

7. DAIRY PROGENY TESTING PROGRAMME IN INDONESIA

**DAIRY PROGENY TESTING PROGRAMME
IN INDONESIA**

Prepared for
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**MINISTRY OF AGRICULTURE
DIRECTORATE GENERAL OF LIVESTOCK PRODUCTION SERVICES
SINGOSARI ARTIFICIAL INSEMINATION CENTER**

DAIRY PROGENY TESTING PROGRAMME IN INDONESIA

I. INTRODUCTION

Progeny Testing programme is carried out two times in Indonesia. The 1st Progeny Testing programme carried out in 1986 until 1992 used 3 heads of candidate bull. The 2nd Dairy Progeny Testing programme carried out in 1989 until 1995 used 5 heads of candidate bull. The 5 heads of candidate bull in 2nd Progeny Testing programme consist of 2 heads that are from 1st Dairy Progeny Testing programme and 3 heads were new one. All of candidate bull came from Japan. The 1st and 2nd Dairy Progeny Testing programme were part of The Strengthening Artificial Insemination Centre Project (ATA 233 Project) as cooperation between The Government of Japan through JICA (Japan International Cooperation Agency) and The Government of Indonesia through DGLS (Directorate General Livestock Services).

Progeny Testing in Dairy Cattle is very important to know about genetics transmitting ability of sire to his offspring. After the ATA 233 project finished, Singosari AI Centre have carried out the 3rd Progeny Testing programme. This programme have started in 1998 used 5 heads of "local" candidate bull. Its call "local" candidate bull because it was produced from planning mating between "local" elite cow with imported elite bull. We hope "local" candidate bull have good adaptation ability which got from his dam and high genetics quality that got from his sire. It is important to minimize interaction between genetics factor and environment factor for optimum milk production performance.

In 1999, Singosari AI centre purchased 22 heads of calves of candidate bull and reared it. In 2001, that calves selected become 5 heads of candidate bull that used in the 4th Dairy Progeny Testing programme. Progeny Testing programme will be continued year by year, and some day in the future, we wish we can produce Indonesian Frisian Holstein that have good adaptation ability with tropical environment and have high genetics quality

II. CANDIDATE BULL

Candidate bull used in Progeny Test III obtain from local elite cows and elite bull mating. The elite bull were obtained by using imported semen donated by JICA. These candidate bulls were call as Local Dairy Candidate bulls. Production of candidate bulls programme was conducted by the following step:

A. Selection of elite cows

Selection of elite cows based on the following criteria :

1. Frisian Hoslstein
2. The average milk production is more than 15 kg/day (more than 4 500 kg/305 days in the first lactation.
3. At first until third lactation period
4. Pedigree record is available
5. Production and reproduction record are available
6. Good condition of health
7. Without reproductive disorder such as sterility, getting pregnant after 3 times insemination.

From 295 heads cows, we selected 192 heads which used for producing candidate bulls. (table 1)

Table 1. Local Elite Cow and Total Selected for Producing Candidate Bull

No.	Location	Total of elite cows (heads)	Total selected elite cows (heads)
1.	District of Kediri , East Java	46	28
2.	BPT-HMT Baturraden Central Java	135	99
3.	West Java	84	65
	Total	295	192

B. Distribution of Elite Frozen Semen

Mating program between local elite cows and elite bulls was carried out by artificial insemination the local elite cows with elite frozen semen donated by JICA. We used frozen semen from the bull A-Chel-Brook Bell Again – ET (P542), Rothrock Starbuck Adam –ET (P543) and Birch-Echo Matt Chief-ET (P292) from Japan. In April 1996, we distributed 576 doses frozen semen (table 2)

Table 2. Distribution of Imported Frozen /semen for Producing Local Dairy Candidate bulls

Location	P542	P543	P292	Total
District of Kediri. East Java	30	27	27	84
BPT-HMT Baturraden	99	99	99	297
West Java	66	66	63	195
Total	195	192	189	576

c. The rearing of candidate bulls

Technical specification of local candidate bull will be purchased as the following condition :

1. Their parents have technical specification standard
2. Minimum birth weight is 35 kg
3. White clear FH character
 - a. Clear black –white colour border
 - b. All black or white colour is rejected
 - c. No other colour beside black and white
 - d. Tail end colour is white
 - e. If black colour starts from under tarsus, not cut white colour.
4. Healthy without defect.
5. Not twin calf

Maximum age of calves purchasing is one week old and then growing in the rearing unit. This method ensure to get uniform feeding and management, therefore the calves grow according to their genetic potency.

After birth in farm, the body weight, wither height, chest girth and body length of the calves from elite cows were measured. From 42 heads of calves, 20 heads were purchased and put in the rearing unit of Singosari AI Center. During rearing period, body weight, wither height, chest girth and body length were also recorded every month until the age of 12 months.

C. Selection of Candidate Bulls

After reach 15 months old, the candidate bulls were selected based on their parent health, semen quality, libido and growth rate. From 20 heads of candidate bulls, 5 heads were chosen to produce frozen semen for progeny testing programme as the following table.

Table 3. The Name of Candidate Bulls which Tested in the Third Progeny Test in Singosari AI Center.

No.	Code Number of Candidate Bulls	Name of Candidate bulls	Sire code	Dam	
				Code	Milk yield
1	39633	Chelsy	P543	39192	305,2X,6 211
2	39634	Stary	P543	29690	305,2X,6 459
3	3975	Rocksy	P542	Mawar	305,2X, 5 159
4	39736	Brocksy	P542	Bomber	305,2X,5 053
5	39737	Bellsy	P542	66253	305,2X, 5 394

III. RECIPIENT COWS

A. Selection of Recipient Cows

Execution of progeny test in the field in cooperation with Regional Livestock Services at provincial or district level, Technical Operation Unit (UPT), Dairy cooperative Union of Indonesia (GKSI) and Dairy Cooperative. Selection of recipient cows was started in August 1998 based on the following condition :

1. Frisian Holstein Cows
2. No heifer
3. Healthy and normal
4. Not pregnant
5. Without reproduction disorder
6. Getting good feeding and management
7. Production and reproduction record is available

B. Distribution of Frozen Semen of Candidate Bull

Semen from candidate bulls is collected and distributed to the field for progeny testing programme. The requirement of frozen semen based on S/C (

Service per Conception) = 3. For example Total of recipient cows = 3 000 heads, the requirement of frozen semen = 3 X 3000 = 9 000 dose.

C. AI, Pregnant Cows and parturition of Recipient Cows

Farmer following progeny testing programme were advised not to sell the recipient cows as well as the daughter cows. But in reality it is very difficult especially for small holder farmer. Many farmers have habit to sell some calves to buy one pregnant cows. As a result many recipient cows lost and a little parturition recipient cows left (table 5).

Table 4. Target of Recipient Cows, Total of Distribution Semen, AI, Pregnant and Parturition Recipient Cows reported to Singosari AI Centre

No.	Location	Target Of RC	Total of Frozen Semen	Target Of AI	Total of Pregnant RC (recorded)	Total of Parturition RC (recorded)
I	District of Malang					
	1. Jabung	300	100	268	148	103
	2. Dau	450	150	358	176	51
	3. Batu	1500	500	255	184	85
	4. Pujon	900	300	179	40	36
II	District of Pasuruan					
	1. Purwodadi	600	200	202	49	22
	1. Getasan	1500	500	625	165	149
III	District of Garut					
	1. Bayongbong	450	150	127	101	89
	2. Cisarupan	600	200	175	28	17
	3. Cikajang	450	150	100	56	36
IV	Distict of Bandung					
	1. Pangalengan	900	300	345	194	88
	2. Cisarua	750	250	150	11	11
	3. Lembang	600	200	117	75	33
	Total	9 000	3 000	2 901	1 227	720

IV. DAUGHTER COW

In Progeny Testing Programme, Daughter Cow has an important role. Data which will be analysed is milk production from Daughter Cow. The ideal total daughter cow each candidate bull is 20 heads. Practically total of daughter in the field decrease from time to time. Factors which influenced the total of Daughter Cow as follows :

1. New Discovery

New discovery happened after technician check the AI Card and find daughter cow that formerly was not found in Daughter Cow list. New discovery daughter cow many found in Dau (11 heads) and Bayongbong (16 heads)

2. The lost DC.

Including in the lost DC : dead, sold, moving, etc. The most total because of soled by the owner. Progeny Test staff has given explanation not to sell the daughter cow because they have good genetic. Most farmer sell when DC in 3- 5 months old, although there are also farmer sold a pregnant DC. Usually farmer sell DC to fulfil their need for example: school fee, wedding party, and other emergency need. Some formers think that rearing calves will increase expenditure without producing milk, therefore they sell some daughters for getting money to buy one pregnant cow.

3. Small DC

Small DC is usually caused by lack of feeding especially in growing period. Every time get such DC, Progeny Staff give explanation in order to improve feeding management. Small DC many found in Jabung and Getasan. To improve feeding and management in Jabung we carried out training course for farmers in Jabung with JICA Expert and counterpart from Bandung as instructors on November 13, 2001.

4. DC. fail to be pregnant

Three months after AI, technician check pregnancy of DC, but the skill technician can do before three months. Expert JICA (Dr. Tanaka Hozumi) with counterpart from Singosari AI Centre trained the local technician about treatment of reproductive disorder by using PDF 2@ and Popiden Iodine with good result. Lack of feeding not only cause small body size but also late oestrus. In every investigation time the technician check the body condition and the condition of feeding management. In order to know the growth rate, technician also measure body weight, body length, wither height and chest girth. Actually this is local technician's job, but in reality it is done by Singosari AI centre staff.

5. Abortion DC

Abortion DC can not produce normal volume of milk, therefore these DC can not used in Progeny Test Program. Abortion many happened in Getasan. Beside 4 DC, many non progeny test cows in this area got abortion. We suggest to Agriculture Services of Semarang District to investigate more intensive about this problem..

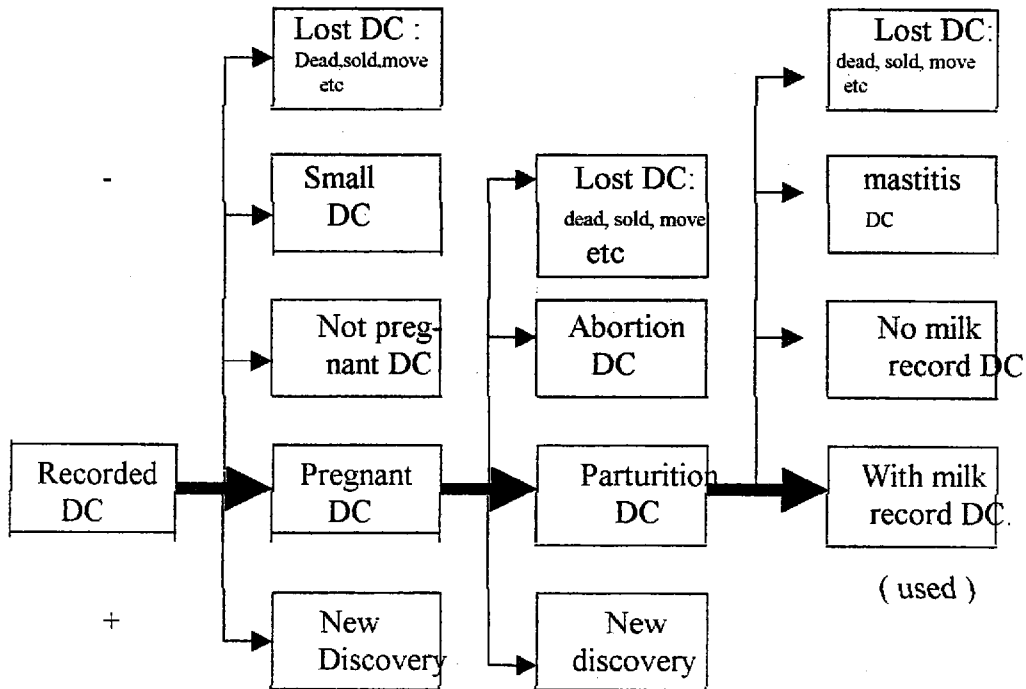
5. Mastitis DC

The mastitis DC can not produce normal volume of milk, therefore the data is not be analysed. Mastitis DC found in Pangalengan and Getasan.

6. DC without milk record

Dairy farmers in Indonesia had no habit to record the daily milk production of his cows. DC without milk record can not use for progeny test program. This following scheme show factors which influence the total of Daughter Cow.

SOME FACTORS AFFECTING THE TOTAL OF USED DUGHTER COWS



Based on the above scheme it is easy to understand that the total of used daughter cows along the time become decrease and decrease as showed the following result of inspection to the field.

V. RESULT OF FIELD INPECTION

In 2001 and 2002, four time field inspection was carried out as follows

- First Inspection : May 2001
- Second Inspection : August 2001
- Third Inspection : November 2001
- Forth Inspection : February – April 2002

The detail time schedule of field inspection see attachment 1.

1. First Inspection

The result of first inspection illustrated in table 5

Table 5. The total of Daughter Cow in first inspection

Province	Location	Total of frozen semen distributed	Target of RC	AI of RC	Pregnancy rate	Parturition of RC	Number of Daughter Cow
East Java	Jabung	300	100	268	148	103	47
	Dau	450	150	358	176	51	10
	Batu	1500	500	255	184	85	13
	Pujon	900	300	179	40	36	13
	Purwodadi	600	200	202	49	22	12
	Total	3750	1250	1262	597	297	95
Central Java	Getasan	1500	500	625	165	140	89
West Java	Bayongbong	450	150	127	101	89	13
	Cisurupan	600	200	175	28	17	4
	Cikajang	450	150	100	56	36	7
	Pangalengan	900	300	345	194	88	13
	Cisarua	750	250	150			11
	Lembang	600	200	117	75	33	3
Total	3750	1250	1014	454	263	51	

2. Second Inspection :

The result of second inspection illustrated in table 6

Table 6. The Total of Daughter Cow :

Location	Total of DC May 2001	New Discovery	Total of DC August 01	Lost : dead, sold, move, etc	Parturition	Pregnancy		No. AI	Small	Young	Abortion (A)	No visit (BK)	Treatment	Remark	
						(+)	(+/-) (-)								
I. JATIM															
1	JABUNG	47	0	47	3	0	8	2	3	20	9	2	0	0	(3)
2	DAU	10	11	21	5	0	6	1	5	0	0	0	1	3	(1)
3	BATU	13	1	14	1	0	6	0	2	0	0	0	0	5	(2)
4	PUJON	13	0	13	1	0	3	4	0	4	0	0	0	1	(0)
5	PURWODADI	12	0	12	4	2	2	1	1	2	0	0	0	0	(1)
TOTAL JATIM		95	12	107	14	2	25	8	11	26	9	2	1	9	(7)
II. JATENG															
1	GETASAN	89	5	94	19	2	26	11	3	14	11	6	1	1	(3)
III. JABAR															
1	PANGALENGAN	13	0	13	2	1	9	0	0	0	0	0	0	1	(0)
2	CISARUA	4	0	4	0	0	3	1	0	0	0	0	0	0	(0)
3	LEMBANG	7	0	7	4	0	3	0	0	0	0	0	0	0	(0)
4	BAYONGBONG	13	16	29	3	3	14	1	0	1	1	0	0	6	(2)
5	CISURUPAN	11	0	11	6	31	1	0	0	0	0	0	0	1	(0)
6	CIKAJANG	3	0	3	0	0	3	0	0	0	0	0	0	0	(0)
TOTAL JABAR		51	16	67	15	4	33	2	0	1	1	0	0	8	(8)
TOTAL		235	33	268	48	8	84	21	14	41	21	6	2	18	(12)

3 The third inspection :
The result of the third illustrated in table 7

Table 7. The Total of Daughter Cow in third inspection

No.	Location	Total of DC August 01	New discovery	Total of DC Nov. 01	Lost : dead sold, moved	Parturition	Pregnancy			No. AI	Small	Young	Abortion	No Investigation	Treatment	Remark
							(+)	+/-	(-)							
I. JATIM																
1	JABUNG	47	0	47	2	2	10	2	2	19	8	2	0	0	2/3	
2	DAU	21	0	21	7	1	7	2	3	0	0	0	1	0	1/1	
3	BATU	14	1	15	3	3	4	0	2	0	2	0	1	0	0/2	
4	PUJON	13	0	13	1	0	6	1	1	4	0	0	0	0	0	
5	PURWO DADI	12	0	12	3	3	3	0	0	2	0	0	0	0	1/1	
TOTAL JATIM		107	1	108	16	9	30	5	8	25	10	2	2	0	4/7	
II. JATENG																
1	GETASAN	94	0	94	19	6	30	5	2	14	10	6	1	0	2/3	
III. JABAR																
1	PANGALENGAN	13	0	13	7	1	5	0	0	0	0	0	0	0	0	
2	CISARUA	4	0	4	0	1	3	0	0	0	0	0	0	0	0	
3	LEMBANG	7	0	7	4	0	3	0	0	0	0	0	0	0	0	
4	BAYONG BONG	29	0	29	6	6	14	0	0	1	1	0	1	0	2/2	
5	CISURUPAN	11	3	14	6	34	5	0	0	0	0	0	0	0	0	
6	CIKAJANG	3	0	3	0	0	3	0	0	0	0	0	0	0	0	
TOTAL JABAR		67	3	70	23	11	33	0	0	1	1	0	1	0	2/2	
TOTAL		268	4	272	58	26	93	10	10	40	21	8	4	0	8/12	

4. Fourth Inspection :

Result of the fourth investigation illustrated in table 8

Table 8. The Total of Daughter Cows in fourth inspection

No.	Location	Total of DC Nov. 01	New Discovery	Total of DC Feb. 02	Lost (heads sold/moved)	Parturition	Pregnancy			No. AI	Small (**)	Young (***)	Abortion	Mastitis	Dystocia	Remark
							(+)	(+/-)	(-)							
I. JATIM																
1	JABUNG	47	2	49	4	3	13	0	2	17	8	0	0	0	0	
2	DAU	21		21	7	3	4	2	2	0	0	0	3	0	0	
3	BATU	15		15	3	5	2	0	2	0	0	2	1	0	0	
4	PUJON	13		13	1	3	8	0		0	0	0	0	0	1	
5	PURWODADI	12		12	4	4	2	0	0	2		0	0	0	0	
	TOTAL JATIM	108	2	110	19	18	29	3	6	19	8	2	4	0	1	
II. JATENG																
1	GETASAN	94	0	94	22	11	25	0	2	14	10	6	4	1	0	
III. JABAR																
1	PANGALENGAN	13	0	13	12	1	0	0	0	0	0	0	0	2	1	
2	CISARUA	4	0	4	1	3	0	0	0	0	0	0	0	0	0	
3	LEMBANG	7	0	7	4	3	0	0	0	0	0	0	0	0	0	
4	BAYONGBONG	29	0	29	6	10	10	0	0	1	1	0	1	(1)*	0	*cured
5	CISURUPAN	14	0	14	10	2	1	0	0	0	0	0	1	0	0	
6	CIKAJANG	3	0	3	0	1	2	0	0	0	0	0	0	0	0	
	TOTAL JABAR	70	0	70	33	20	13	0	6	1	1	0	2	2	1	
	TOTAL	272	4	274	74	49	67	3	8	34	21	6	10	3	2	

*) This cow has cured mastitis **) Small size can't used ***) Young cow can't used.

VI. MILK PRODUCTION OF DAUGHTER COWS

Some of daughter cows has been parturition. The owner were advised to record daily milk production. Some farmers doing well but the others feel that it increase they work and they are not interest to do. The total of parturition cows is 52 heads. Table 9 show the tentative data about average milk production in each location.

Table 9. The average of milk production of Daughter Cows during ten days in some location (tentative data)

Ten days	Purwodadi	Batu	Bayongbong	Cisarua	Cisurupan	Dau	Getasan	Jabung
1	184	125	144	134	139	137	136	160
2	175	140	136	134	137	137	138	160
3	201	142	147	138	149	138	147	124
4	198	152	162	150	154	149	153	139
5	197	151	170	147	157	150	154	139
6	183	151	195	144		150	137	134
7	183	147	201	136		68	144	109
8	174	136	177	136		90	134	100
9	166	139	192	137		88	138	95
10	162	145	192	130		90	156	94
11	162		172	132			155	
12	148		160	138			143	
13	148		159	127				
14	142		158	121				
15	133		156	124				
16	126							

To know the graft of each daughter cow see attachment 2.

VII. THE FOURTH PROGENY TESTING PROGRAM

For continuing progeny Testing Program, in 1999 the same procedure we started again to produce candidate bulls. We purchased 22 heads of male calves and put in the rearing unit in Singosari AI Centre. The pedigree of candidate bulls can be seen in table 10

Table 10. The Candidate bulls for the fourth Progeny Testing Program.

No.	Calves Code	Original	Birth Date	Sire Code	Dam Code	Dam milk production (kg)	Birth Wight (kg)
1.	CB 1 A	Baturraden	02/12/99	P 521	1147	5639	48
2	CB 2 A	Baturraden	10/12/99	P 542	306-91	4877	39
3	CB 3 A	Baturraden	12/12/99	P 543	339-91	4903	47
4	CB 4 A	Baturraden	12/12/99	P 292	868-97	5215	42
5	CB 5A	Baturraden	20/12/99	P 521	414-92	4661	35
6	CB 6A	Baturraden	22/12/99	P 292	868-97	6017	38
7	CB 7 A	Baturraden	15/01/00	P 543	458-92	5167	35
8	CB 8A	Baturraden	18/01/00	P 521	422-92	4659	45
9	CB 9A	Baturraden	01/02/00	P 543	603-94	5167	42
10	CB 10A	Baturraden	04/02/00	P 543	572-94	6600	44
11	CB 11A	Kandangan	31/01/00	P 292	Melati	4726	44
12	CB 12A	Baturraden	10/02/00	P 521	867-97	4835	42
13	CB 13A	Baturraden	10/02/00	P 521	839-97	5317	42
14	CB 14A	Baturraden	11/02/00	P 292	3971	5034	41
15	CB 15A	Baturraden	14/02/00	P 543	108-89	4753	46
16	CB 16A	Baturraden	14/02/00	P 521	863-97	4660	45
17	CB 17A	Baturraden	17/02/00	5818N	864-97	5584	39
18	CB 18A	Baturraden	24/02/00	P 543	625-94	4999	42
19	CB 19A	Baturraden	26/02/00	P 543	565-94	5804	35
20	CB 20A	Baturraden	26/02/00	P 543	565-94	5804	36
21	CB 21A	Baturraden	28/02/00	5818N	846-97	7357	48
22	CB 22A	Kandangan	05/03/00	P 292	Cantik	5214	38

From 22 heads of calves we selected 5 candidate bulls based on the same criteria with the third progeny testing program as seen in table 11

Table 11. The selected candidate bulls of The Fourth Progeny Testing Program

No.	Name of Candidate bull	Calves Code	Candidate bull Code	Date of birth	Sire code	Dam Code	Milk Production
1	Boisy	CB 17A	39941	17 Feb 00	58-15N	836-97	5584
3	Cherry	CB 6A	39943	22-Dec-99	P292	86897	6017
6	Ichiroisy	CB 5A	30044	20 Jan 00	P521	414-92	4661
7	Bootsy	CB 21A	30047	28-Feb-00	58-18N	846-97	7357
10	Bissy	CB 14A	30048	11 Feb 00	P292	3971	5034

Distribution of frozen semen of candidate bull have been carried out since February 2000. The target of Recipient Cow each candidate bull is 600 heads cows. The requirement of frozen semen is 3 X 600 dose = 1800 dose. Therefore the total of frozen semen requirement is 5 X 3000 dose = 9000 dose. Target of insemination in each province as follows:

East Java : 1250 heads of recipient cow = 3750 dose of frozen semen
 Central Java : 700 heads of recipient cow = 2100 dose of frozen semen
 West Java : 1050 heads of recipient cow = 3150 dose of frozen semen
 Total : 3000 heads of recipient cow = 9 000 dose of frozen semen

Until May 200 the realization of distribution of frozen semen is 6902 dose (see table 12)

Table12. The Target and Realization of frozen semen distribution

Province	Location	39941		39943		30044		30047		30048		Total	
		T	R	T	R	T	R	T	R	T	R	T	R
East Java	Malang												
	Jabung	150	150	150	150	150	150	150	150	150	150	750	750
	Dau	90	190	90	90	90	90	90	90	90	90	450	450
	Batu	150	150	150	150	150	150	150	150	150	150	750	750
	Pujon	90	60	90	60	90	60	90	60	90	60	450	300
	Ngantang	120	120	120	120	120	120	120	120	120	120	600	600
	Total (Malang)	600	570	600	570	600	570	600	570	600	570	3000	2850
	Pasuruan												
	Purwodadi	150	0	150	0	150	0	150	0	150	0	750	0
	Total (East Java)	750	570	750	570	750	570	750	570	750	570	3750	2850
Central Java	Semarang (Jetak-Getasan)	420	0	420	0	420	420	420	420	420	173	2100	1013
West Java	Bandung Pangalengan	90	32	90	90	90	90	90	0	90	90	450	302

Attachment 1.
Time Schedule of Field Inspection

**I. Time Schedule of The First Field Inspection of Progeny Testing Program
(May 2001)**

Tuesday, May 1, 2001	14.00-05.00	Malang-Bandung	
Wednesday, May 2, 2001	07.30-08.30	Meeting in Livestock Services of West Java Province	Bandung
	09.00-10.00	Meeting in Livestock and Fishery Services of District of Bandung	Bandung
	13.00-14.00	Meeting in KPPBS	Pangalengan
	14.00-15.00	Break	
	15.00-17.00	Supervision to Pangalengan	
	17.00-19.00	Pangalengan-Bandung	
Thursday May 3, 2001	07.30-08.30	Meeting in KUD Sarwa Mukti Cisarua	Cisarua
	08.30-12.00	Supervision to Cisarua	Cisarua
	12.00-13.0	Cisarua – Lembang	Lembang
	13.00- 14.00	Meeting in KPSBU	
	14.00-16.00	Supervision to Lembang	Lembang
	16.00-	Lembang – Garut	
Friday May 4, 2001	07.30-8.00	Meeting in Agriculture Services of District of Garut.	Garut
	08.30-9.30.	Meeting in KUD Bayongbong	Bayongbong
	9.30-12.00	Supervision in Bayongbong	Bayongbong
	13.00-14.00	Meeting in KUD Cisarupan	Cisarupan
	14.00-17.00	Supervision to KUD Cisarupan	
Saturday May 5, 2001	07.30- 08.00	Meeting in KUD Cikajang	Cikajang
	08.00-11.00	Supervision to Cikajang	
	11.00-13.00	Garut – Bandung	
	13.00-	Bandung – Malang	
Tuesday May 8, 2001	10.00-18.00	Malang – Semarang	
Wednesday May 9, 2001	07.30-08.30	Pertemuan di Disnak Prop. Jateng	Ungaran
	08.30-09.30	Meeting in Liestock and Fishery Services of	Ungaran

	09.30-10.30	District of Semarang.	Getasan
	10.30-17.00	Supervision to Getasan	
Thursday May 10, 2001	08.00- 12.00 12.00- 17.00	Supervision to Getasan Getasan – Baturraden	Getasan
Friday May 11, 2001	08.00-12.00 12.00 – 18.00	Meeting in BPT HMT Baturraden Baturraden-Yogyakarta	Baturraden
Saturday May 12, 2001	06.00-	Yogyakarta – Malang	

**II. Time Schedule of The Second Field Inspection of Progeny Testing Program
(August 2001)**

Day and Date	Time	Activities	Remark
1	2	3	4
Monday Aug.13, 2001	09.00- 11.00 13.00-17.00	Meeting in Jabung Supervision to Jabung	Participant: Recorder from Ja- bung and Purwodadi
Tuesday Aug.14, 2001	09.00-11.00 11.00-12.00 13.00-17.00	Meeting in KUD Batu Break Supervision to Dau	Participant: Recorder from Dau, Batu and Pujon
Wednesday Aug.15,2001	09.00-12.00 13.00-17.00	Supervision to Batu Supervision to Pujon	Batu Pujon
Thursday Aug.16, 2001	09.00- 17.00	Supervision to Purwodadi	Purwodadi
Sunday Aug.19, 2001	10.00-18.00	Malang – Semarang	
Monday, Aug.20, 2001	07.30-08.30 08.30- 12.00 13.00-17.00	Meeting in Livestock Services of Central ava Proince Meeting in Livestock and Fishery Services of District of Semarang Supervision to Getasan Penjelasan mengenai Tugas tugas recorder Supervisi di Getasan	Ungaran Ungaran Participant: Recorder from Getasan
Tuesday Aug.21, 2001	08.00- 17.00	Supervision to Getasan	Getasan
Wednesday Aug.22,2001	08.00-17.00	Supervision to Getasan	Getasan
Thursday Aug.23, 2001	08.00-17.00	Supervision to Getasan	Getasan
Friday,	06.00-13.00	Semarang-Malang	

Aug.24, 2001			
Sunday, Aug.26, 2001	14.00-05.00	Malang-Bandung	Bis malam
Monday Aug.27, 2001	07.30-08.30 09.00-10.00 13.00-14.00 14.00-17.00	Meeting in Livestock Services of West Java Province Meeting in Livestock and Fishery Services of District of Bandung Meeting in KPPBS Supervision to Pangalengan	Bandung Bandung Pangalengan (Recorder fromPangalengan)
Tuesday Aug.28, 2001	09.00-10.00 10.00-12.00 13.30-14.30 14.30-17.00	Meeting KUD Sarwa Mukti Cisarua Supervision to Cisarua Meeting in KPSBU Lembang Supervision to Lembang	Cisarua Cisarua Participant : Recorder from Lembang and Cisarua
Wednesday, Aug.29, 2001	07.30-8.30 09.00-10.00 10.00-17.00	Meeting in Agriculture Services of District of Garut Meeting in KUD Bayongbong Supervision to Bayongbong	Garut Participant : RecorderBayongbong Cisurupan,Cikajang
Thursday Aug.30, 2001	08.00- 12.00 13.00-14.00 14.00-17.00	Supervision to Bayongbong Supervisi toCisurupan	Bayongbong Cisurupan Cisurupan
Friday Aug.31, 2001	8.00- 9.00 09.00-11.00 11.00-13.00 13.00-	Meeting in KUD Cikajang Supervisi to Cikajang Garut-Bandung Bandung-Malang	Cikajang

**III. Time Schedule of The Third Field Inspection of Progeny Testing Program
(October - November 2001)**

Day and date	Time	Activities	Remark
1	2	3	4
Monday, October 29, 2001	06.00 – 14.00	Malang – Semarang	Malang Semarang
	14.00 – 14.45	Meeting in Livestock Services of Central Java Province .	
	14.45 – 15.30	Meeting in Livestock Services of District of Semarang	
Tuesday October 30, 2001	15.30 -	Semarang – Getasan	Getasan
	08.00 – 12.00	Supervision to Getasan	
	12.00 – 13.00 13.00 – 17.00	Break Supervision to Getasan	
Wednesday, October 31, 2001	08.00 – 12.00	Supervision to Getasan	Getasan
	12.00 – 13.00	Break	
	13.00 – 17.00	Supervision to Getasan	
Thursday, November 1, 2001	08.00 -	Getasan – Garut	
Friday, November 2, 2001	07.30 – 08.30	Meeting in Agriculture Services of District of Garut	Garut
	09.00 – 11.30	Supervision to KUD Bayongbong	Bayongbong
	11.30 - 13.00	Break	
	13.00 – 17.00	Supervision to KUD Bayongbong	
Saturday, November 3, 2001	08.00 – 10.00	Supervision to KUD Cikajang	Cikajang
	10.00 – 15.00	Supervision to KUD Cisarupan	Cisarupan
	15.00 -	Garut – Bandung	
Sunday, November 4, 2001	08.00	Holiday	Bandung
Monday Nov. 5, 2001	07.30-08.30	Meeting in Livestock Services of West Java Province	Bandung
	10.00-11.00	Meeting in Livestock Services of District of Bandung	Bandung
	13.00-17.00	Supervision to KPPBS Pangalengan	Pangalengan
Tuesday, Nov. 6, 2001	09.00-12.00	Supervision to KUD Sarwa Mukti	Cisarua

	12.00-13.00 13.00-15.00	Break Supervision to KPSBU Lembang	Lembang
Wednesday, Nov. 7, 2001	08.00 - 10.00 10.00 -	Meeting in KUD Ciwidey Bandung – Yogyakarta	Bandung
Thursday, Nov. 8, 2001	0700-	Jogyakarta – Malang	Jogyakarta

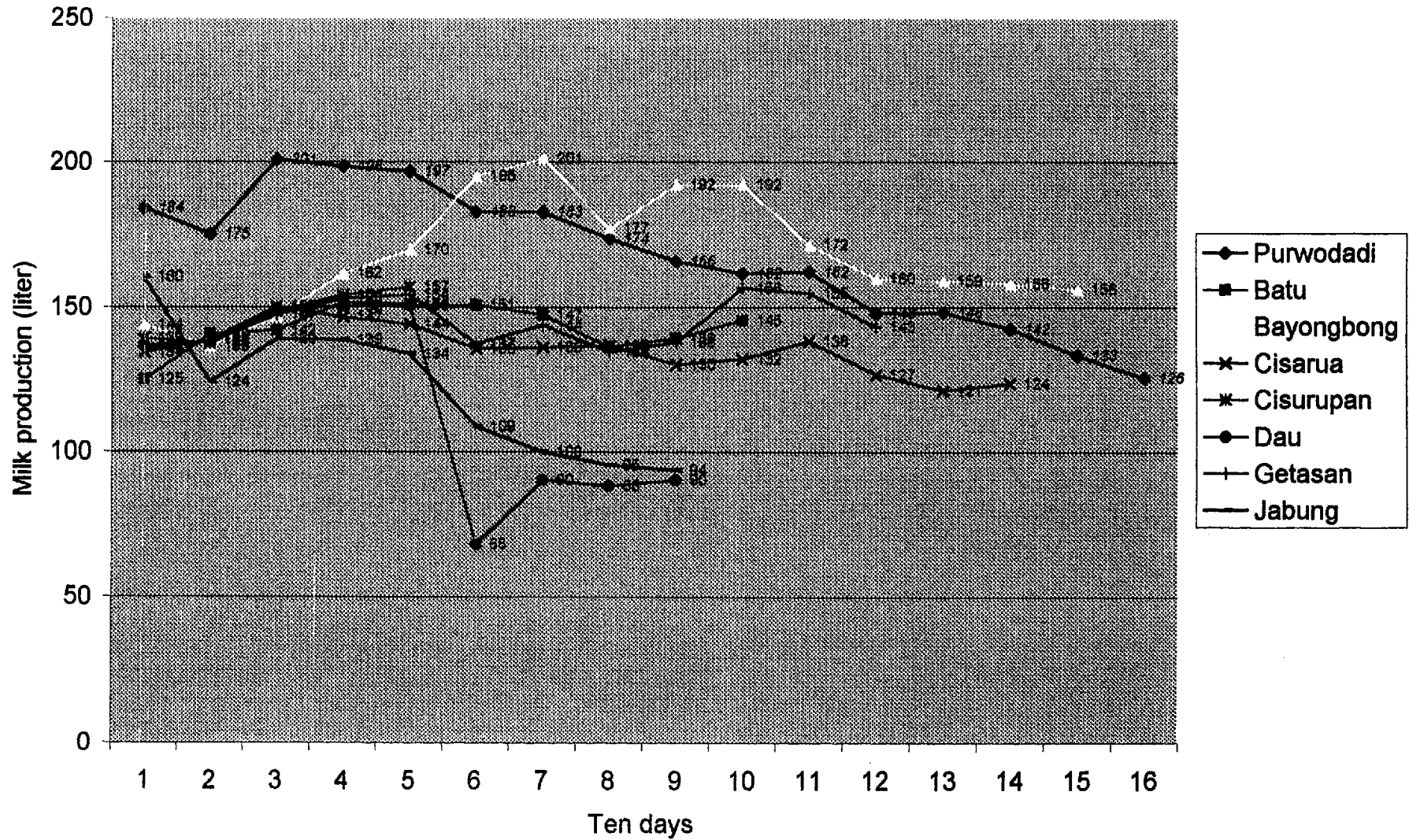
IV. Time Schedule of The Fourth Field Inspection of Progeny Testing Program
(February- April 2002)

Day and Date	Time	Activities	Remark
1	2	3	4
Monday, 25 Feb. 29, 2002	06.00 - 14.00	Malang – Semarang	Malang
	14.00 - 14.45	Meeting in Livestock Services of Central Java Province	Semarang
	14.45 - 15.15	Meeting in Livestock Services of District of Semarang	
	15.15 -	Semarang – Getasan	
Tuesday Feb. 26, 2002	08.00 - 12.00	Supervision to Getasan	Getasan
	12.00 – 13.00	Break	
	13.00 – 17.00	Supervision to Getasan	
Wednesday, Feb. 27, 2002	08.00 - 12.00	Supervision to Getasan	Getasan
	12.00 – 13.00	Break	
	13.00 –	Getasan – Garut	
Thursday, Feb. 28, 2002	07.30 – 08.30	Meeting in Agriculture Services of District of Garut	Garut
	09.00 – 12.00	Supervision to KUD Bayongbong	Bayongbong
	12.00 - 13.00	Break	Bayongbong
	13.00 - 17.00	Supervision to KUD Bayongbong	
Friday, 1 Feb. 1, 2002	08.30 – 10.00	Supervision to KUD	Cikajang
	10.00 - 11.30	Cikajang	
	11.30 - 14.00	Supervision to KUD Cisurupan	Cisurupan
	14.00 - 15.00	Garut – Bandung Meeting in Livestock Services of West Java Province	
Saturday, March 2, 2002	09.00 - 11.00	Supervision to KUD Sarwa Mukti	Cisarua
	11.30. - 13.00	Supervision to KPSBU in Lembang	Cisarua
	13.00 - 14.00	Break	Lembang

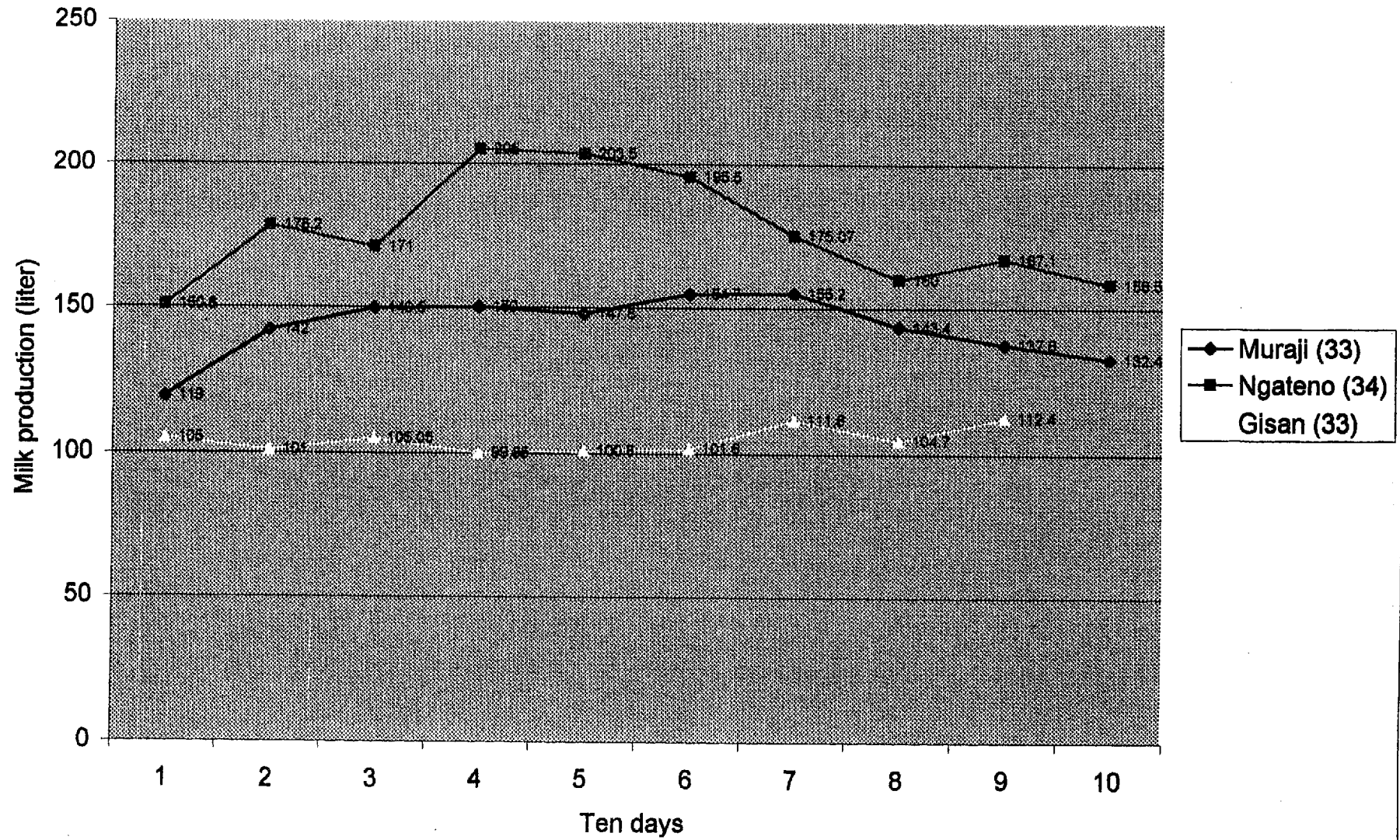
Sunday, March 3, 2002	08.00 -	Holiday	Bandung
Monday, March 4, 2002	08.30- 09.30	Meeting in Livestock and Fishery Services of District of Bandung	Bandung
	11.00-13.00 15.00-16.00	Supervision to KPBS Meeting in KUD Tani Mukti	Pangalengan Ciwidey
Tuesday, March 5, 2002	07.00 -	Bandung – Yogyakarta	Bandung- Yogyakarta
Wednesday, March 6, 2002	07.00 -	Jogyakarta – Malang	Jogyakarta
Monday, March 11, 2002	09.00 – 10.00	Meeting in Cooperative of Jabung	Jabung
	10.00 – 14.00	Supervision to Jabung	
Wednesday, March 13, 2002	09.00 - 10.00	Meeting in KUD Dau	Rabu
	10.00 - 14.00	Supervision to Dau	
Monday, April 8, 2002	09.00 - 10.00	Meeting in KOPSAE	Pujon
	10.00 - 14.00	Supervision to Pujon	
Thursday, April 11, 2002	09.00 - 10.00	Meeting in KUD Dau	Dau
	10.15 - 11.15	Meeting in KUD Batu	Batu
	12.00 - 14.00	Meeting in KUD Ngantang	
Tuesday, April 23, 2002	09.00 – 10.00	Meeting in cooperative in Jabung	Jabung
	10.00 – 14.00	Supervision to Jabung	

Attachment 2.
Graft of Milk Production of Daughter Cows

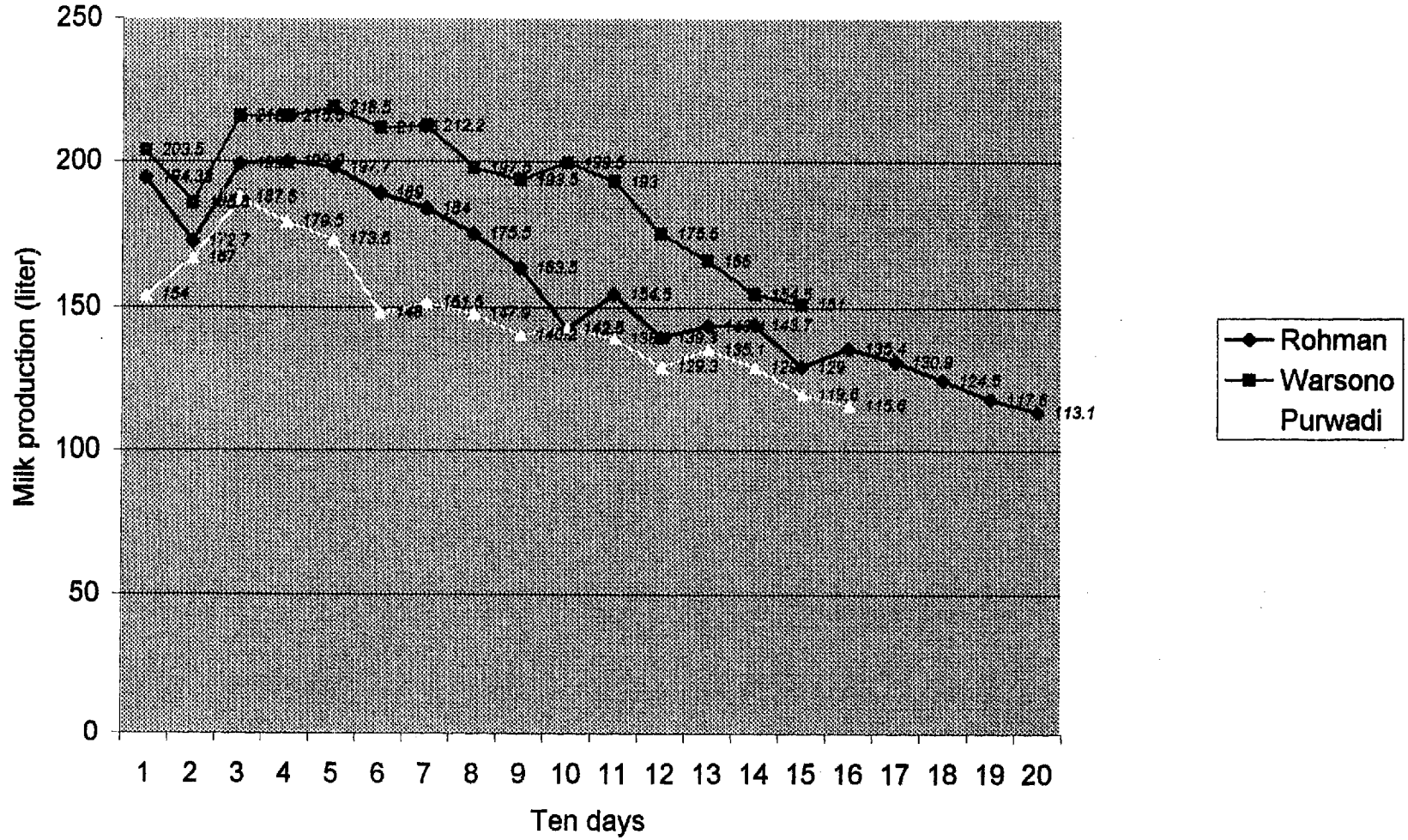
The average of milk production of DC



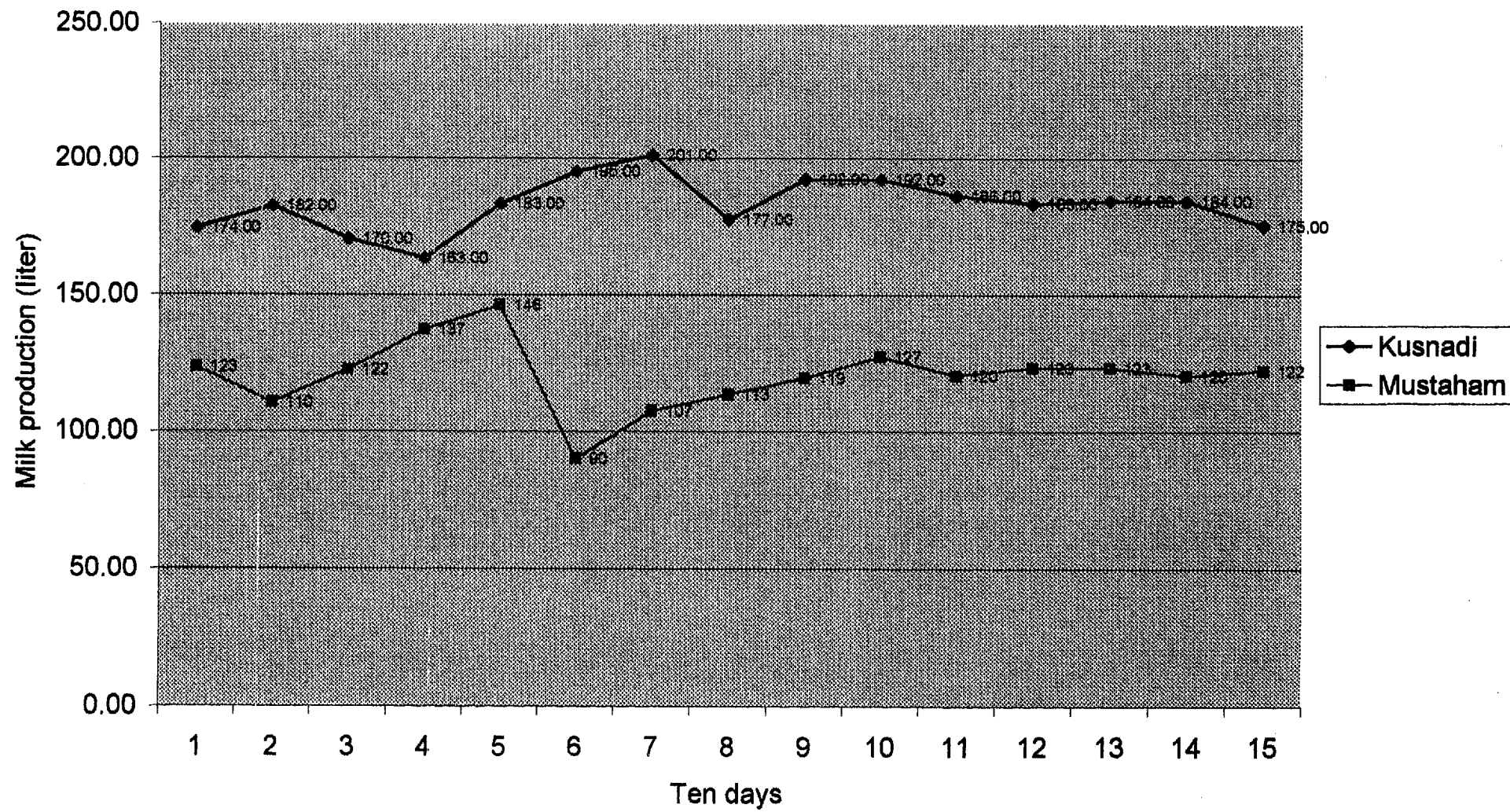
Milk production of DC in Batu



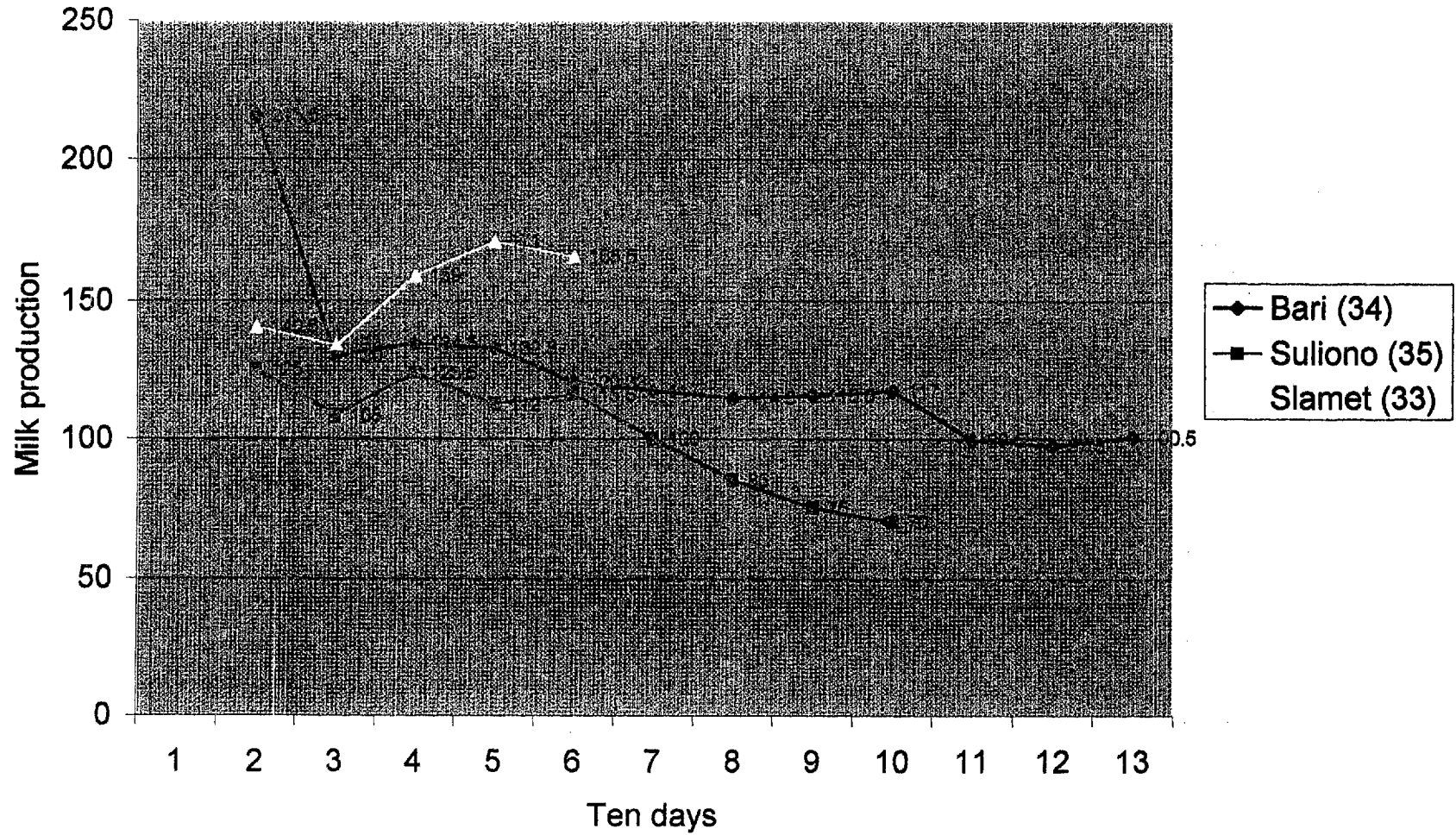
Milk production of DC in Purwodadi



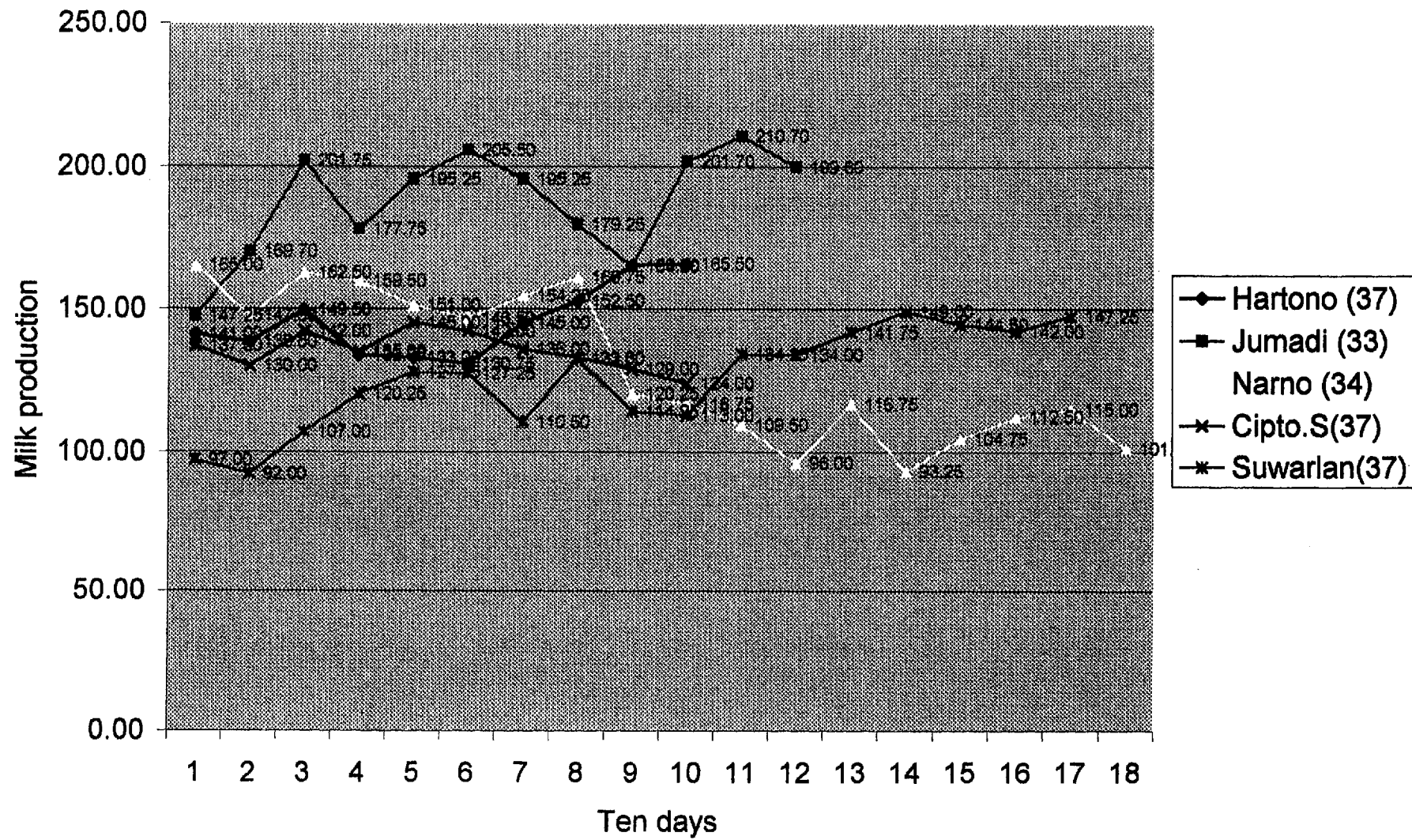
Milk production of DC in Pujon



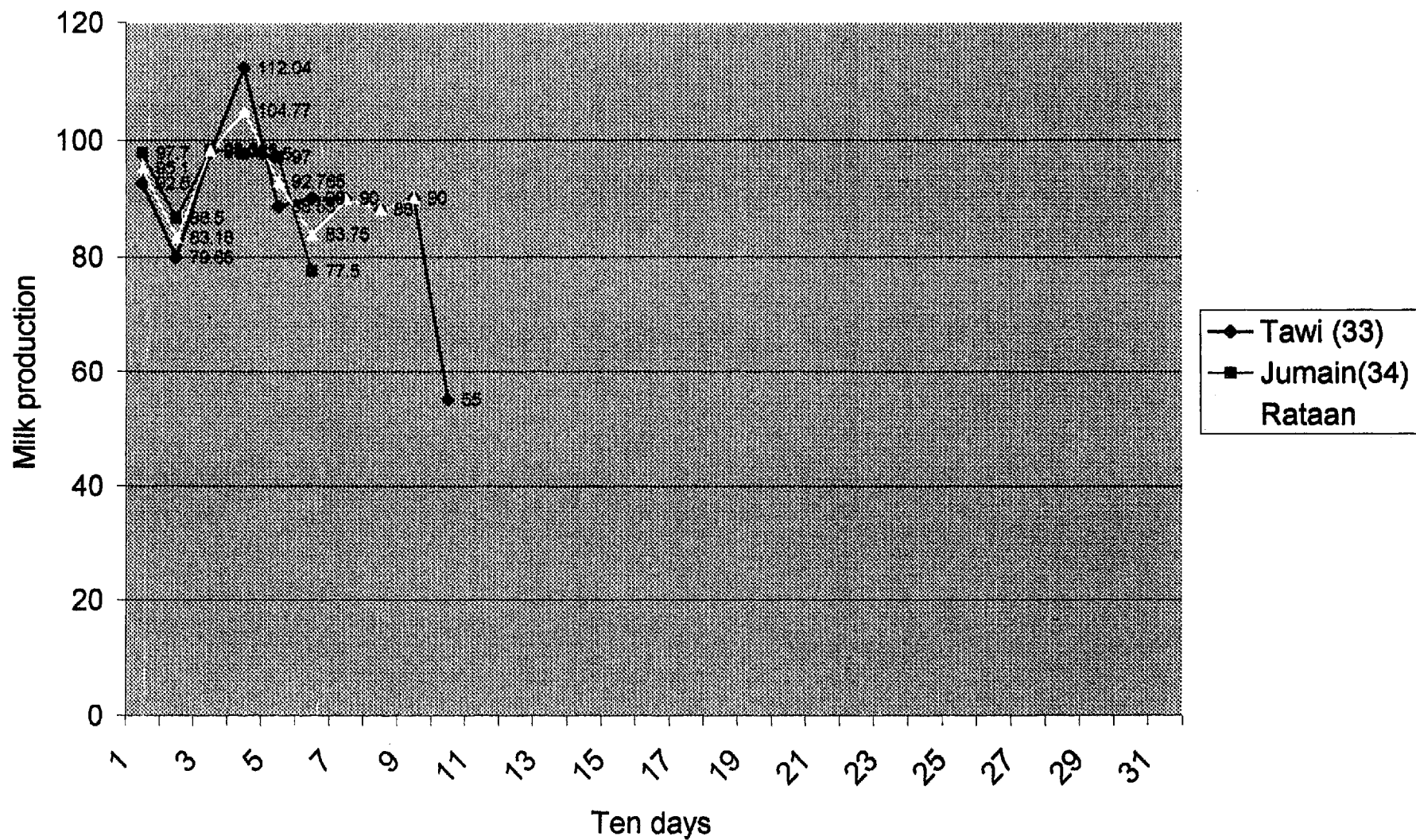
Milk production of DC in Jabung



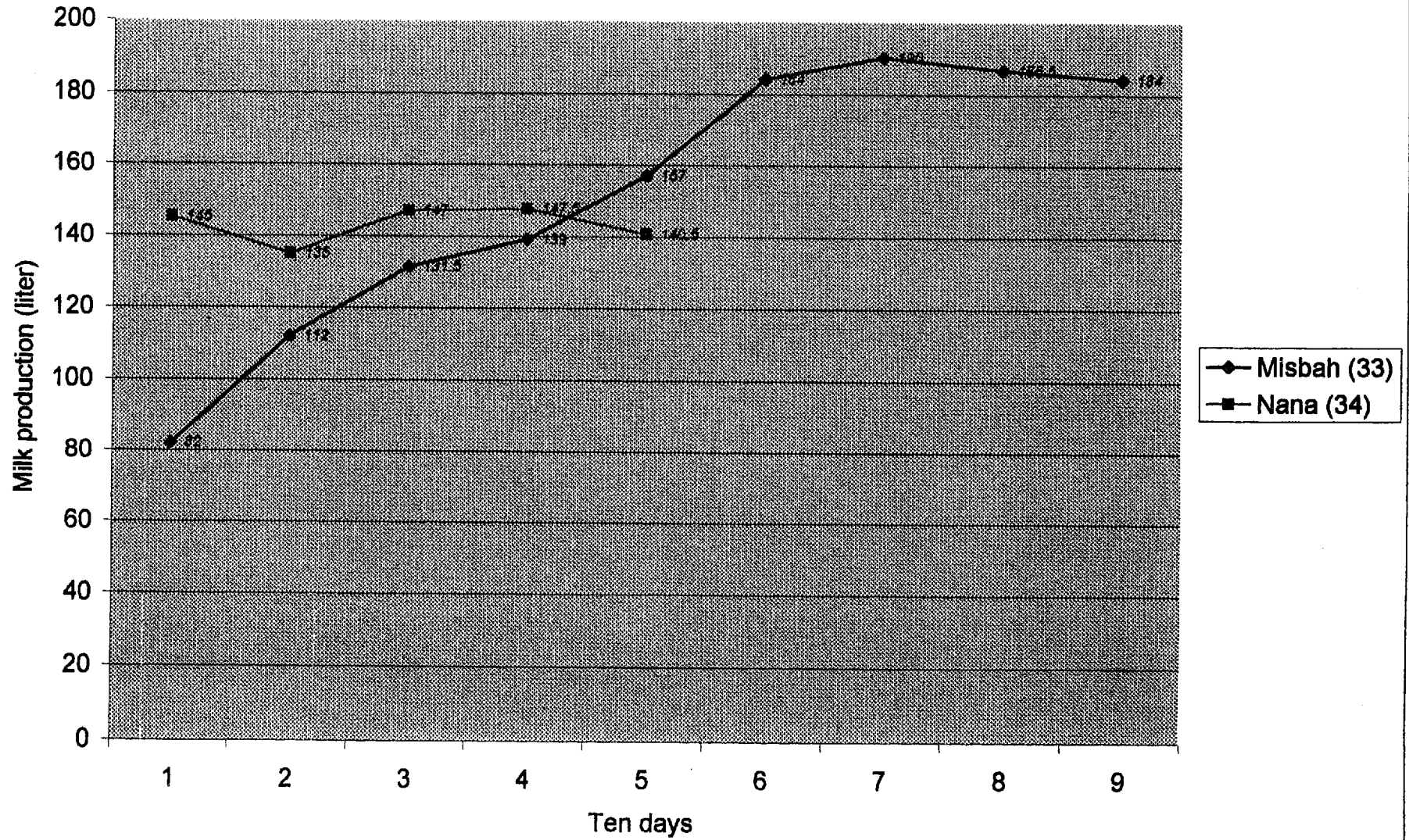
Milk production of DC in Getasan



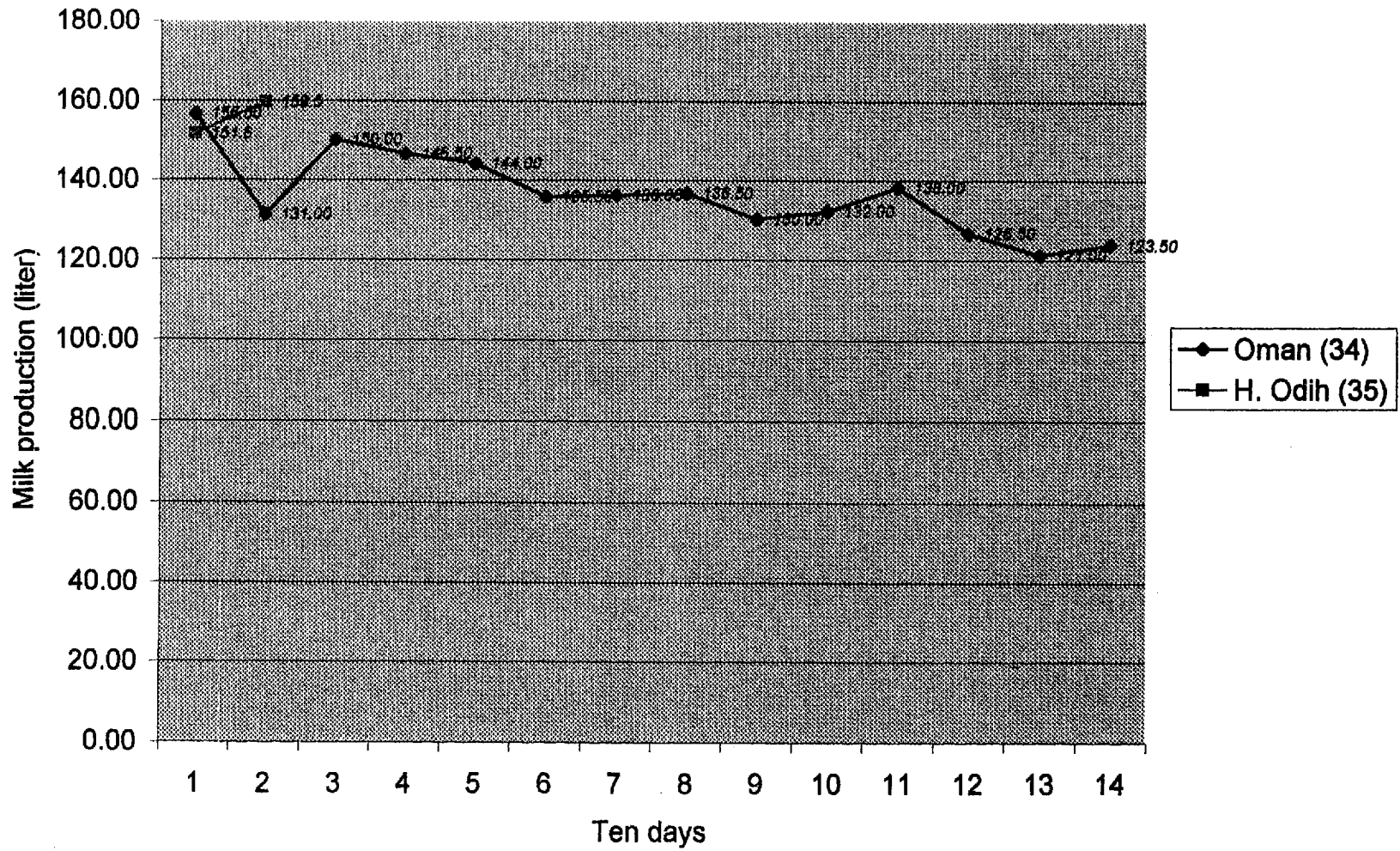
Milk production of DC in Dau



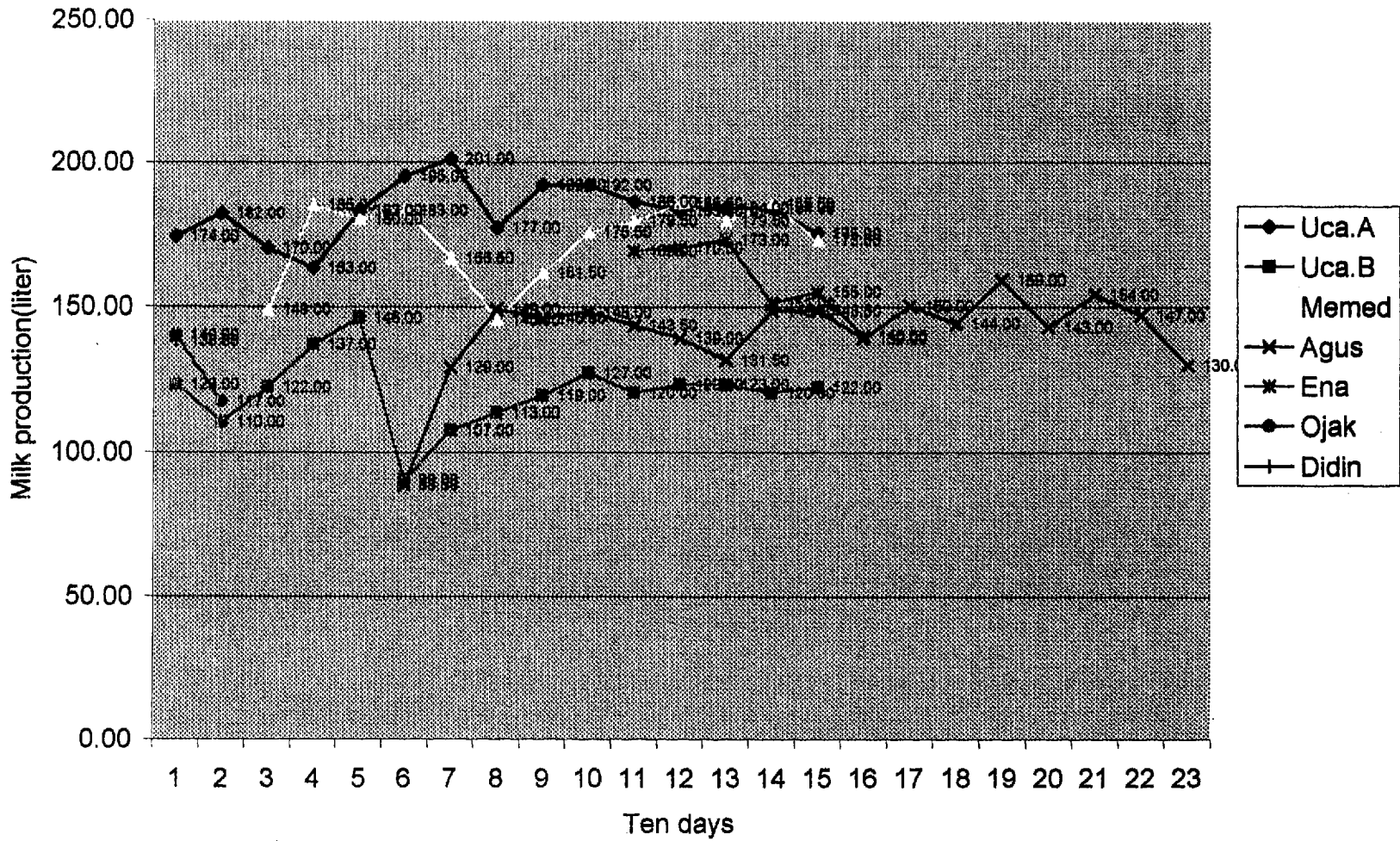
Milk production of DC in Cisurupan



Milk production in Cisarua and Lembang



Milk production of Daughter Cows in Bayongbong



Attachment 3.
List of Daughter Cows

LIST OF DAUGHTER COW OF PROGENY TEST III IN FEBRUARY 2002.

NO.	FARMER NAME	FARMER ADDRESS	NO OF FATHER	BIRTH DATE	AI DATE	PREG NANT DIAG.	DATE OF PARTURI-ON	DATE OF INSPEC-TION	REMARK
Jabung									
1	SLAMET	B.MANTREN	39633	26-Jan-00		(P)	16-Dec-01	07-Feb-02	
2	H.RUSTAWI	JABUNG	39634	12-Mar-00	23-Jul-01	(+)		07-Agust-01	
3	SUKI	PETUNG SEWU	39634	15-Jan-00	25-Jul-00	(+)		13-Agust-01	
4	BARi	SLAMPAR	39634	28-Nop-99	23-Dec-01	(P)	27-Sep-01	20-Nop-01	
5	SONDIHAJI	SLAMPAR	39634	28-Nop-99	26-Sep-01	(+)		07-Feb-02	from Gunawan
6	JONO	CINCING	39637	22-Mar-00		(+)		06-Agust-01	
7	SULIONO	BEGAWAN/Psari	39735	06-Feb-00	27-Jan-01	(P)	7-Nop-01	20-Nop-01	
8	SUHARJO	SLAMPAR	39735	22-Mar-00	?	(+)		07-Agust-01	
9	WENDI	SUKOPURO	39735	6-Feb-00	30-Apr-01	(+)		06-Agust-01	
10	H.RUSTAWI	JABUNG	39736	12-Mar-00	19-Mei-01	(+)		07-Agust-01	
11	DIONO	KEMIRI	39736	11-Mar-00		(+)		07-Agust-01	
12	SUPRIH	PETUNG SEWU	39736	22-Feb-00	03-Apr-00	(+)		13-Agust-01	
13	SONDIHAJI	SLAMPAR	39737	16-Dec-99	26-Okt-01	(+)		07-Feb-02	from Gunawan
14	BARi	SLAMPAR	39633	?	?	(+)		07-Feb-02	new discovery
15	WASIP ^a	KEMIRI	39736	13-Mar-00	07-Sep-01	(+)		07-Feb-02	
16	SUWARI ^a	KEMIRI	39737	27-Jan-00	10-Jan-02	(+)		07-Feb-02	

Dau

1	TAWI	GS.PUTUK	39633	3-Mar-00	05-Mei-01	(P)	27-Nop-01		
2	MISELAN	MULYO AGUNG	39633	18-Feb-00	02-Mei-01	(A)		abortion	1-Jan-00
3	RUMADI	PRINCI	39633	14-Feb-00	05-Jul-01	(+)			
4	SAMUJI	PRINCI	39633	29-Mar-00	22-Mei-01	(+)		18 Aug-2001	
5	DULMURAT	TEGAL WARU	39633	30-Mar-00	07-Mei-01	(+/-)		18 Aug-2001	
6	MATATIM	PPRINCI	39634	25-Mar-00	20-Mei-01	(+)		18 Aug-2001	
7	JUMAIN	SELOREJO	39634	9-Mar-00	10-Mei-01	(P)	30-Nop-01		
8	SUMANTRI	GS.PUTUK	39735	6-Mar-00	20-Mei-02	(+)			
9	JUARI	DERMO	39737	30-Mar-00	15-Mei-01	(+/-)		18 Aug-2001	
10	SUWAJI	PRECET	39739	15-Feb-00	26-Mei-01	(P)	01-Feb-02		

Batu

1	GISAN	JUNGGO	39633		26-Jan-01	(p)	28-Okt-01	Feb. 02	
2	SUNARDI	SANTREAN	39633	7-Okt-01	15-Mei-01	(+)		19-Nop-01	
3	KAMARI	TOYOMERTO	39633	24-Sep-99	10-Apr-01	(P)	9-Jan-02	Feb. 02	
4	Pii	Junggo	39634	?	29-Jun-01	(+)		19-Nop-01	
5	NGATENO	JUNGGO PS	39634	5-Okt-99	09-Feb-01	(p)	17-Nop-01	Feb. 02	
6	MURAJI	JUNGGO.PS	39634	11-Jul-99	???	(p)	10-Okt-01	Feb. 02	
7	PAI	SREBET KIDUL	39736	9-Okt-99	02-Mei-01	(P)	9-Feb-02	Feb. 02	

Pujon

1	DANIN	NGABAB	39633		20-Agust-01	(+)		08-Apr-02	
2	KUSNADI	PANDESARI	39633		07-Agust-01	(+)		08-Apr-02	
3	MUSTAHAM	NGABAB	39634		4 bulan	(P)	3-Apr-02	08-Apr-02	
4	KUSNADI	PANDESARI	39736		28-Mei-01	(P)	05-Mar-02	08-Apr-02	
5	DANIN	NGABAB	39737		28-Apr-01	(P)	DEAD	08-Apr-02	dystocia
6	RAKIMIN	NGABAB	39737		20-Sep-01	(+)		08-Apr-02	
7	SUWONO	PANDESARI	?			(+)			
8	SARDI	MARON	39736		?	(+)			
9	HARYONO	SEBALUH	39633		16-Okt-01	(+)		08-Apr-02	
10	JUWARI	NGABAB	39737		12-Jan-02	(+)		08-Apr-02	
11	SUWARDI	NGABAB	39736		04-Jan-02	(+)		08-Apr-02	
12	RAKIMIN	NGABAB	39636		31-Dec-01	(+)		08-Apr-02	

Purwodadi

1	PURWADI	TEJOWANGI	39634	12-Okt-99	17-Nop-00	(P)	14-Agust-01	16-Feb-02	
2	DARSONO	TAMBAKSARI	39737	12-Mar-00	05-Sep-01	(+)		22-Okt-01	
3	SAMUJI	TAMBAKSARI	?	30-Sep-99	25-Apr-01	(P)	24-Jan-02	16-Feb-02	move to Suminto
4	SAMDARI	TEJOWANGI	?		6 BLN	(+)		22-Okt-01	
5	ROHMAN	TAMBAKSARI	33/37	23 BLN		(P)	8-Jul-01	16-Feb-02	
6	WARSONO	PUCANGSARI	35/37	6-Okt-99	23-Nop-00	(P)		16-Feb-02	

LIST OF DAUGHTER COW OF PROGENY TEST III IN FEBRUARY 2002.

NO.	FARMER NAME	FARMER ADDRESS	NO OF FATHER	BIRTH DATE	AI DATE	PREG NANT DIAG.	DATE OF PARTURITION	DATE OF INSPECTION	REMARK
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II. JATENG

Getasan

Parturition

1	JUMADI	NGRAWAN	39633	12-Sep-99	7bln	(P)	16-Okt-01	26-Feb-02	
2	NARNO	KALITENGAH	39634		13/12/99	(P)	8-Jan-01	26-Feb-02	
3	GITO/Suwartan	KASIRAN	39735		7 bln	(P)	28-Agust-01	26-Feb-02	
4	SUPAR	KALITENGAH	39737	14/12/99	1-Sep-99	(P)	18-Okt-01	26-Feb-02	
5	HARTONO	TAMBANGAN	39737			(P)	10-Des-01	26-Feb-02	
6	JUMARI/SWT	GETASAN		31-Des-99		(P)	22-Agust-01	26-Feb-02	no milk record
7	WAHYU	NOGOSAREN	39633	-		(P)	28-Des-01	26-Feb-02	
8	SUMAR	NOGOSAREN			27-Mar-01	(P)	28-Des-01	26-Feb-02	
9	PARJO	DALANGAN	39735	15-Apr-00	20-Mei-01	(P)	7-Des-01	26-Feb-02	
10	SURAJI	PONGANGAN	39634	9-Jun-01	15-Jan-01	(P)	15-Des-01	26-Feb-02	no milk record
11	WAJI	PONGANGAN	39737			(P)	awal puasa	26-Feb-02	

Abortion

1	KAMTO	BUMIHARJO	39633		1-Jun-01	(A)		26-Feb-02	abortion
2	RADI	BUMIHARJO				(A)	15-Agust-01	26-Feb-02	abortion
3	MARMO/WARN	DUKUH T.	39633	13-Sep-99	6 bln	(A)	1-Des-01	26-Feb-02	abortion
4	SUNGKONO	PONGANGAN				(A)	15-Nop-01	26-Feb-02	abortion

Pregnant

1	SULIMIN	GETASAN	39633	6-Sep-99	2 bln	(+)		30-Okt-01	
2	JANADI (?)	KALITENGAH	39633	1-Jan-00	26-Jul-01	(+)		30-Okt-01	
3	KASINAH (?)	KENDAL	39633			(+)		30-Okt-01	
4	JURI/SUNGK ?	PONGANGAN	39633			(+)		30-Okt-01	
5	SUPARLAN (?)	DUKUH T.	39634		5 bln	(+)		30-Okt-01	
6	PARLI	GETASAN	39634		1-Jul-01	(+)		30-Okt-01	
7	TARIMAN	NOGOSAREN	39634	14-Sep-99	30 hari	(+)		30-Okt-01	
8	SUTOMO.ST	PONGANGAN	39634	15 bulan	4-Agust-01	(+)		30-Okt-01	
9	DARMO (?)	MUJO	39735	4-Mar-00	2.5 bln	(+)		30-Okt-01	
10	DARNO (?)	NOGOSAREN	39735	7-Sep-99	30-Jun-00	(+)		30-Okt-01	
11	SUNARYO (?)	NOGOSAREN	39735	11-Sep-99	22-Jun-01	(+)		30-Okt-01	pg
12	RABUN (?)	SOKOWOLU	39735	12-Sep-99		(+)		30-Okt-01	
13	MIATUN	TAJUK	39735	6-Sep-99	45 hari	(+)		30-Okt-01	
14	SLAMET	TAMBANGAN	39735	4-Apr-00		(+)		30-Okt-01	
15	BAYAN (?)	KALITENGAH	39737	6-Sep-01	25-Mei-01	(+)		30-Okt-01	
16	SUTOMO.ST	PONGANGAN	39737	14 bulan	5-Agust-01	(+)		30-Okt-01	
17	M.SINUN	TAJUK	39737			(+)		30-Okt-01	
18	SANGKAN (?)	GETASAN			7-Agust-01	(+)		30-Okt-01	
19	SUDI/RUDI	NOGOSAREN	39633	13-Nop-99	6 bln	(+)		30-Okt-01	move
20	SUNGKONO	NOGOSAREN	39633	19 bln	-	(+)		30-Okt-01	small
21	DARJO P. (?)	PONGANGAN	39735	4-Apr-00		(+)		30-Okt-01	
22	MASRI (?)	PONGANGAN	39634	9-Des-99	1-Apr-01	(+)		30-Okt-01	
23	SUTAR (?)	SOKOWOLU		23 bln		(+)		30-Okt-01	
24	MUKMIN	NOGOSAREN	39634	11-Okt-99	27-Jul-01	(+)		30-Okt-01	from (+/-)
25	YONO	NOGOSAREN	39634	6-Jan-00		(+)		30-Okt-01	from (+/-)

Pangalengan

1	H.SARYA W	PANGKALAN	39633	17-Okt-99	Apr-01	(+)			sold
2	INING IPT	PANGKALAN	39633	13-Okt-99	Jan-01	(P)	22-Okt-01	05-Nop-01	sold
3	H.ARAN	CITER2001/31040	39634	09-Okt-99	Des-00	(+)		27-Agust-01	sold
4	DIDIN.R	L.CIMAUNG	39634	14-Okt-99	Apr-01	(P)	29-Jan-02	27-Agust-01	
5	H.ARAN	CITER4001/31039	39736	15-Okt-99	Feb-01	(+)		27-Agust-01	sold
6	DADAH	CITERE/31042	39736	11-Sep-99	Mar-01	(+)			sold

Cisarua

1	H.NAYA	PAMEUNGPEUK	39633	21-Sep-99	11-Mei-01	(P)	16-Feb-02	02-Mar-02	
2	H.NAYA	PAMEUNGPEUK	39633	24-Sep-99	5-Mei-01	(P)	10-Feb-02	02-Mar-02	
3	H.NAYA	PAMEUNGPEUK	39633	27-Sep-99	7-Agust-01	(+)	mati	02-Mar-02	dead
4	OMAN	PAMEUNGPEUK	39634	15-Okt-99	4-Jan-01	(P)	7-Okt-01	02-Mar-02	

Lembang

1	ENDANG.Y	WANGUNSARI	39634	23-Sep-99	Feb-01	(P)	9-Des-01	02-Mar-02	
2	NUNUH	PASIR IPIS	39735	27-Okt-99	13-Apr-01	(P)	18-Jan-02	02-Mar-02	
3	H.ODIH	WANGUNSARI	39735	14-Sep-99	15-Apr-01	(P)	28-Jan-02	02-Mar-02	

LIST OF DAUGHTER COW OF PROGENY TEST III IN FEBRUARY 2002.

NO.	FARMER NAME	FARMER ADDRESS	NO OF FATHER	BIRTH DATE	AI DATE	PREG NANT DIAG.	DATE OF PARTURI-ON	DATE OF INSPEC-TION	REMARK
Bayongbong									
1	AGUS SPM	NEGLA	39633	7-Okt-99	?	(P)	9/06/01	28-Feb-02	?
2	ADE MOMON	CIPONDOK I	39634	10-Okt-99	16-Mei-01	(P)	25-Feb-01	28-Feb-02	
3	WARYAWAWA	NEGLA	39634	6-Okt-99	15-Agust-01	(+)		29-Agust-01	
4	ENA	PABRIK	39634	19-Sep-02	22-Agust-01	(P)	21-Agust-01	28-Feb-02	
5	TARYA	BARUKAI	39633	27-Sep-99	11-Feb-01	(P)	24-Dec-01	31-Agust-01	
6	MEMED	CIGEDUG	39633	16-Sep-99	3-Nop-00	(P)	16-Agust-01	28-Feb-02	
7	ULOH	CIGEDUG	39633	15-Sep-99	?	(+)		31-Agust-01	
8	ADA	CIPONDOK I	39633	16-Sep-99	18-Jul-01	(+)		29-Agust-01	
9	ULOH	CIPONDOK I	39633	15-Sep-99	11-Jun-01	(+)		29-Agust-01	
10	ATING	NEGLA	39633	28-Sep-99	15-Mei-01	(+)		29-Agust-01	iodin
11	UUN	NEGLA	39633	19-Sep-99	13-Mar-01	(+)		29-Agust-01	
12	ENTOH	PABRIK	39633	?	Agust-01	(+)		31-Agust-01	
13	ADA	SUKAHURIP	39633	18-Sep-99	?	(+)		29-Agust-01	
14	DADI/TATANG	SUKAHURIP	39633	22-Sep-99	14-Agust-01	(+)		29-Agust-01	
15	DIDIN	SUKAHURIP	39633	25-Sep-99	9-Mei-01	(P)	9-Feb-02	28-Feb-02	
16	HUSIN	SUKAHURIP	39634	29-Sep-99	10-Sep-01	(+)		29-Agust-01	
17	UCA	SUKAHURIP	39633	8-Sep-99	7-Dec-01	(P)	7-Sep-01	28-Feb-02	
18	UCA/YAYA	SUKAHURIP	39633	17-Sep-99	8-Dec-01	(P)	14-Sep-01	28-Feb-02	
19	USIN	SUKAHURIP	39633	?	6-Jan-01	(P)	12-Okt-01	02-Nop-01	
20	OJAK	SUKARAME	39633	13-Sep-99	3-Mei-01	(P)	7-Feb-02	28-Feb-02	
21*	IDING	BARUKAI	39633	26-Sep-99	?	(O)		31-Agust-01	Not yet AI
Cisurupan									
1	TOTOK	BARUKURUNG	39633	28-Feb-00		(+)		01-Mar-02	
2	MISBAH	CIHAREMAS	39633	10-Okt-99	21-Feb-01	(P)	15-Jan-02	01-Mar-02	
3	TOTOK	BARUKURUNG	39634	16-Nop-99		(+)	abortus	01-Mar-02	abortion
4	H. OMAN	CIRANDOG	39634	10-Nop-99	1-Jun-01	(+)		01-Mar-02	sold
5	NANA	CIDATAR	39737	10-Okt-99		(P)	1-Jan-02	01-Mar-02	
Cikajang									
1	CACA	CIKANDANG	39634	?	05-Jul-01	(+)		02-Nop-01	ke Herman
2	ASEP	CIHARUS 1	39737	17-Okt-99	5-Jul-01	(+)		02-Nop-01	
3	SUNGKAWA	NGAMPLANG	39737	5-Okt-99	22-Mei-01	(P)	27-Feb-02	02-Nop-01	

TOTAL OF DAUGHTER COWS BASED ON SIRE CODE

	SIRE CODE						Total
	39633	39634	39735	39736	39737	(?)	
1.1. JABUNG							
a. Partirition		1	1				2
b. Pregnant	1	2	2	3	1	1	10
Total	1	3	3	3	1	1	12
1.2. DAU							
a. Partirition	1						1
b. Pregnant	3	2	1			1	7
Total	4	2	1	0	0	1	8
1.3. BATU							
a. Partirition	1	2					3
b. Pregnant	2	1		1			4
Total	3	3	0	1	0	0	7
1.4. PUJON							
a. Partirition		1		1			2
b. Pregnant	3			3	2	1	9
Total	3	1	0	4	2	1	11
1.5. PURWODADI							
a. Partirition		1				2	3
b. Pregnant					1	2	3
Total	0	1	0	0	1	4	6
Jumlah Jatim	11	10	4	8	4	7	44
2.1. GETASAN (JATENG)							
a. Partirition	1	1	1		2	1	6
b. Pregnant	7	5	7		4	7	30
Total	8	6	8	0	6	8	36
3.1. PANGALENGAN							
a. Partirition	1						1
b. Pregnant	1	2		2			5
Total	2	2	0	2	0	0	6
3.2. CISARUA							
a. Partirition		1					1
b. Pregnant	3						3
Total	3	1	0	0	0	0	4
3.3. LEMBANG							
a. Partirition							0
b. Pregnant		1	2				3
Total	0	1	2	0	0	0	3
3.4. BAYONGBONG							
a. Partirition	1	1				4	6
b. Pregnant		2				12	14
Total	1	3	0	0	0	16	20
3.5. CISURUPAN							
a. Partirition							0
b. Pregnant	2	2			1		5
Total	2	2	0	0	1	0	5
3.6. CIKAJANG							
a. Partirition							0
b. Pregnant		1			2		3
Total	0	1	0	0	2	0	3
Total	8	10	2	2	3	16	41
Grand total	27	26	14	10	13	31	121

List of container and thermos donated by JICA for Progeny Testing Programme

No.	Name of receiver	Occupation	Address	Total	
				Container	Thermos
1	Ida Royani SPt	KUD staff	Jabung	1	1
2	Drh. Hermaniadi	Head of KUD	Dau	1	1
3	H.Ach.		Batu	1	1
4	Drh. Elizabeth	KUD staff	Pujon	1	1
5	R.DM. Agung SE	KUD staff	Ngantang	1	1
6			Purwodadi	1	1
7	Suryantoro SPt	Breeding Section	Getasan	2	2
8	H. Engkun.M	Head I of KUD	Pangalengan	1	-
9	H. Asep Mulyana	Manager	Cisarua	1	-
10			Lembang	-	-
11	H. Djafar Hidayat	Head of KUD	Ciwidey	1	-
12	Muzahid	Manager	Bayongbong	2	2
13	H.M. Sudana	Head of KUD	Cisurupan	1	1
14	Drs. H. Nunuh Chaidar	Head of KUD	Cikajang	1	1
	Jumlah			15	12

RECEIVING MILK PRODUCTION DATA FROM THE FIELD

Name of Farmer	Date of parturition	Monthly data received										Remark
		1	2	3	4	5	6	7	8	9	10	
Kab. Malang												
Jabung												
1. Bari (34)	29-Sep-01	Okt	Nop	Des	Jan							
2. Suliono (35)	7-Nop-01	Nop	Des	Jan	Peb	Mar	Apr					
3. Slamet (33)	16-Des-01	Des	Jan	Peb	Mar	Apr						
4. Wendi (35)	2-Feb-02	Feb	Mar	Apr								
5. Diono (36)	24-Feb-02	Mart	Apr									
Dau												
1. Tawi (33)	27-Agust-01	Sep	Okt	Nop	Des	TD	TD					
2. Jumain (34)	30-Nop-01	Des	Jan									
3. Suwaji (?)	1-Feb-02											
Batu												
1. Legislan (33)	28-Okt-01	Nop	Des	Jan								
2. Ngateno (34)	17-Okt-01	TD	Nop	Des	Jan							
3. Andik/Muraji (34)	10-Okt-01	TD	Nop	Des	Jan							
4. Pa'l (36)	9-Feb-02											
5. Kamari (33)	15-Jan-02	?										
Purwodadi												
1. Purwadi (34)	12-Agust-01	Agus	Sep	Ok	Nop	Des	Jan					
2. Rohman (37)	8-Jul-01	Juli	Agus	Sep	Ok	Nop	Des	Jan				
3. Warsono (37)	30-Agust-01	Sep	Ok	Nop	Des	Jan						
4. Samuji (33)	30-Jan-02											
Kab. Semarang												
Getasan												
1. Suwarlan (?)	28-Agust-01	Sept	Okt	Nop	Des	Jan	Peb					
2. Suwarti (?)	22-Agust-01	Agst	Sep	Okt	Nop	Des	Jan	Peb				
3. Hartono (37)	12-Okt-01	Okt	Nop	Des	Jan	Peb						
4. Jumadi (33)	22-Okt-01	Nop	Des	Jan	Peb	mastitis chronis						
5. Wahyu (33)	18-Nop-01	Nop	Des	Jan	Peb							
6. Sumar Saji(?)	22-Nop-01	Des	Jan	Peb								
7. Narno (34)	1-Agust-01	Agst	Sept	Okt	Nop	Des	Jan	?				
8. Sutjipto S.(37)	18-Okt-01	Agst	Sept	Okt	Nop	Des	Jan	?				
9. Parjo (35)	7-Des-01	?	?	?								
10. Suraji (34)	15-Des-01	TD	TD	TD								
11. WAJI (37)	awal puasa	TD	TD	TD								
12. Giito (35)	Okt.01	?	?	?	?	?						

RECEIVING MILK PRODUCTION DATA FROM THE FIELD

Name of Farmer	Date of parturition	Monthly data received											Remark	
		1	2	3	4	5	6	7	8	9	10	11		
Kab. Bandung													Name of month= data has been received	
Pangalengan														
1. Didin (34)	29-Jan-02	TD												
Cisarua														
1. Oman (34)	7-Okt-01	Okt	Nop.	Des.	Jan	Peb.								
2. H.Naya (33)	16-Feb-02	TD												
3. H.Naya (33)	10-Feb-02	TD												
Lembang														
1. Endang (34)	9-Des-01	sudah dicatat tetapi belum dilaporkan (lemari terkunci)												TD = data not recorded by farmer
2. Nunuh (35)	18-Jan-02	TD	TD											
3. H.Odih (35)	28-Jan-01	Peb.												
													? = data not yet received	
Kab. Garut														
Bayongbong														
1. Agus SPM(33)	9-Jun-01	Agst.	Sept	Okt	Nop.	Des.	Jan							
2. Ade Momon (34)	25-Feb-01													
3. Ena (34)	21-Agust-01	?	?	?	?	Des.	Jan	?						
4. Tanya (33)	24-Des-01	TD	TD	?										
5. Memed (33)	16-Agust-01	Sept	Okt	Nop.	Des.	Jan	Peb.							
6. Didin (33)	9-Feb-02	Peb.												
7. Uca A /Yahya(33)	7-Sep-01	Sept	Okt	Nop.	Des.	Jan	Peb.							
8. Uca B (33)	14-Sep-01	Sept	Okt	Nop.	Des.	Jan	Peb.							
9. Usin (33)	12-Okt-01	TD	?	?	?									
10. Ojak (33)	7-Feb-02	Peb.												
Cisurupan														
1. Misbah (33)	24-Nop-01	Nop	Des	Jan	Peb									
2. Nana (37)	1-Jan-02	Jan	Peb											
Cikajang														
1. Sungkawa (37)	27-Feb-02													