followed by a single dairy practitioner in southern Quebec, milk from cows between 4 and 21 days in milk (DIM) at the time of herd health visit was submitted to KTST. Keto-Test results, as well as diseases, reproduction and DHI data, were compiled using the herd health monitoring software DSA over a three-year period. Result to KTST was considered positive at

ÉTUDE DBLOV... POURQUOI ?



- ◎ L'intérêt de Pfizer Santé Animale
 - Comparer / positionner Factrel vs autres GnRH
- ◎ Contribuer à la discussion sur les PSR

ÉTUDE DOUBLE-OVSYNCH



- ◎ Début: Mars 2012
 - 18 Troupeaux de la CVC
 - 1530 vaches en lactation (moyenne 85)
 - 5 vets
 - VC (5) EM (4) JC (4) PV (2) DFL (2) KM (1)
- ◎ Fac Médecine Vétérinaire s'ajoute en juillet 2012.

ÉTUDE DOUBLE-OVSYNCH

- Objectif: 3000 inséminations sur double-ovsynch avec dx gestation.
 - 1500 avec Factrel
 - 1500 avec Fertiline



ÉTUDE DBLOV CONDITIONS D'ADHÉSION



- Pas d'exigence de performance repro.
- Entrée de données « Top » (DSA ou LAC-T, niveau certifié LCQ)
- TOUTES vaches > 33 JEL à chaque MP
 - DBLOV pour 1^{ère} saillie.
- Vet et Producteur acceptent utiliser
 - Macros du projet
 - Marqueurs du projet



VS



ÉTUDE DOUBLE-OVSYNCH



- Déroulement du projet
 - Visites doivent être aux 2, 3 ou 4 semaines mais jamais plus.
 - Vets doivent valider le suivi des protocoles à chaque visite.
 - Changement de produit selon mois pairs vs impairs.
 - Produits payés à 100 % par Pfizer.



VS



ÉTUDE DOUBLE-OVSYNCH



- Fin janvier 2013
 - 1250 protocoles démarrés
 - Environ 1000 vaches inséminées
 - 869 vaches inséminées avec dx gestation réalisé et données valides.
- Résultats...



VS



ÉTUDE DOUBLE-OVSYNCH



	gestantes	non-gestantes	
Produit A	171	249	420
Produit B	179	270	449
	350	519	869



VS



ÉTUDE DOUBLE-OVSYNCH

	gestantes		
Produit A	171	40,7 %	420
Produit B	179	39,9 %	449
	350	40,3 %	n=869



VS



ÉTUDE DOUBLE-OVSYNCH



<http://www.dsahr.ca>

RAPPORT ANNUEL BANQUE DE DONNÉES

GÉNÉRALITÉS (nombre d'animaux)	TAURES	PRIMIPARES	2 ^e VEAU	PLURIPARES	TOTAL
nombre de vaches	49914	47454	34582	63625	195575
nombre d'insémination de sécurité	430 (412)	1328 (1218)	1098 (1005)	2034 (1838)	4460 (4061)

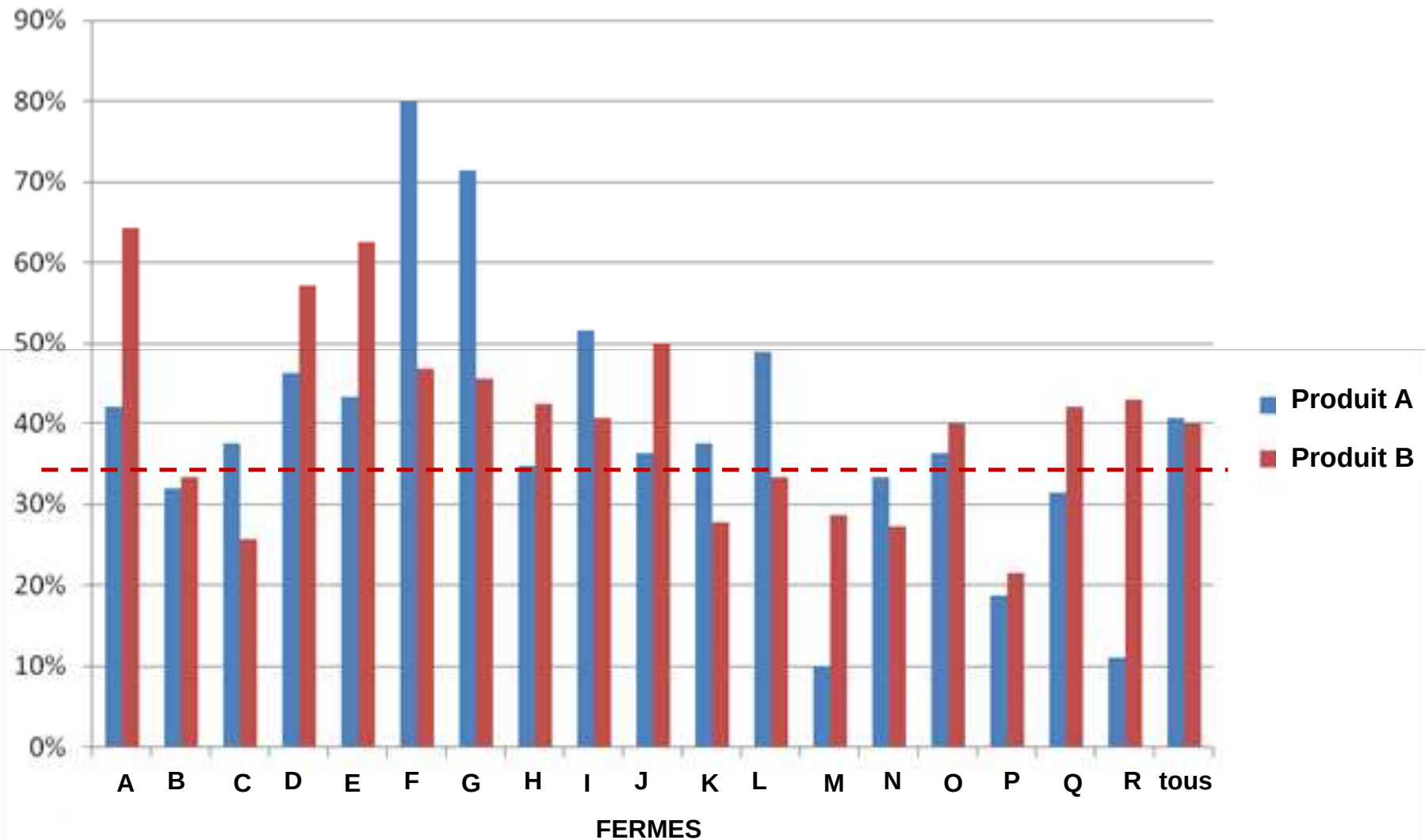
INTERVALLES jours (n)

vêlage - 1 ^{re} chaleur	56 (10820)	55 (12430)	54 (8723)	57 (12820)	56 (33984)
vêlage - 1 ^{er} examen	103 (10940)	62 (26280)	61 (20040)	61 (34490)	62 (80833)
vêlage - 1 ^{re} insémination	92 (34950)	80 (41510)	79 (30410)	81 (49780)	80 (121709)
1 ^{re} insémination - 2 ^e insémination	42 (13300)	40 (23780)	41 (18790)	42 (31390)	41 (73975)
2 ^e insémination - 3 ^e insémination	38 (5444)	38 (13260)	39 (11040)	40 (18760)	39 (43072)
vêlage - réforme	167 (3503)	141 (8863)	175 (7584)	162 (21750)	160 (38198)
vêlage - insémination fécondante	112 (31550)	125 (36710)	130 (25650)	134 (38640)	130 (101016)
âge au vêlage:	13 (49910)	27 (47450)	40 (34580)	70 (63620)	49 (145661)

PROPORTIONS % (n)

succès à la 1 ^{re} insémination	58 (34950)	40 (41510)	35 (30410)	32 (49780)	35 (121709)
succès à la 2 ^e insémination	54 (13300)	41 (23780)	37 (18780)	34 (31390)	37 (73975)
succès à la 3 ^e insémination	50 (5444)	40 (13260)	37 (11040)	34 (18760)	37 (43072)

ÉTUDE DOUBLE-OVSYNCH



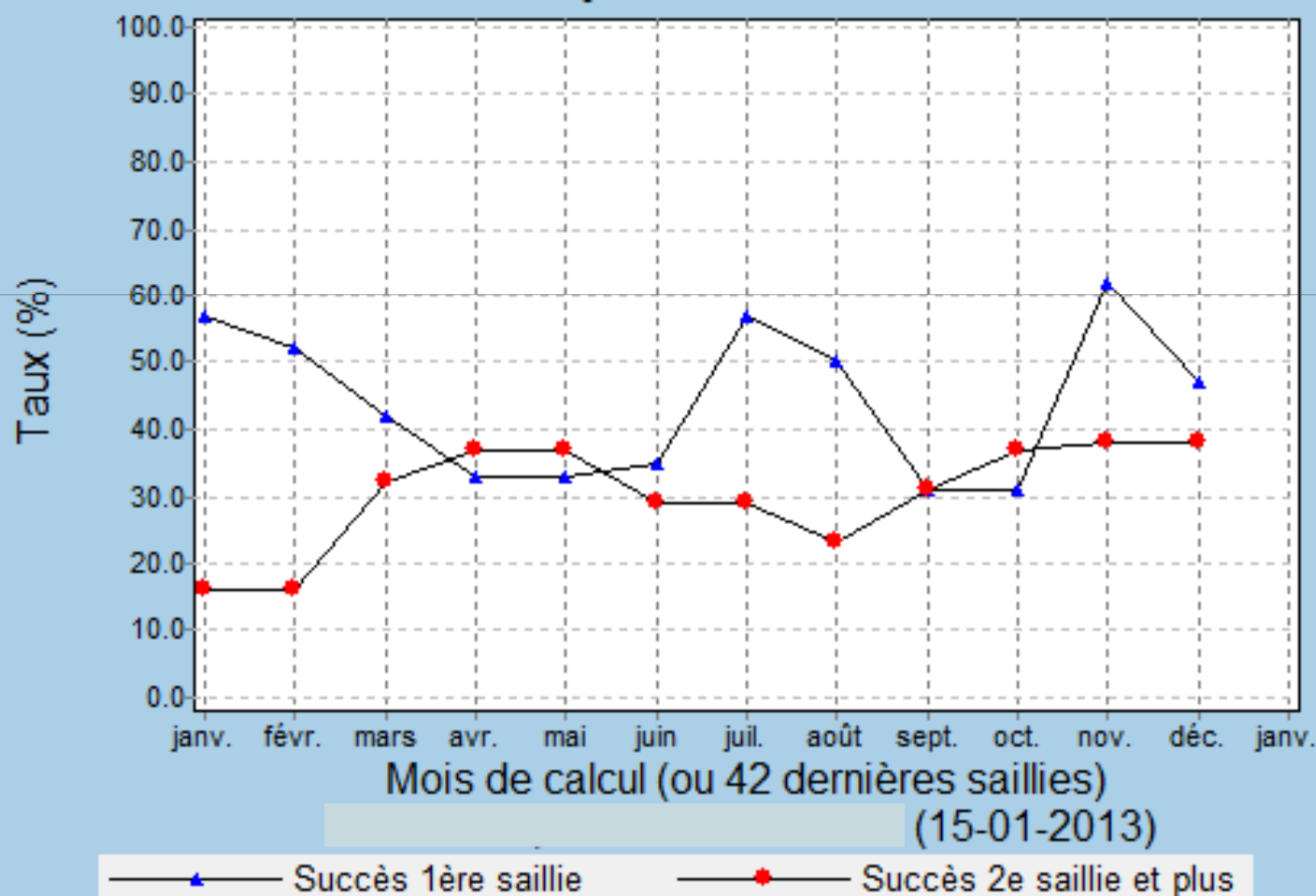
ÉTUDE DOUBLE-OVSYNCH



- ⦿ Augmentation relative de TC...
 - De 35 % à 40 % = 5 points de %
 - $5 / 35 = 14\%$ d'augmentation de TC !!
- ⦿ Ça confirme ce qu'on voit cliniquement.
- ⦿ Ne semble pas y avoir de différence entre les 2 produits.
- ⦿ Ces résultats sont préliminaires !!!

ÉTUDE DOUBLE-OVSYNCH

Succès comparé - saillie 1 vs 2+





DOUBLE OVSYNCH ET AUTRES...

...Exemple d'un troupeau du projet

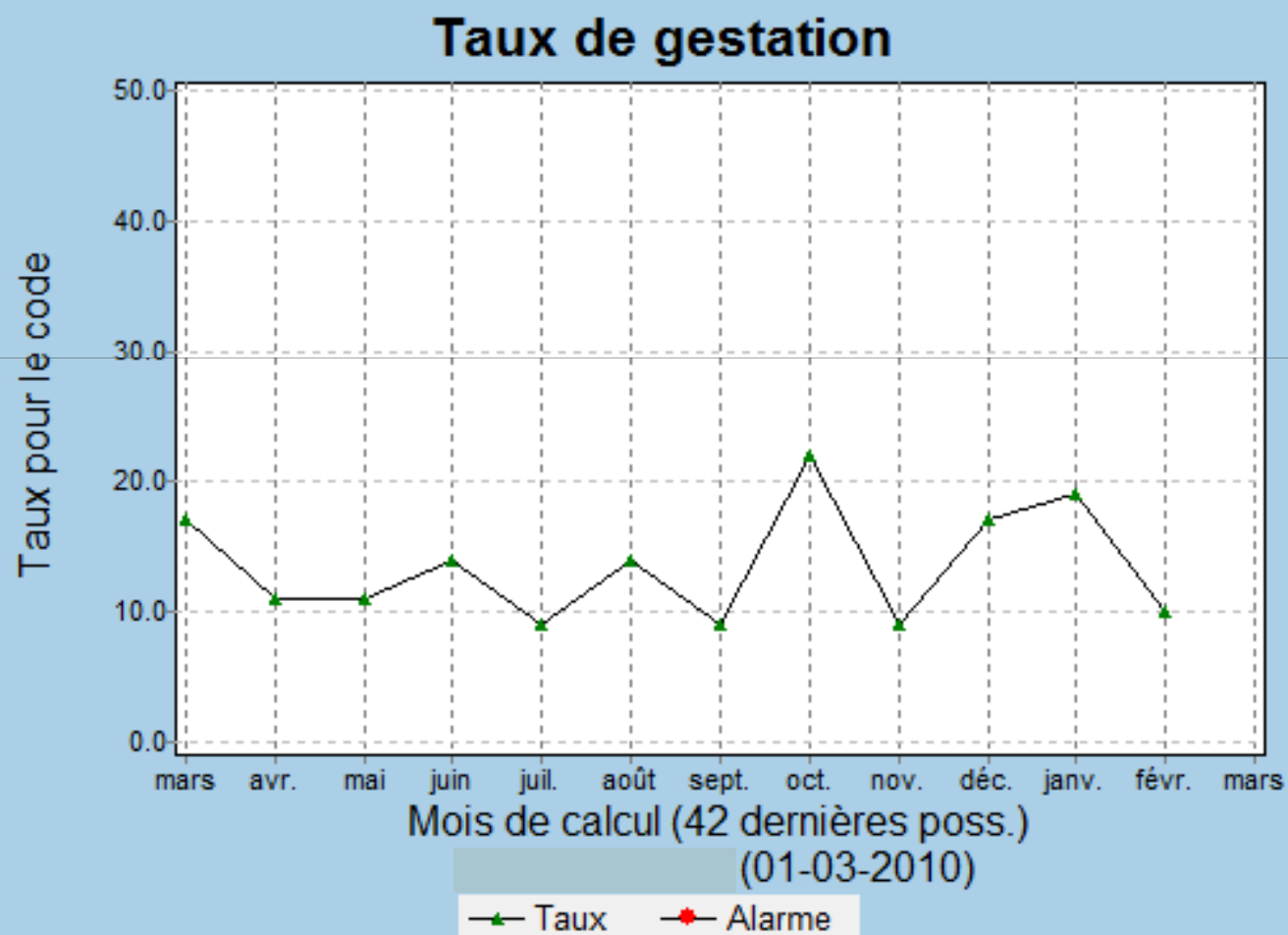
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Février 2013

ÉTUDE DOUBLE-OVSYNCH



- ◎ Exemple d'un troupeau de la CVC
 - Quota quotidien: 127 kg
 - Moy. adulte: 10 000 KG 4,1 % GRAS
- ◎ Suivi MP mensuel régulier
 - 1^{ère} IA sur détection chal. ovsynch au besoin
 - Bonne régie générale
 - Intervalle vêlage-saillie fécondante: 131 jours
 - IVV: 411 - 416 jours

ÉTUDE DOUBLE-OVSYNCH



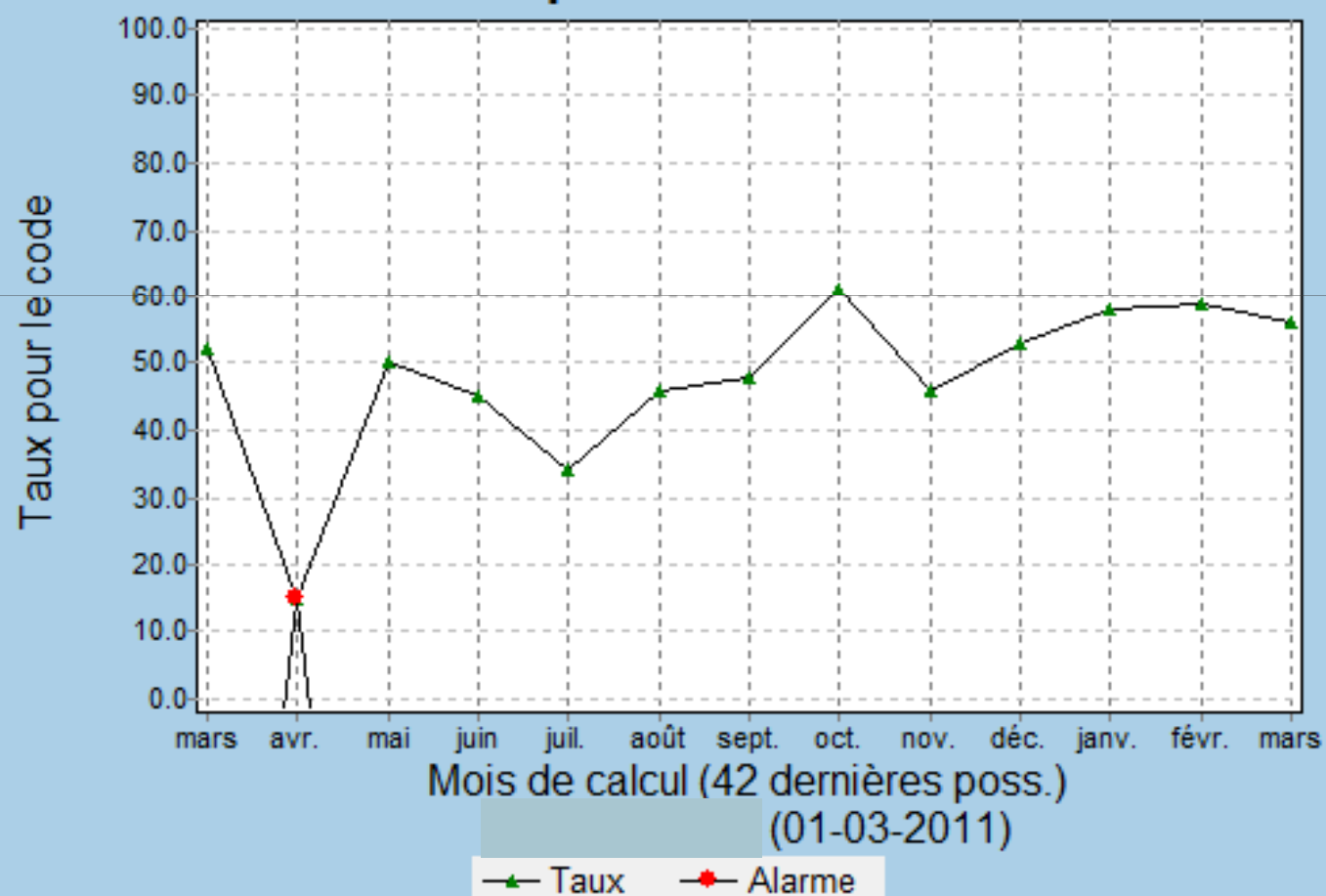
ÉTUDE DOUBLE-OVSYNCH



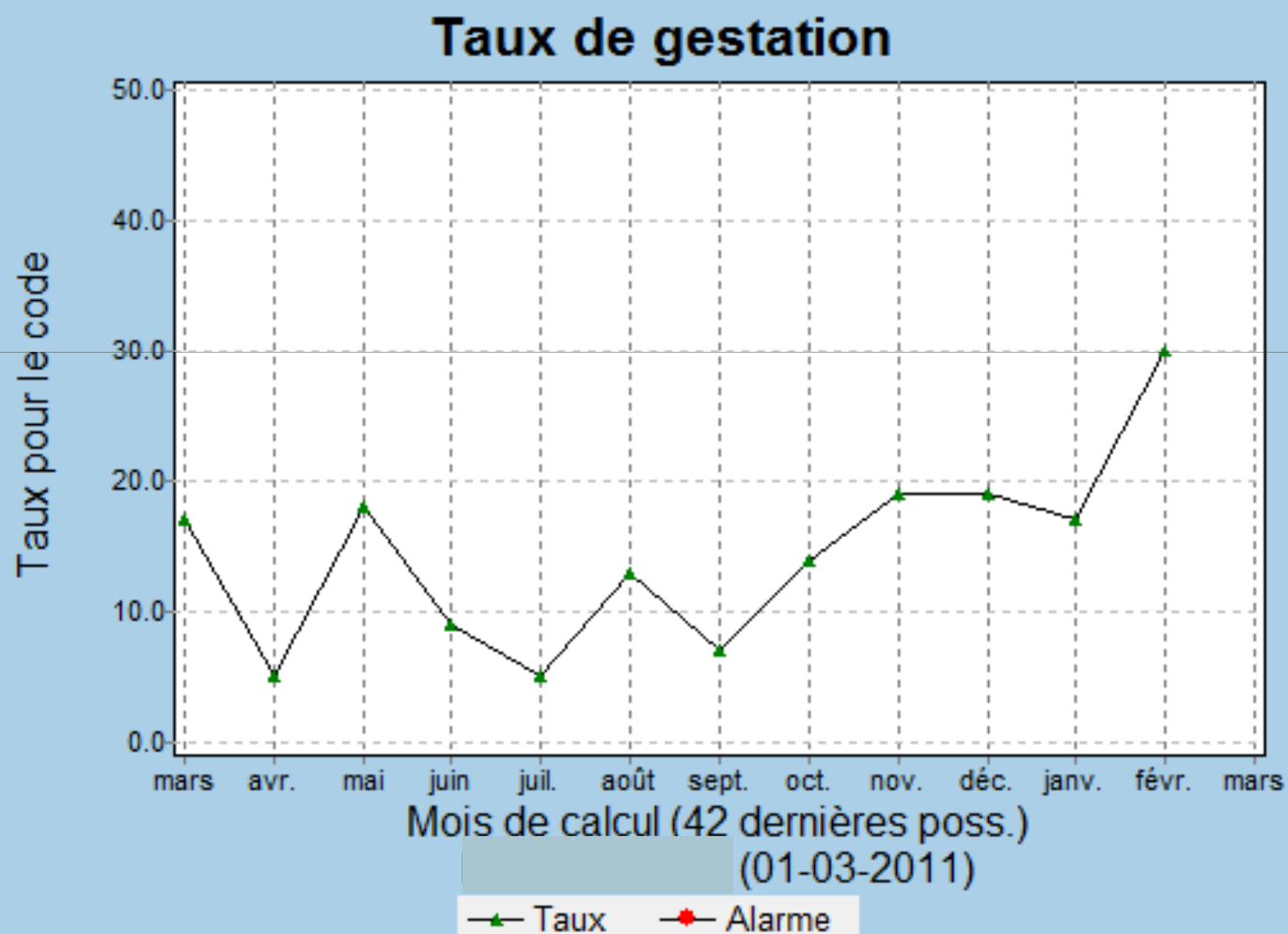
- ◉ Changement de suivi 22 février 2010
 - Visites aux 2 semaines
 - Continue détection de chaleurs mais ovsynch si non-saillie > 60 JEL lors de visite MP
- ◉ 1 an plus tard...

ÉTUDE DOUBLE-OVSYNCH

Alarme pour le code SAIL

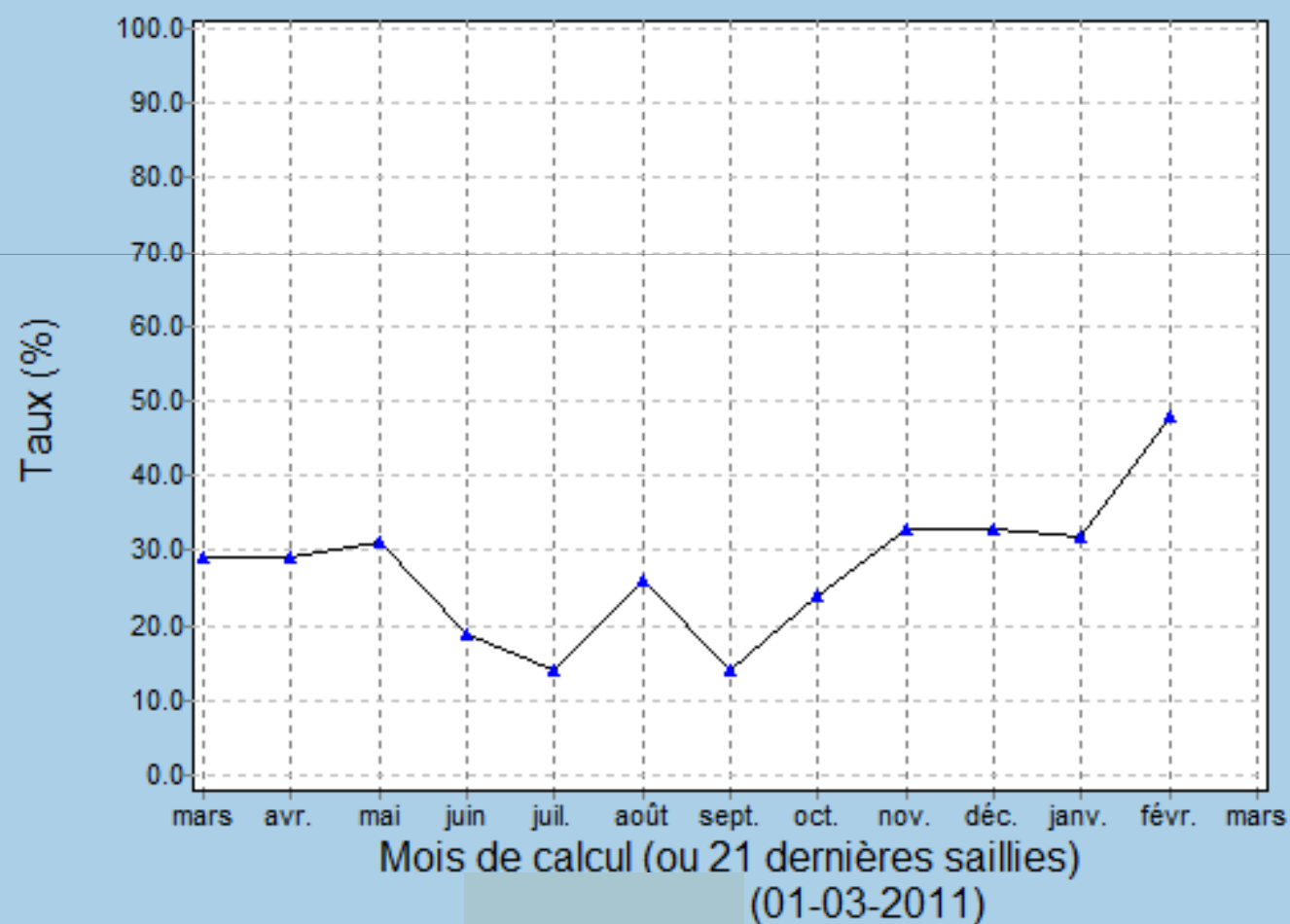


ÉTUDE DOUBLE-OVSYNCH



ÉTUDE DOUBLE-OVSYNCH

Taux de succès aux saillies

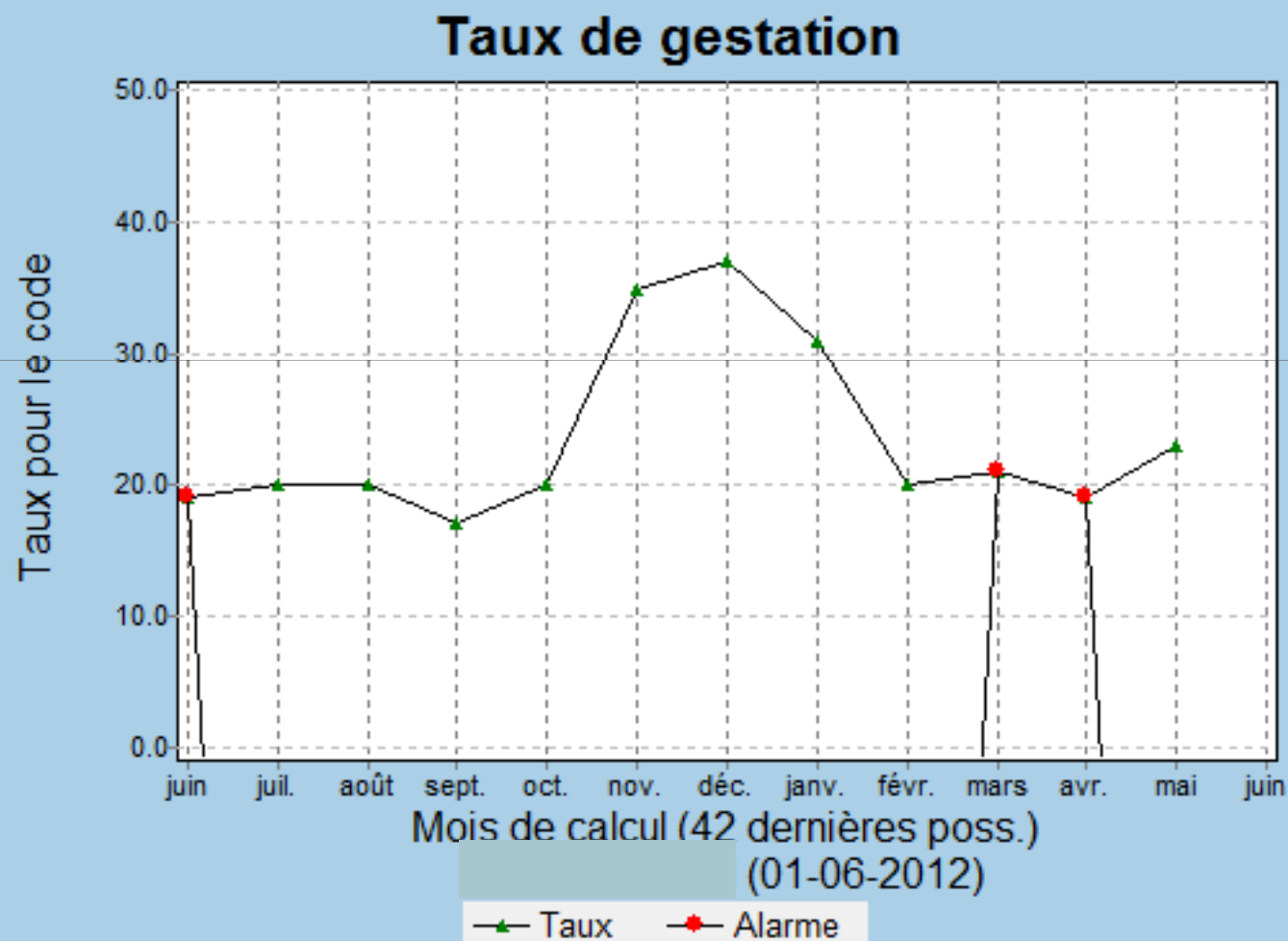


ÉTUDE DOUBLE-OVSYNCH

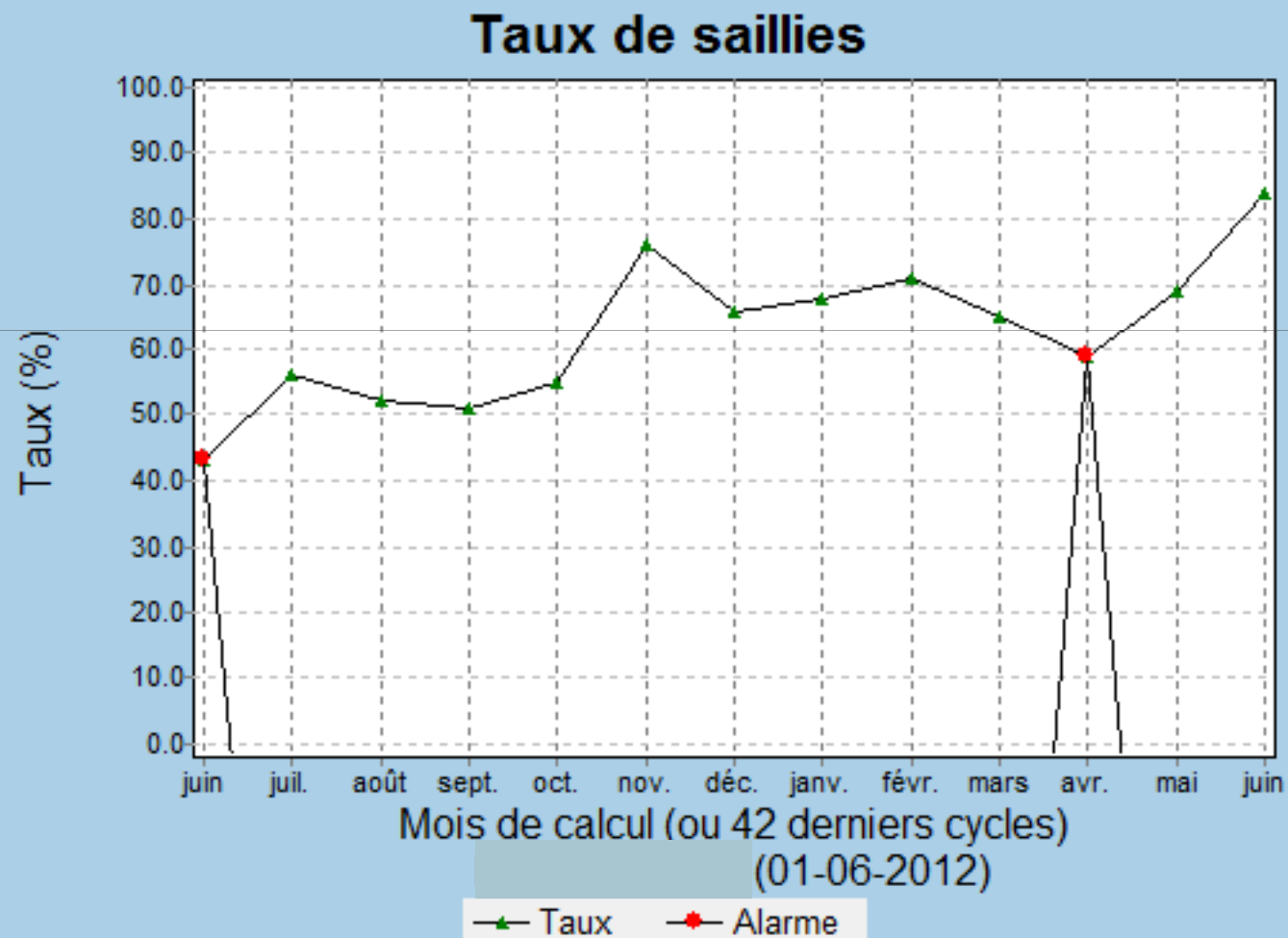


- ◉ Ajout en juin 2011 (8 mois avant projet)
 - Double-ovsynchs systématiques à chaque MP
 - Vaches à 33 JEL et +

ÉTUDE DOUBLE-OVSYNCH



ÉTUDE DOUBLE-OVSYNCH



ÉTUDE DOUBLE-OVSYNCH



- ◎ Décembre 2011- Janvier 2012
 - Il me demande si un moniteur d'activité vaudrait la peine.
 - On a fait du bon travail pour la 1^{ère} saillie, mais la 2^e ?...

ÉTUDE DOUBLE-OVSYNCH



Rapport annuel DSA

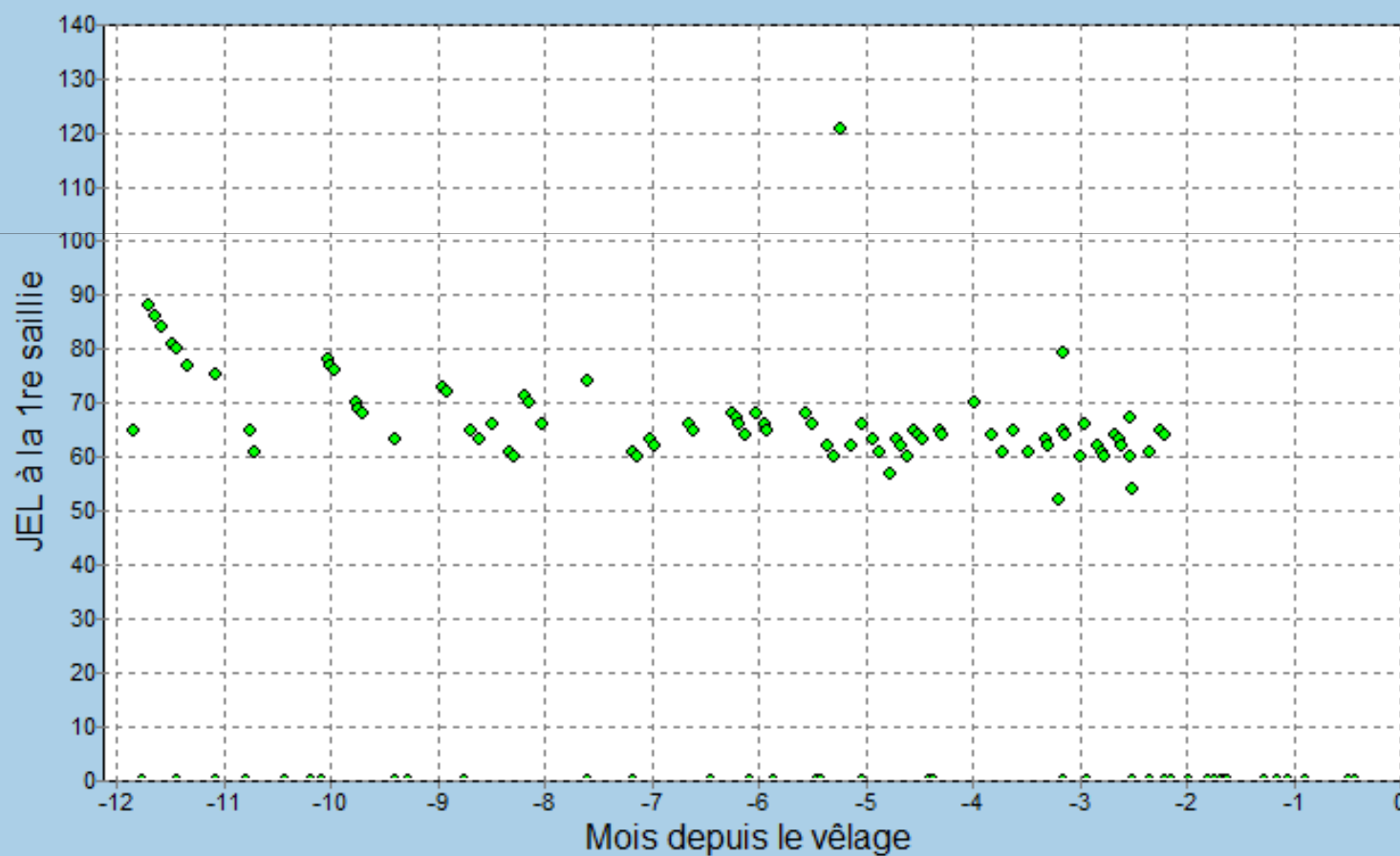
Fermer

Actuel

	Taures	Primipa.	2' veau	Multipa.	Total
Généralités (nombre d'animaux)					
Nombre de vaches	45	50	24	47	121
Nombre de saill. sécurité		1 (1)			1 (1)
Âge en mois au vêlage	13 (45)	27 (50)	40 (24)	63 (47)	44 (121)
Intervalles jours					
Vêlage - 1ère chaleur	66 (24)	50 (6)	34 (5)	39 (5)	42 (16)
Vêlage - 1er examen		42 (5)	60 (1)	23 (6)	34 (12)
Vêlage - 1ère saillie	95 (30)	67 (43)	64 (21)	68 (30)	67 (94)
1ère saillie - 2ème	39 (14)	45 (26)	43 (12)	40 (18)	43 (56)
2ème saillie - 3ème	44 (4)	31 (16)	47 (10)	45 (12)	40 (38)
Vêlage - réforme	123 (10)	96 (11)	177 (5)	115 (30)	117 (46)
Vêlage - saillie fécondante	126 (28)	113 (38)	127 (19)	118 (17)	118 (74)

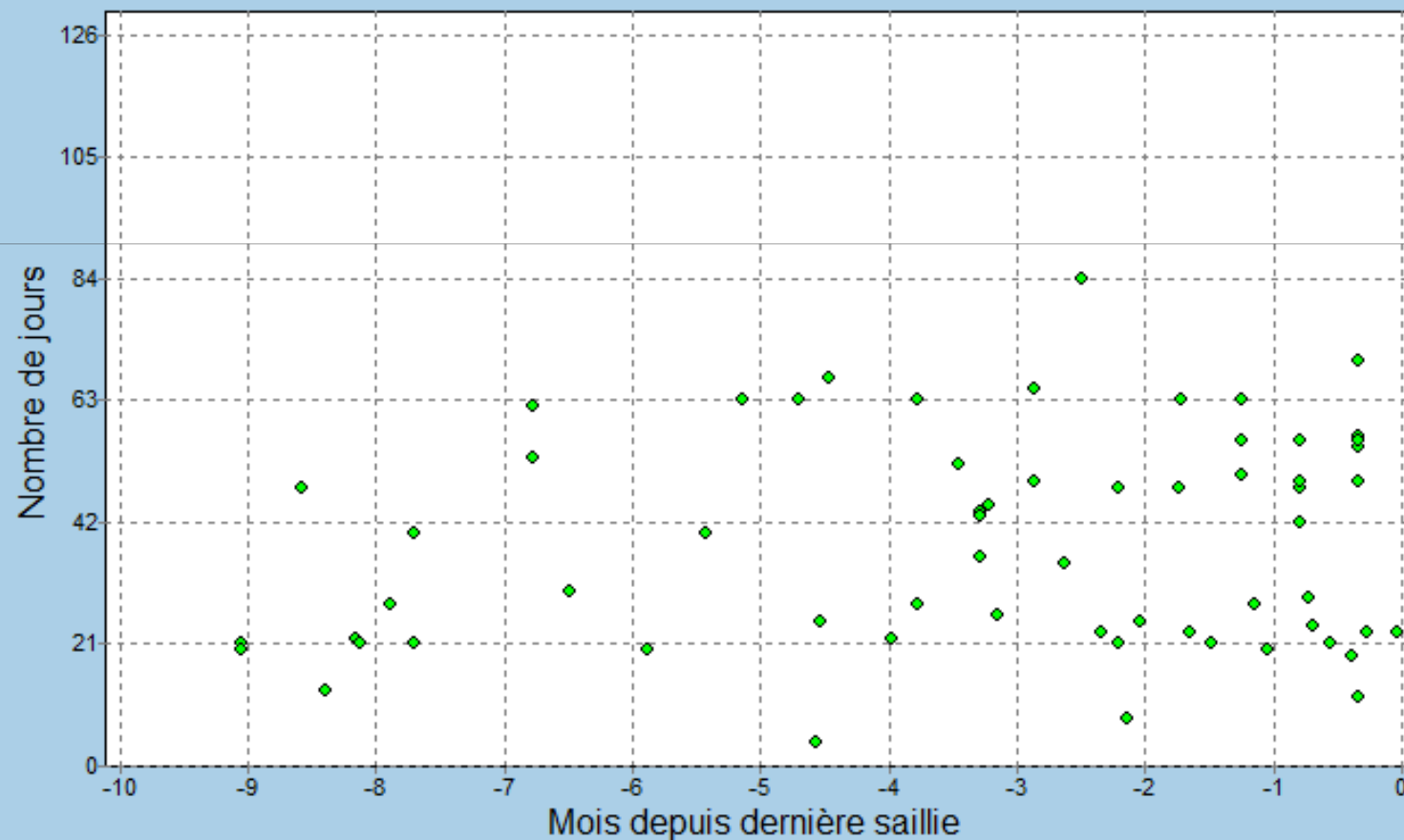
ÉTUDE DOUBLE-OVSYNCH

Intervalle vêlage-1re saillie



ÉTUDE DOUBLE-OVSYNCH

Intervalle entre les 2 dernières saillies

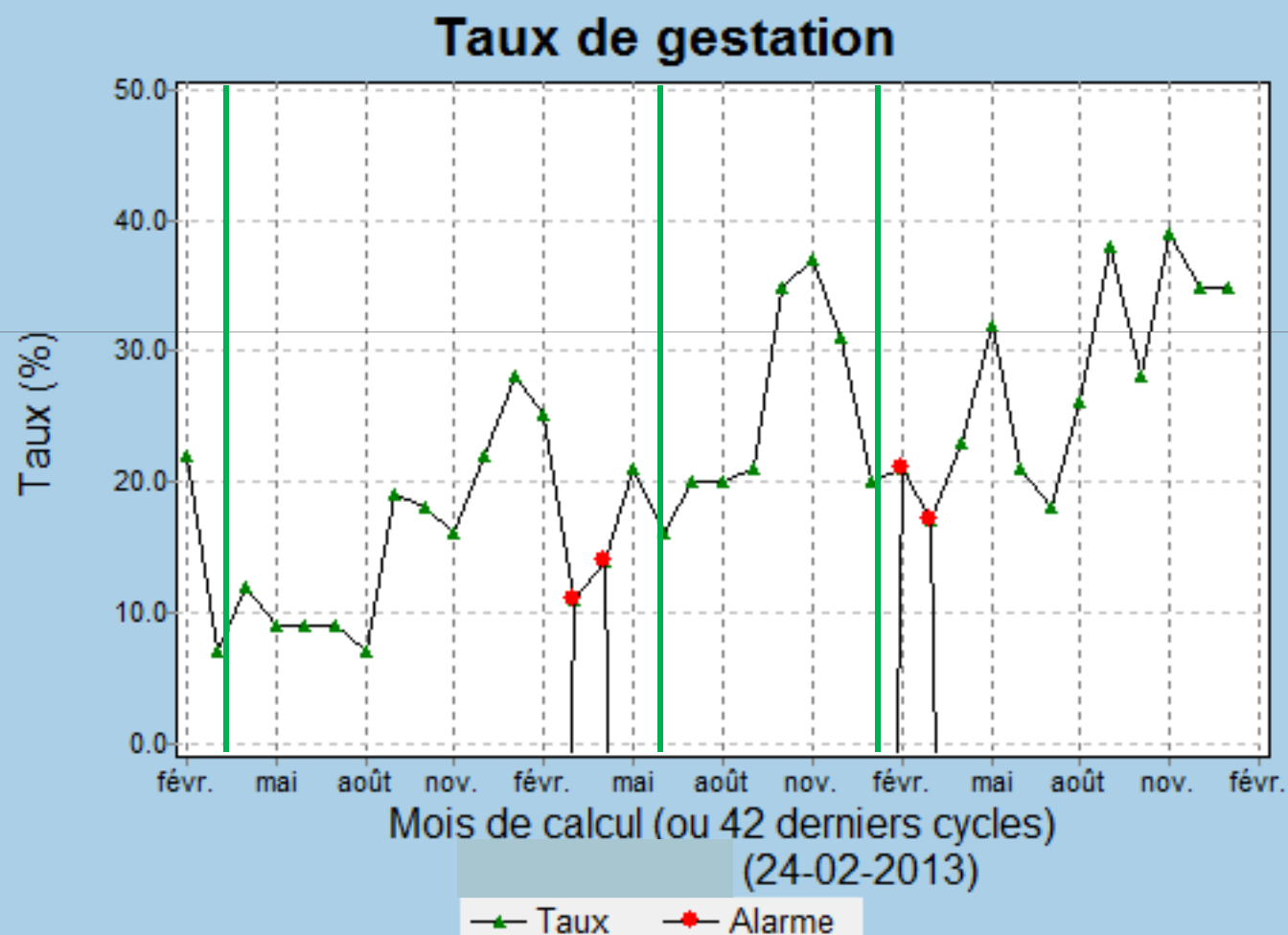


ÉTUDE DOUBLE-OVSYNCH



- ⦿ Donc, oui ça vaudrait la peine !
- ⦿ Au bout de 3 ans avec...
 - Visites de MP aux 2 semaines
 - Double-ovsynchs systématiques
 - Moniteur d'activité
- ⦿ Résultats...

ÉTUDE DOUBLE-OVSYNCH



ÉTUDE DOUBLE-OVSYNCH

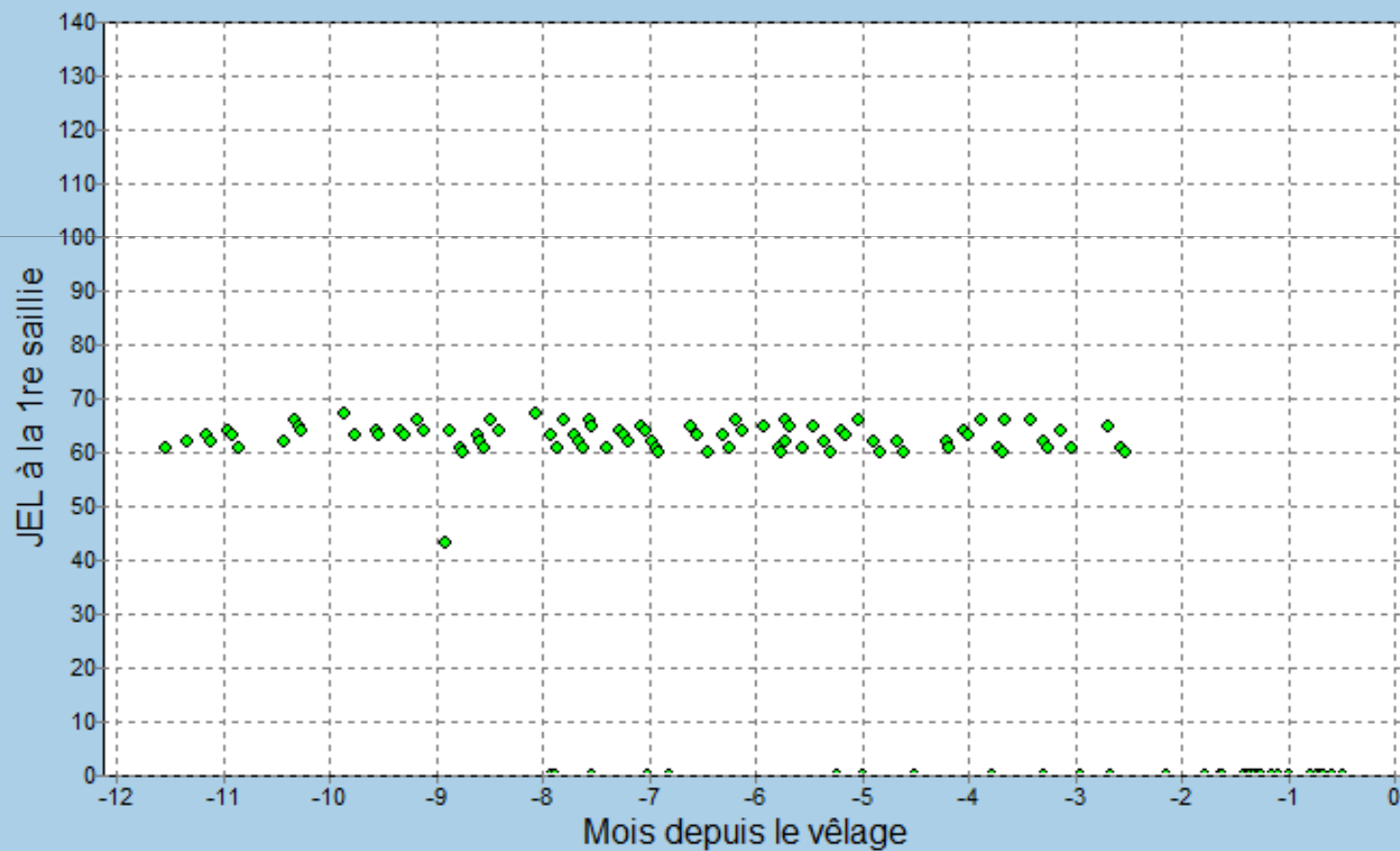


- Intervalle vêlage-saill fécond: 112 jours
- IVV projeté: 392-397 jours

	Rapport annuel DSA				-
Actuel	Taures	Primipa.	2 ^e veau	Multipa.	Total
Généralités (nombre d'animaux)					
Nombre de vaches	53	37	44	46	127
Nombre de saill. sécurité		1 (1)			1 (1)
Âge en mois au vêlage	13 (53)	26 (37)	40 (44)	64 (46)	44 (127)
Intervalles jours					
Vêlage - 1ère chaleur	39 (25)	43 (4)	40 (8)	42 (6)	41 (18)
Vêlage - 1er examen	80 (2)	24 (7)	19 (5)	16 (2)	21 (14)
Vêlage - 1ère saillie	74 (42)	64 (36)	63 (40)	63 (38)	64 (114)
1ère saillie - 2ème	31 (11)	32 (20)	31 (25)	34 (28)	32 (73)
2ème saillie - 3ème	33 (3)	31 (15)	27 (17)	35 (16)	31 (48)
Vêlage - réforme	134 (3)	187 (3)	113 (11)	137 (18)	134 (32)
Vêlage - saillie fécondante	82 (37)	102 (31)	113 (31)	124 (26)	112 (88)

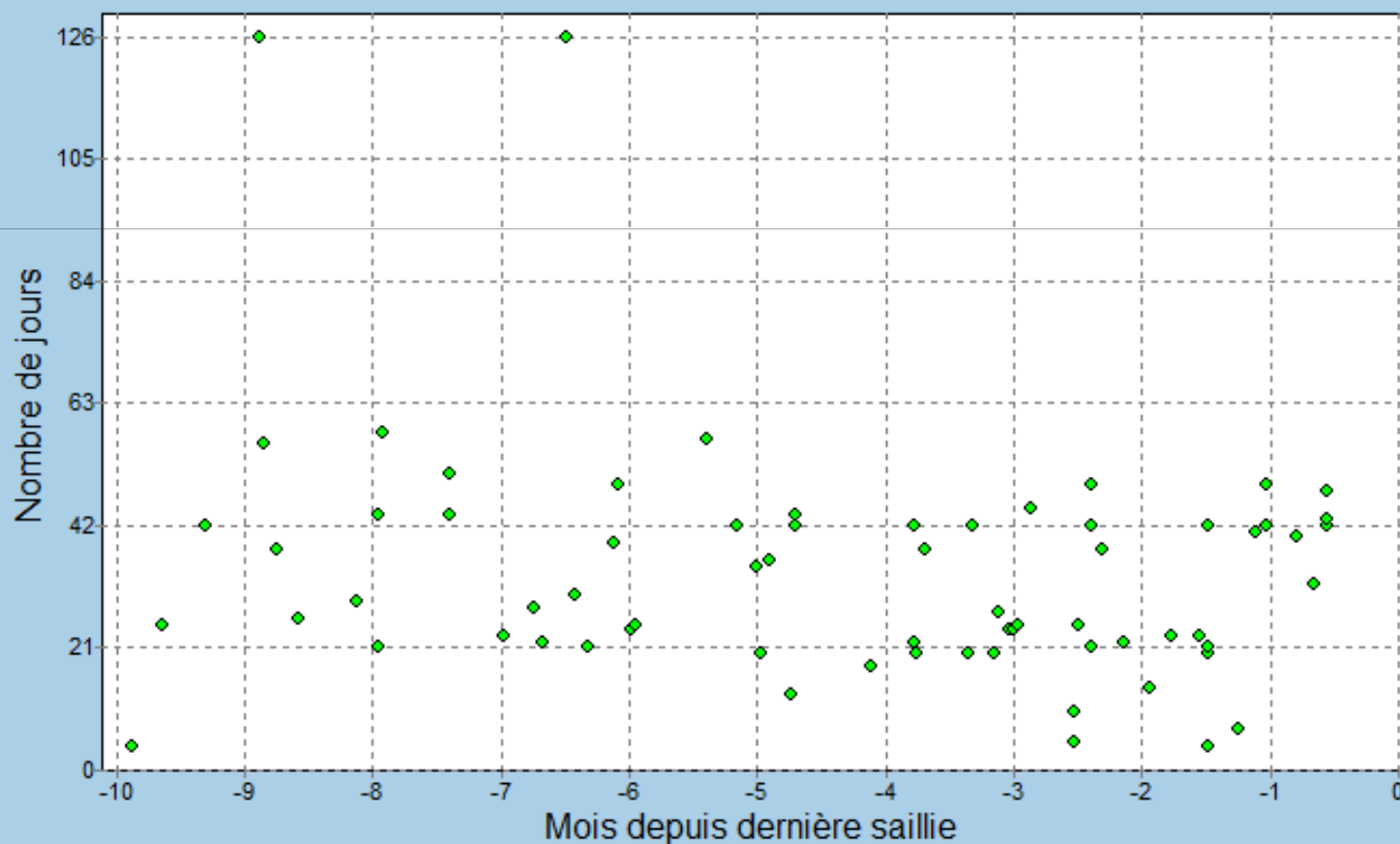
ÉTUDE DOUBLE-OVSYNCH

Intervalle vêlage-1re saillie

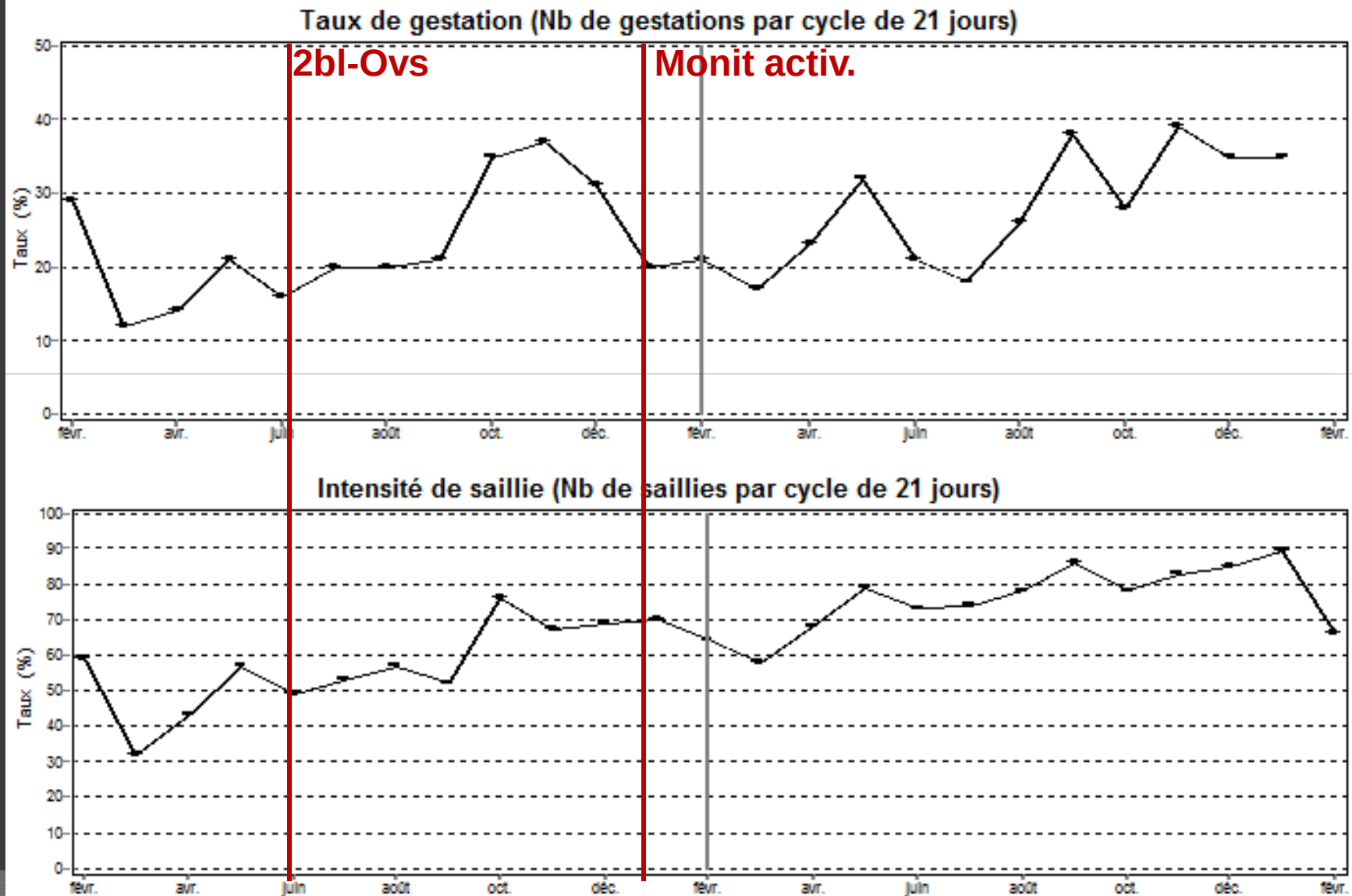


ÉTUDE DOUBLE-OVSYNCH

Intervalle entre les 2 dernières saillies

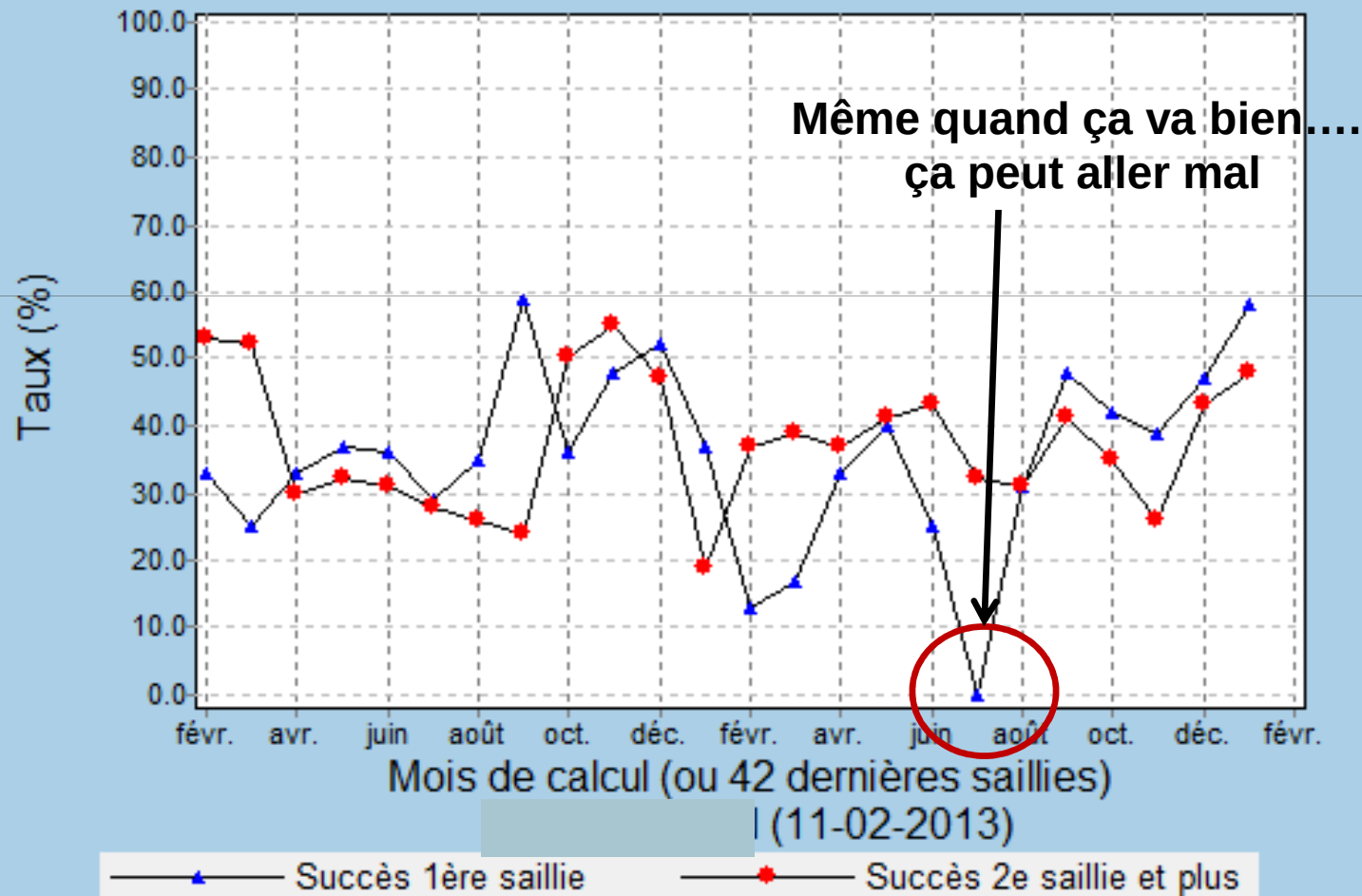


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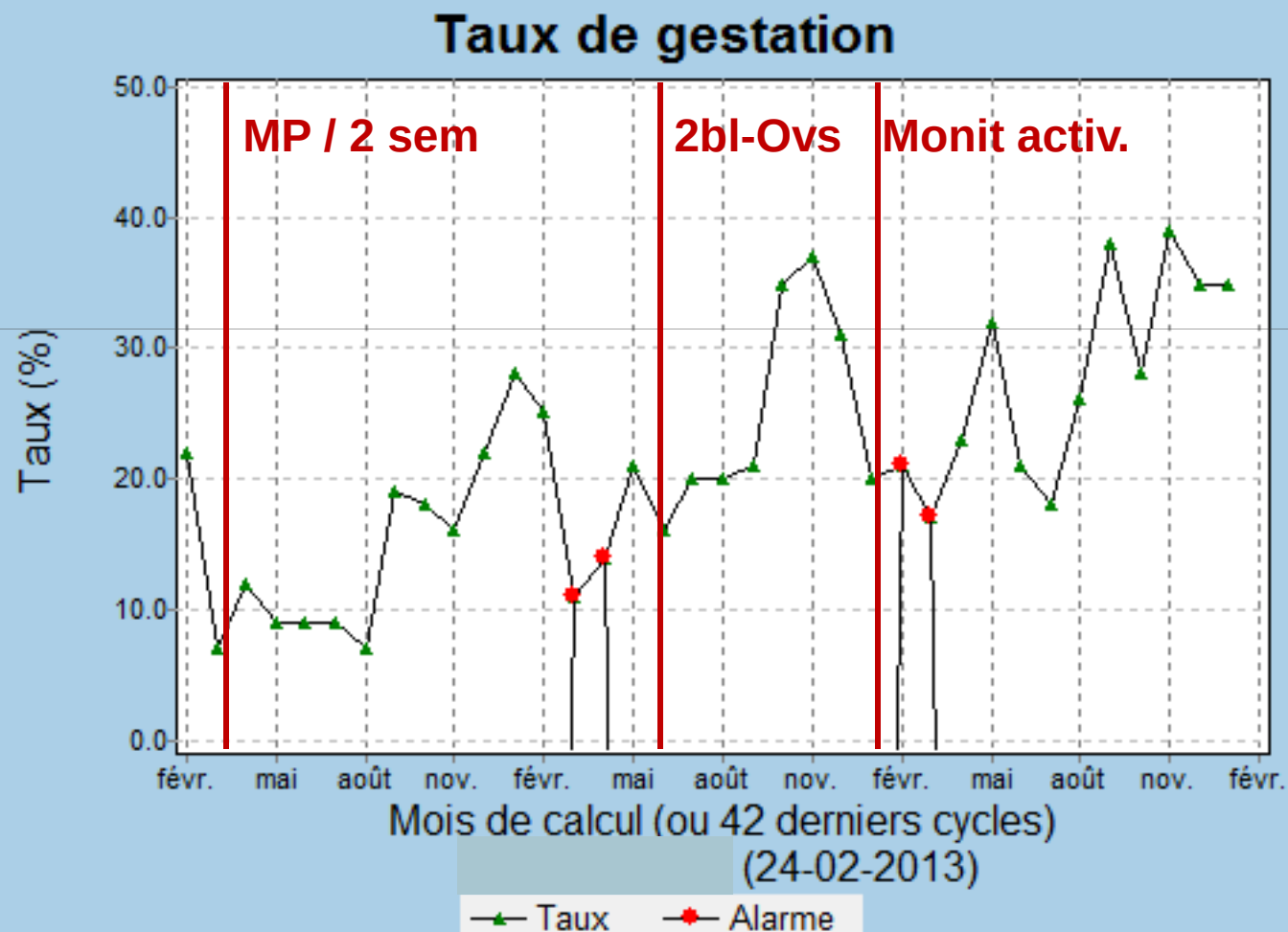


ÉTUDE DOUBLE-OVSYNCH

Succès comparé - saillie 1 vs 2+

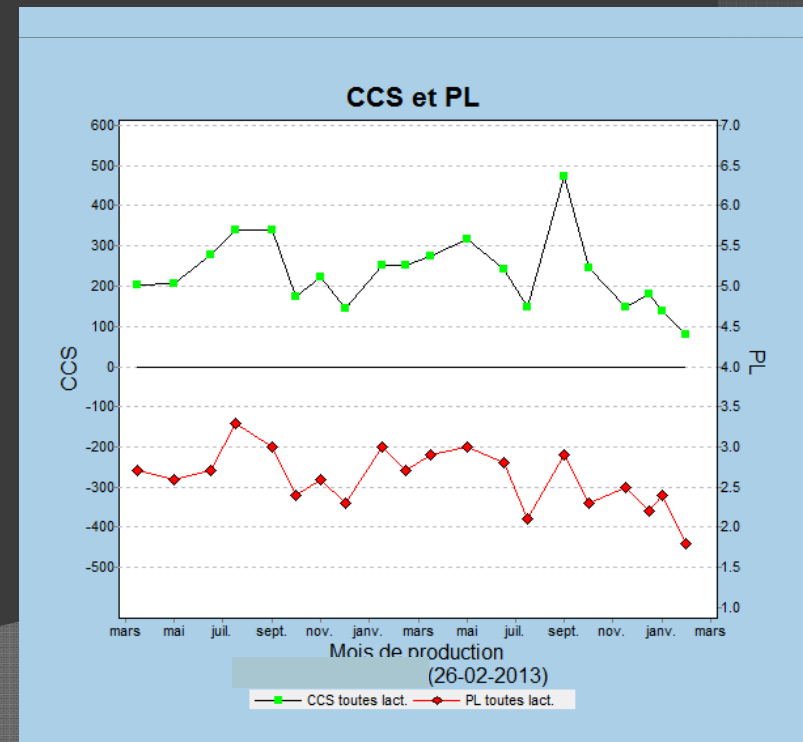
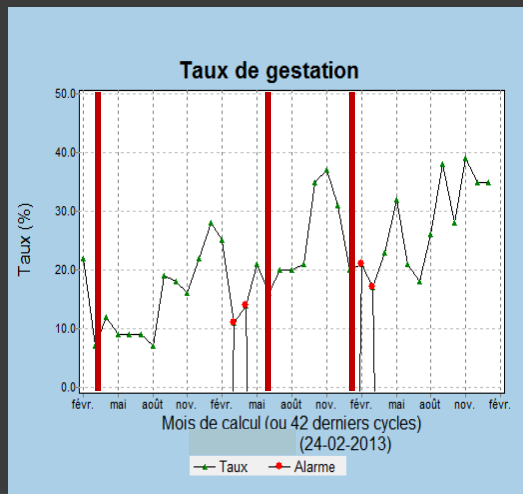


ÉTUDE DOUBLE-OVSYNCH



ÉTUDE DOUBLE-OVSYNCH

- Effets « non-reproducteurs »
 - Plus de liberté de choix pour la réforme !
 - Diminution des CCS
 - Autres priorités (logement, génétique etc...)



MERCI...



CLINIQUE VÉTÉRINAIRE
COATICOOK