

**Senepol Symposium, St. Croix, USVI November 8-10, 2002**

**Evolution and Situation of Senepol Breed in Venezuela as an Option of Genetic Quality**

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**Introduction**

Since cattle breeding exists in the tropics, there has always been a search for adapted breeds specialized in dairy and beef production, which has not been an easy task in comparison to cattle breeding in subtropical areas where one can find animals that excel for each line. Though in the tropics the zebu breeds have been a solution with good results that have been improved by years of selection and crossbreeding amongst themselves, we have lacked of the basic tool of crossbreeding that is the hybrid vigor or heterosis. Concerned about this, Mr. Antonio Díaz, in 1986 contacts the breeders of this new *Bos Taurus* breed adapted to the tropics called SENEPOL, and from then on starts working in the introduction of the breed in Venezuela.

The Venezuelan cattle breeders were avid for a breed that would have characteristics that would, amongst others:

- Increase the hybrid vigor in crossbreeding (*Bos Taurus*)
- Work in the tropics
- Improve beef productivity of local cattle without decreasing the milk production of it.

To answer such needs we have used Senepol cattle.

## **BEGINNINGS**

The beginning of the Senepol cattle in Venezuela goes back to 1989 when the first importation was done. Let us look at the evolution:

1. 1,989 - 150 frozen embryos were imported and were transferred between 1,990 y 1,992 by Dr Edwin Robertson.
2. 1,990 - 1,000 doses of frozen semen were imported.
3. 1,991 – ASL Volcan 93Y – the first live animal arrived in Venezuela
4. 1,992 – Sale of locally collected semen from Volcan was offered to the Venezuelan market and up to date 30,000 doses of semen of this bull have been sold.
5. 1,993 – Three live animals were imported from USA and 200 from St. Croix
6. 1,996 – 39 animals from USA were brought to the country.
7. 1,998 – 76 animals were imported from USA and 96 from St. Croix
8. 1,999 – An airplane with 99 animals from St. Croix arrived to Venezuela
9. 2,000 – 85 animals were imported from St. Croix.
10. 2,001 – 111 animals arrived from St. Croix and 35 from Mainland
11. From 1,994 to 2,002 over 3,000 doses of frozen semen from the best Senepol bulls have been imported.

Because of these facts the Venezuelan Association of Senepol Cattle Breeders (ASOSENAPOL) was created and is registering all the fullblood, purebred, crossbred cattle with the constant support and orientation of SCBA where all the data of all the Senepol cattle of the world is processed.

## OUR MEMBERS

At this moment approximately 38 breeders of the country belong to ASOSENAPOL. We are still missing some that do not understand yet the importance of the registration and data because they have commercial cattle and this is our challenge and goal.

REGISTRO	NOMBRE	REGISTRO	NOMBRE
1000685	Elsa &/Or Eduardo Martinez	1001604	Agropecuaria El Paraiso S A
1000498	Raul De Armas	1003421	GAN.LA CIA DEL GOLFO 1998 C.A
1001673	Genetica Ganadera Genproca	1001674	Sr Carlos Ruiz
1003295	Agropecuaria La Estrella RCA	1003171	Agropecuaria Santa Isabel
1003086	ERASO Ranch	1003422	AGROP. EL RODEO S.C.
1000684	Agropecuaria San Francisco	1003170	Franco Isgro
1003107	Hato Real y Medio	1003306	Alfredo Vargas
1003113	Agropecuaria Tazon CA	1003424	AGROP. DON MANUEL C.A.
1000694	C.A. Hato La Vergarena	103412	Agropecuaria San Gabriel
1003280	Luis Jose Saud Saud	1003296	Agropecuaria Carfran
1003114	Agropecuaria Lula CA	1003338	Agropecuaria B Man C.A.
1003307	Jose Luis Zerpa	1000682	Alberto Yepez
1001786	Hato Martha Teresa	1000784	Asoc. Reg. Ganad. Edo. Anzoategui
1003112	Juan Vicente CID	1001787	Mr Pedro Oliva
1003087	Jesus Rincon Vilorio & CIA SA	1002030	Jorge Rincon
1003309	Victor Marmol	1003308	Rodrigo Cagide
1000683	Agropecuaria Santa Elena Ca	1003337	Marcial Orozco
1003088	Agropecuaria Tinacoa, S.A.	1003365	Finca San Antonio
1001577	Jose Rene Finol	1003397	AGROPECUARIA ALJAVA 691 C.A.
<b>Total general</b>		<b>38</b>	

Source: SCBA

We could say that the Senepol cattle are in all the country from the Andean foothills, to the lake basin and flatlands in the east, center and west with successful results in pure and commercial breeding.

## OUR HERD

### BULLS

Our bull herd has its origin or influence from the best Senepol breeders of US and St. Croix as well as the best known Senepol breeders of the country.

B	5 T Ranches	2
	AGROP. DON MANUEL C.A.	1
	Agropecuaria La Estrella RCA	20
	Agropecuaria Lula CA	3
	Annaly Farms	68
	Castle Nugent Farms	79
	Coley-Gardner Senepol	1
	David Everett	1
	Elsa &/Or Eduardo Martinez	70
	ERASO Ranch	23
	Frits E. Lawaetz	1
	Gambit Farms	2
	Genetica Ganadera Genproca	34
	Granard Estates	1
	Hato Martha Teresa	2
	Honey Bee Creek	3
	Jens S Lawaetz	1
	Juan Vicente CID	3
	Prime Rate Ranch	4
	Raul De Armas	17
Sr Clemente Rodriguez	1	
Total B	337	

Source: SCBA

## COWS

As the bulls, our cows originate from the most important herds in the breed as we can see in the next chart.

C	5 T Ranches	6
	AGROP. DON MANUEL C.A.	4
	Agropecuaria La Estrella RCA	25
	Agropecuaria Lula CA	2
	Alfredo Vargas	1
	American Senepol Ltd	2
	Annaly Farms	184
	Castle Nugent Farms	110
	Coley-Gardner Senepol	1
	Elsa &/Or Eduardo Martinez	93
	ERASO Ranch	25
	Frits E. Lawaetz	2
	Frits T. Lawaetz	1
	Genetica Ganadera Genproca	42
	Granard Estates	58
	H J White Farm	1
	Hall Farms	1
	Hart Enterprises	1
	Hato Martha Teresa	5
	Hidden Lake Ranch	1
	Honey Bee Creek	19
	Jens S Lawaetz	2
	Jodie A Lawaetz	1
Juan Vicente CID	4	
King Farms	3	
Prime Rate Ranch	73	
Raul De Armas	188	
TNT Senepols	1	
Total C	856	

Source: SCBA

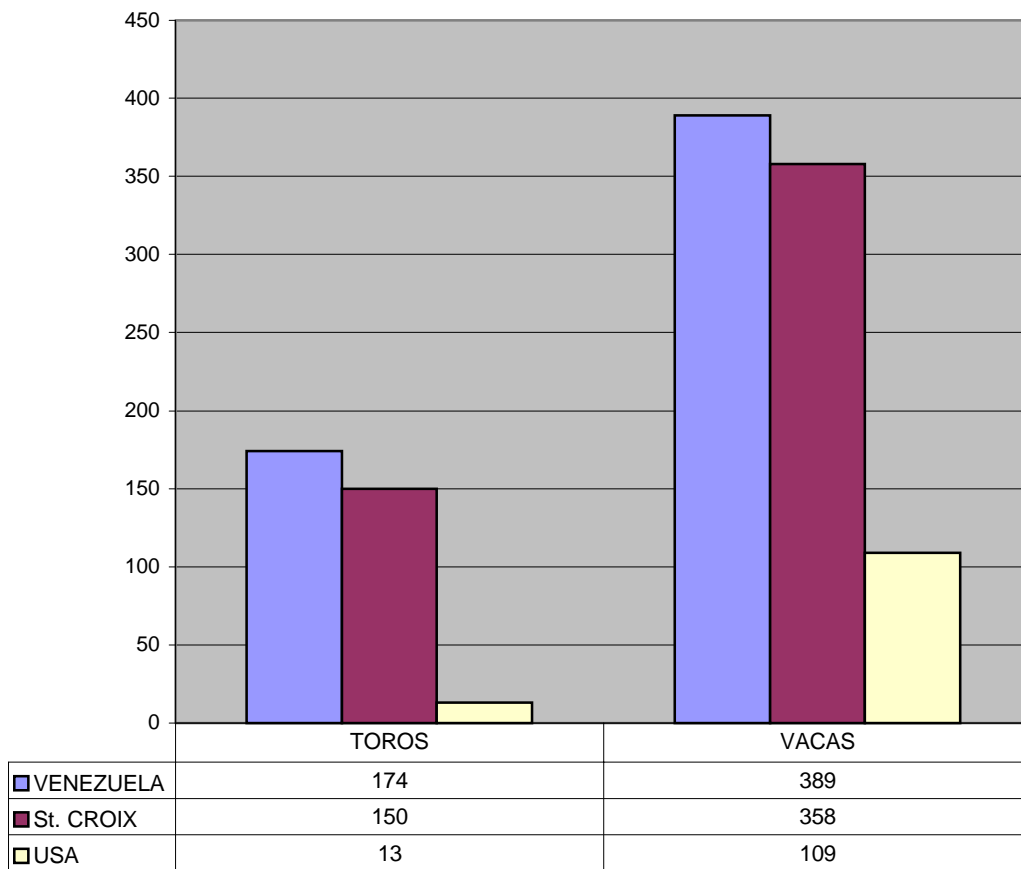
We also have purebred animals that come out of well-managed upgrading programs in the best herds in Venezuela.

## SEMEN SALES

Information from one of the best known companies in semen commercialization shows us the increasing interest in Senepol semen cattle breeders have that showing that while in 2,000 – over 2,000 doses were sold, until October 2,002 over 2,200 dose have been sold. Although these figures are not very impressive show an increase, considering competition also has grown.

## PRESENT NATIONAL HERD COMPOSITION (REGISTERED)

VENEZUELAN HERD COMPOSITION BY ORIGIN



Source: Own numbers ASOSENAPOL

As it has been demonstrated in Chart No. 1 the majority of the Venezuelan Senepol herd is formed by imported animals, however the number of locally born fullblood, purebred and crossbred animals is increasing and we have a hard job ahead in order to be able to register many of them since it is a large number. Now we have registered crossbred animals from one breeder only.

The best part in the locally born animals is the pressure of selection breeders have had thanks to the information received from SCBA, which is essential for our selection.

## QUALITY OF SIRES

Now a day we have in Venezuela sires that are well positioned in the Senepol Sire Summary and can compete with bulls in other countries among which we can list:

1. ASL VOLCAN 93Y E.T.	SIRE SUMMARY	
2. CN 5664	SIRE SUMMARY	
3. CN 6409	SIRE SUMMARY	TRAIT LEADER
4. SHERMAN	SIRE SUMMARY	
5. WC 260	SIRE SUMMARY	TRAIT LEADER
6. WC 805	SIRE SUMMARY	
7. CN 6322	SIRE SUMMARY	
8. CN 5388	SIRE SUMMARY	
9. CN 5563	SIRE SUMMARY	
10. CN 6544	SIRE SUMMARY	> YW EPD
11. WC 243	SIRE SUMMARY	
12. WC 358	SIRE SUMMARY	
13. CN 6367	SIRE SUMMARY	
14. CN 5464	SIRE SUMMARY	

Source: SCBA

In others words of the 129 active bulls in 2,002 Sire Summary, Venezuela has approximatly 10% of them in 38 herds.

## SUMMARY OF OUR SIRE SUMMARY (VENEZUELA)

We observe that for birth weight EPD the locally born animals have accomplished a good behavior in numbers, being some of them superior to the imported once but of course with lower accuracy since they are younger animals that have a small number of progeny.

### BIRTH WEIGHT EPD

NAME	REGISTE	DOB	SEX	OWNER	BD	%	EPD BW	ACC BW
JC 217-1L *	1111231	05/09/01	B	Agropecuaria La Estrella RCA	SE	100	-2.735	26
CN 171K	1108857	01/12/00	B	Agropecuaria La Estrella RCA	SE	100	-2.162	29
CN 5645	1063587	18/07/92	B	Agropecuaria San Francisco	SE	100	-2.134	73
GGG 02K ALF *	1108950	03/03/00	B	Genetica Ganadera Genproca	SE	100	-2.069	22
GGG 08J JULIO CESAR*	1108948	06/05/99	B	Victor Marmol	SE	100	-2.013	28
CN 5488	1060898	05/07/91	B	Agropecuaria San Francisco	SE	100	-1.839	73
CGG 17G*	1108248	09/12/97	B	Genetica Ganadera Genproca	SE	100	-1.839	29
CN 6409G	1081477	26/02/97	B	Agropecuaria La Estrella RCA	SE	100	-1.74	67
GGG 02H AUGUSTO*	1108942	31/01/98	B	Genetica Ganadera Genproca	SE	100	-1.734	32
AMI 407D	1071028	28/01/94	B	Genetica Ganadera Genproca	SE	100	-1.528	P

\*BORN VZLA  
SOURCE: SCBA

### WEANING WEIGHT EPD

NAME	REGISTE	DOB	SEX	OWNER	BD	%	EPD WW	ACC WW
CN 6544H	1100828	05/02/98	B	Agropecuaria La Estrella RCA	SE	100	26.396	54
WC 688G	1100913	20/11/97	B	Agropecuaria Lula CA	SE	100	20.552	29
CN 72K	1108257	02/07/00	B	Genetica Ganadera Genproca	SE	100	20.462	26
GGG 07K ROBIN HOOD*	1108954	18/03/00	B	Genetica Ganadera Genproca	SE	100	20.287	28
CN6481G	1082634	05/11/97	B	Agropecuaria Tazon CA	SE	100	19.105	30
CN6515G	1082668	25/11/97	B	Agropecuaria San Francisco	SE	100	18.771	32
E. 99815J*	1109261	24/10/99	B	ERASO Ranch	SE	100	17.914	26
TM 000064*	1110054	28/07/00	B	Raul De Armas	SE	100	17.654	23
CN 6367G	1081436	20/01/97	B	Raul De Armas	SE	100	17.51	50
WC 637G	1082285	15/05/97	B	Hato Real y Medio	SE	100	17.184	35

\*BORN VZLA  
SOURCE: SCBA



## MILK EPD

NAME	REGISTE	DOB	SEX	OWNER	BD	%	EPD MILK
SHERMAN	1078347	08/10/95	B	Raul De Armas	SE	100	13.288
CN 6748J	1105258	17/06/99	B	Agropecuaria Tazon CA	SE	100	12.876
CN 22K	1107493	12/02/00	B	ERASO Ranch	SE	100	12.304
CN 6341F	1079869	08/10/96	B	Agropecuaria San Francisco	SE	100	12.21
CN 6127E	1076690	09/09/95	B	Jesus Rincon Viloría & CIA SA	SE	100	11.568
CN 5630	1063573	30/06/92	B	Agropecuaria San Francisco	SE	100	11.142
CN 5664	1063928	15/09/92	B	Genetica Ganadera Genproca	SE	100	10.875
CN6515G	1082668	25/11/97	B	Agropecuaria San Francisco	SE	100	10.656
CN 5842	1067537	04/10/93	B	Mr Pedro Oliva	SE	100	10.627
CN 6781J	1105277	09/08/99	B	Agropecuaria Tazon CA	SE	100	10.61
CN 6737J	1105248	21/06/99	B	Agropecuaria La Estrella RCA	SE	100	10.563
CN 5563	1062011	01/02/92	B	Genetica Ganadera Genproca	SE	100	10.326

\*BORN VZLA  
SOURCE: SCBA

## MILK AND GROWTH EPD

NOMBRE	REGISTRO	NACIMIENTO	SEXO	DUEÑO	RAZA	%	EPD M&G
CN6515G	1082668	25/11/97	B	Agropecuaria San Francisco	SE	100	20.042
CN 6127E	1076690	09/09/95	B	Jesus Rincon Viloría & CIA SA	SE	100	19.866
SHERMAN	1078347	08/10/95	B	Raul De Armas	SE	100	18.637
CN 5664	1063928	15/09/92	B	Genetica Ganadera Genproca	SE	100	17.785
CN 6544H	1100828	05/02/98	B	Agropecuaria La Estrella RCA	SE	100	17.672
CN 5842	1067537	04/10/93	B	Mr Pedro Oliva	SE	100	17.472
CN 5626	1063569	03/07/92	B	Agropecuaria San Francisco	SE	100	17.413
CN 5563	1062011	01/02/92	B	Genetica Ganadera Genproca	SE	100	17.32
CN 72K	1108257	02/07/00	B	Genetica Ganadera Genproca	SE	100	16.878
CN 6341F	1079869	08/10/96	B	Agropecuaria San Francisco	SE	100	16.565
CN 6367G	1081436	20/01/97	B	Raul De Armas	SE	100	16.454

SOURCE: SCBA

## YEARLING WEIGHT EPD

NOMBRE	REGISTRO	NACIMIENTO	SEXO	DUENO	RAZA	%	EPD YW	ACC YW
CN 6544H	1100828	05/02/98	B	Agropecuaria La Estrella RCA	SE	100	34.7	36
GGG 07K ROBIN HOOD *	1108954	18/03/00	B	Genetica Ganadera Genproca	SE	100	28.069	19
WC 688G	1100913	20/11/97	B	Agropecuaria Lula CA	SE	100	27.477	25
CN 6367G	1081436	20/01/97	B	Raul De Armas	SE	100	25.965	17
WC 637G	1082285	15/05/97	B	Hato Real y Medio	SE	100	24.096	23
TM 000064 *	1110054	28/07/00	B	Raul De Armas	SE	100	23.975	7
CN 72K	1108257	02/07/00	B	Genetica Ganadera Genproca	SE	100	23.973	9
CN 6127E	1076690	09/09/95	B	Jesus Rincon Viloria & CIA SA	SE	100	23.655	24
CN6481G	1082634	05/11/97	B	Agropecuaria Tazon CA	SE	100	23.642	19
CN6515G	1082668	25/11/97	B	Agropecuaria San Francisco	SE	100	22.628	22
WC 205D	1073502	18/05/94	B	ERASO Ranch	SE	100	22.041	32
WC 798A	1064082	05/08/91	B	Dr Vladimir Cruz	SE	100	21.339	28
JC 208-1L *	1109720	18/03/01	B	Agropecuaria La Estrella RCA	SE	100	21.184	P
CN 6376G	1081445	30/01/97	B	Agropecuaria San Francisco	SE	100	20.612	21
WC 954K	1109094	15/10/00	B	Agropecuaria La Estrella RCA	SE	100	20.577	18

\*BORN IN VZLA  
SOURCE: SCBA

As it has been shown in each of the charts for the different traits evaluated, birth weight, weaning weight, milk, milk and growth and yearling weight, we notice that the Venezuelan breeders have put more selection pressure to obtain better results in

- Birth Weight
- Weaning Weight
- Yearling Weight

This is due to the fact that the breed has been used in beef production, however there have been good experiences of milk production in dual purpose cattle, however in this characteristic, milk, we have little information up to now, this is why the study that Dr. Isea and the Zulia University are doing is going to be of big importance for us and the breed.

## OUR DAMS

Venezuela has an enviable group of dams with small fertility problems even in very hard conditions and managements. More over a significant amount of them are closely genetically related to the cows that have been honored in the 2,002 supercow award of the SCBA.

As the next chart shows cows in Venezuela have genetic relation with 60% of the cows in the 2,002 list.

COW	CLASSIFIED	CALF)
CN 4882	M. ELITE	CN 6635
WC 5505	M. ELITE	WC 7108 WC 637 WC 824
WC 7352	M. ELITE	WC 8107 WC 815
WC 7388	M. ELITE	WC 7865 WC 710
CN 5843	M. SUPERIOR	CN 6378 CN 28K
CN 5937	M. SUPERIOR	CN 6737
WC 7037	M. SUPERIOR	WC 8110

SOURCE: SCBA & own numbers ASOSENAPOL

COW	CLASSIFIED	CALF
WC 7204	M. EXCELLENCE	WC 8120
CN 6221	M. EXCELLENCE	CN 6K
WC 7501	M. EXCELLENCE	WC 550
WC 7641	M. EXCELLENCE	WC 8353 WC 902

## **GENETIC QUALITY**

In summary, the Senepol herd in Venezuela has excellent genetics with a tremendous potential to improve itself by working closely with SCBA which helps the members of ASOSENAPOL to successfully select genetically superior animals to have a solid genetic improvement and detect and cull inferior animals, or undesirable genes.

## **GROWTH**

In Venezuela we have successfully experienced a sustained growth of the Senepol breed from the first importation of frozen embryos up to the present and there is a very simple reason for it:

Breeders satisfaction with the results obtained using the Senepol breed in their breeding programs.

Undoubtedly, there is still a lot to be done and we are aware of the barriers that the traditionalism of some breeders in their herd management, as well as to use of technology. but we are convinced that now a days the breeders have a very important tool that years ago was impossible to foresee, and we feel very proud of it.

## **HIGH DEMAND**

As evidence of the demand of Senepol genetics in Venezuela is the constant growth of the “national herd” plus the increase in semen sales of the breed as well as the behavior of the market for fullblood and purebred live animals.

**FOR ALL THESE REASON WE CAN SAY THAT  
VENEZUELA IS A SENEPOL COUNTRY**

## **BIBLIOGRAPHY**

Senepol World MAGAZINE, August 2002. pages 12 to 26.