

IMPROVING GENETICS

WITH FROZEN SEMEN

英式豬凍精的實用性

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Deerpark純種豬公司總裁



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Deerpark Pedigree Pigs Deerpark純種豬公司

Semen, fresh or frozen

精液 – 新鮮或冷凍

From ten different breeds of boars

取自十種不同品種公豬



Your Number One Choice!

您的優先選擇！

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Frozen semen
is the most
cost effective
method for
improving
genetics.

冷凍精液是最符合
成本效益的改良
基因方法



DEERPARK :

- A family business where you will be guaranteed personal attention.

Deerpark公司是個家族企業，保證為您提供個人照料。

- 1000 Pedigree Sows all registered with the British Pig Association.

擁有1,000隻在英國養豬協會登記有案的純種豬。

- Top Quality Large White, Landrace and Duroc.

頂極品質大白豬、藍瑞斯豬、和杜洛克豬。

- Based in three separate farms with no movement between farms.

以三處分離但毗鄰的農場為基礎，農場間無需運送。

DEERPARK A.I. STUD : DEERPARK人工授精種豬 :



Deerpark Notis 4496

DEERPARK A.I. STUD : DEERPARK人工授精種豬 :



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DEERPARK A.I. STUD : DEERPARK人工授精種豬 :



Deerpark Pasta 4505

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DEERPARK A.I. STUD : DEERPARK人工授精種豬 :



Pitkenney Champion Boy 1514

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DEERPARK A.I. STUD : DEERPARK人工授精種豬 :



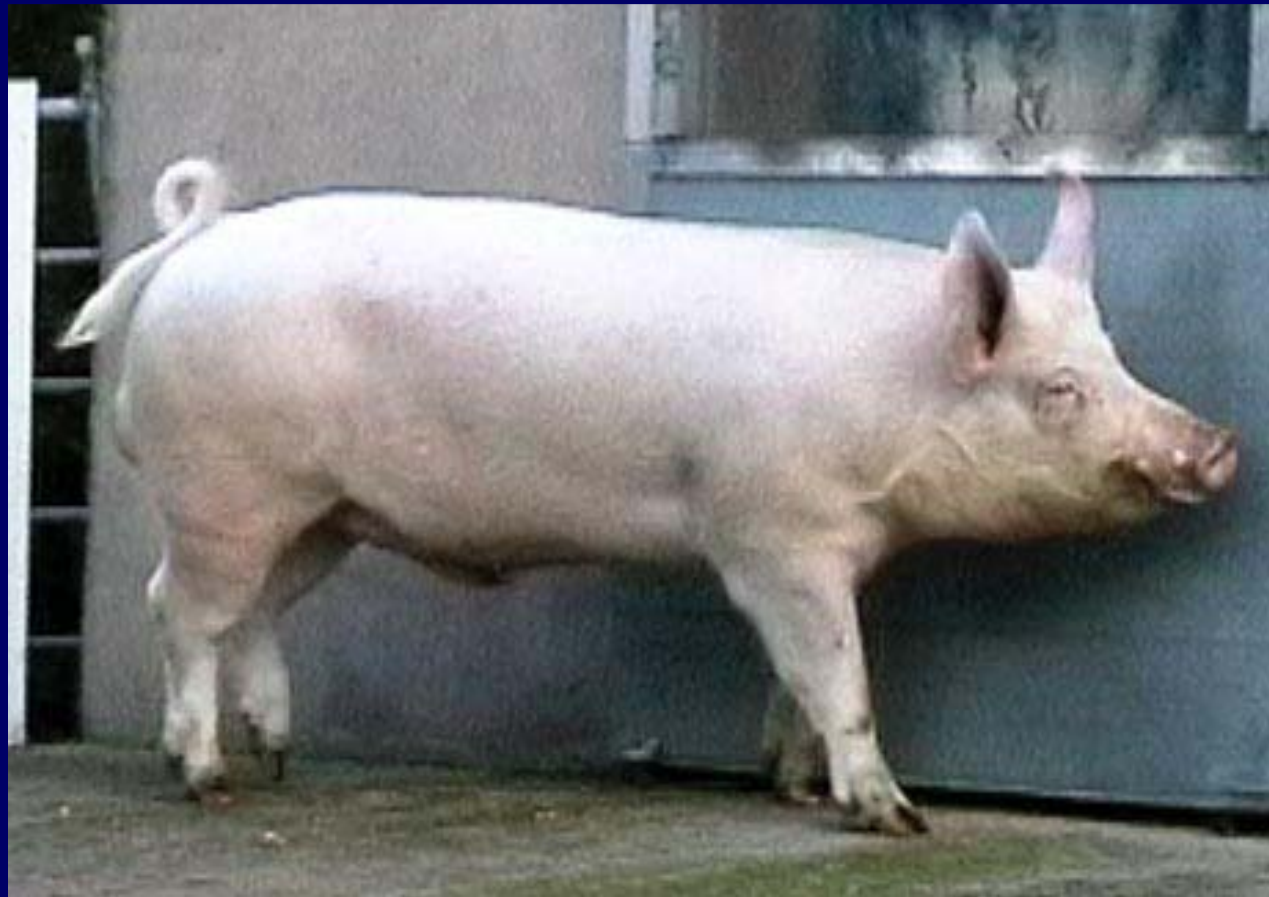
Pitkenney Valiant 1785

DEERPARK A.I. STUD : DEERPARK人工授精種豬 :



Cappagh Nekton 9549

DEERPARK A.I. STUD : DEERPARK人工授精種豬 :



Weiss of Bellaghy 1914

Deerpark Freezing Method:

Deerpark冷凍方法：

- Select only boars whose semen freezes and thaws well.

僅挑選精液冷凍和解凍情況良好的公豬

- Use only the correct diluent and mix at the required proportion.

僅依所需比例採用適當的稀釋液和混合液。

- Take the necessary time to cool to the required temperature prior to Spinning in the Colorimeter.

在送往色度計旋轉之前，花必要時間將精液冷卻至所需要的溫度。

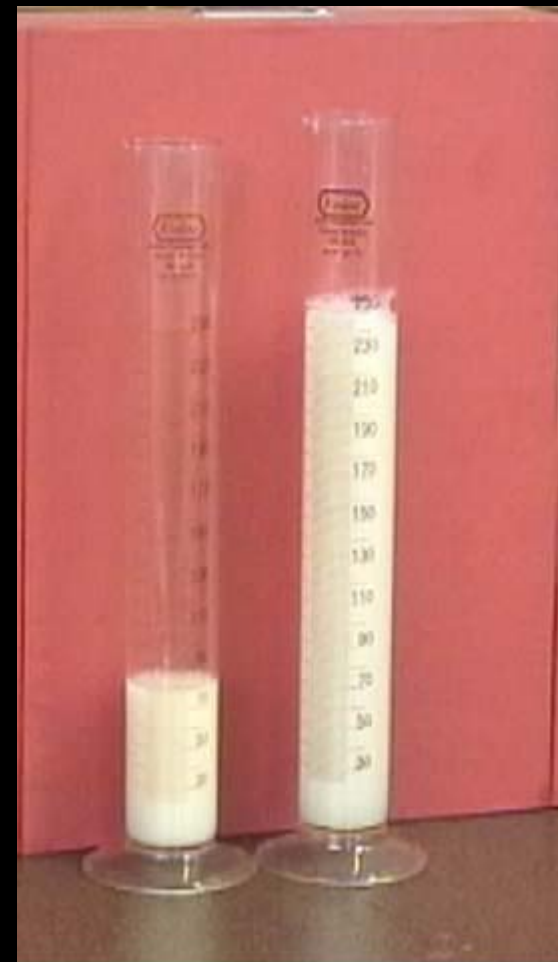
Deerpark Freezing Method (continued) :

Deerpark冷凍方法 (續) :

- Careful selection of only the Sperm-rich fraction of the ejaculate.

審慎選擇，僅採用射出精液中精蟲豐富的部份。

- A = Sperm rich fraction
A = 精蟲豐富部份
- B = Total ejaculate
B = 全部射出精液



A

B

Deerpark Freezing Method (continued) :

Deerpark冷凍方法 (續) :

- Clearly identify the name of each boar on the individual straw.
在個別細管上清楚標示公豬的名字。
- Take time to prepare and carefully fill the straws prior to placing in the liquid nitrogen.
將精液置入液態氮之前，花必要時間準備，將精液謹慎裝入細管中。
- Make sure you check at least one straw from each freezing to ascertain the quality of each batch of frozen semen.
在每次冷凍作業中，至少檢查一個細管中的精液，以確保每批冷凍精液的品質。
- Particular attention to the freezing technique combined with specialised Deerpark thawing method results in much improved conception rate.
Deerpark特別細緻的冷凍技術加上專門的解凍方法，使得受胎率大幅改善。

Deerpark Freezing Method (continued) :

Deerpark冷凍方法 (續) :

- Careful selection of the sows to mate and mating at the correct time results in higher than average rate of numbers born and reared.

審慎選擇配對母豬並挑選適當時機配對，達成高於平均值的出生率和培育率。

- Results from frozen semen exported to other Countries:

冷凍精液的成果外銷他國：

- Average conception from 65% up to 91%.

平均受胎率從65%提升至91%。

- Average born alive from 9.2 up to 11.6 with minimum of 4 and a maximum of 17 born alive.

平均出生活仔豬數從9.2隻提升為11.6隻 – 每窩最少4隻，最多17隻出生活仔豬。

Thawing the Straw :

解凍細管：

- Double check that the sows are ready to be inseminated.
再次檢查，以確定母豬已準備受精。
- Decide which straw you are going to use and identify where it is placed in the tank of frozen semen.
決定您要採用哪一支細管中的精液，並從冷凍精液桶中找到其所放位置。
- Prepare the water bath by adding at least 6 litres of warm water to the bath.
準備水浴槽，在水浴槽中至少加入6公升溫水。
- The water should be 50° Centigrade and the diluent which had been mixed earlier should be 30° Centigrade.
水溫應為50° C，稍早混合的稀釋液溫度應為30° C。

Selecting
the correct
Straw
選擇適當的
細管



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Thawing the Straw :

解凍細管：

- A small amount of diluent should be placed in each of the two bottles in preparation to receive the thawed semen.
兩個採精瓶中應分別加入少量稀釋液，以準備接受解凍的精液。
- A pair of scissors and a paper tissue should be beside the bottles.
採精瓶旁邊應放置一把剪刀和一張薄紗紙。
- Open the tank containing the semen and carefully remove the selected straw from the goblet with the forceps holding the straw by the end.
打開精液桶，以鉗子夾住細管頂端，將所選擇的細管從杯狀桶口小心取出。
- Place the straw on the gloved hand or on a piece of cloth and then move quickly to the water bath.
將細管置於戴有手套的手中或一塊布上，然後迅速將之移至水浴槽。
- Check the time on the clock and, holding the straw firmly in the centre with the forceps, immerse it in the water and gently move it slowly through the water for 50 seconds.
核對時鐘上的時間。以鉗子牢牢夾著細管，將之浸入水中，並輕輕在水中搖動約50秒。

Thawing the Straw :

解凍細管：

- Remove from the water, wipe dry, remove the sealing ball from the end of the straw and place the open end of the straw in the bottle and remove the other sealing ball.

將細管從水中取出擦乾，取下細管頂端的密封球，將細管開口端置於採精瓶中，再取下另一端的密封球。

- Flush the semen from the straw into the bottle, top up with diluent, rotate gently and then divide into two bottles.

將細管中的精液沖入採精瓶中，加入稀釋液，輕輕轉動，再將瓶中精液分裝入兩個採精瓶。

- The diluted semen is estimated by Microscope and then inseminated immediately in the two sows for best results.

以顯微鏡評估稀釋精液後，立即對兩隻母豬進行授精，以獲取最佳結果。

Selecting the Sows: 選擇母豬：

Select sows rather than gilts and we find it is best to use 3rd. 4th. or 5th. Parity sows with proven record of high fertility and good mothering ability.

挑選種母豬，不要採用新母豬。我們發現，採用具有經過驗證之高繁殖率記錄和良好母性能力的第三、四、五產次母豬效果最佳。

Batch wean so that you can select two sows on heat at the same time.

採批次斷奶方法，以便您能同時挑選兩隻適合受孕的母豬。

Sows for insemination with frozen semen should be checked at least twice each day.

When they stand firm in the presence of a boar wait for 8 to 10 hours before the first insemination.

即將接受冷凍精液人工授精的母豬每天至少應檢查兩次。當牠們能夠自在地面對公豬時，等待8-10小時再做第一次授精。

It is good to consult your senior stock person as they will know their sows best.

最好諮詢資深畜養人員，因為他們最了解自己的母豬。

When you thaw the straw, divide it into two bottles and inseminate each sow with one bottle on day one then repeat the process on day two approximately 18 hours after the first insemination.

解凍細管後，將精液分裝於兩個採精瓶。第一天以其中一瓶對兩隻母豬進行授精，再於第二天(第一次授精後約18個小時)重複同樣的授精動作。

Reaping the Reward 收成

One of the strengths of frozen semen is that it is always available when you need to inseminate your sows. All you need do is check your tank regularly and have access to a supply of liquid nitrogen.

● 冷凍精液的優點之一是，當您需要為母豬授精時，隨時都有精液可用。您只需要定期檢查您的冷凍精液桶，並確定液態氮供應無缺即可。



Reaping the Reward (Continued)

收成 (續)

Piglets resulting from the use of frozen semen will have:

利用冷凍精液產出的仔豬具有以下特質：

- Better food conversion. Less expensive feed.
飼料轉換情況較佳。飼料花費較低。
- Bigger daily gain. Faster growth, less days to slaughter means more pigs through your expensive houses.
每日增重較多；發育較快；送交屠宰的天數較少，意味著您的昂貴房舍可生產較多豬隻。
- Higher % lean: More quality pork from younger pigs.
瘦肉率較高；較年輕的豬隻能產生較多高品質豬肉。
- The Top advantage is in superior replacement animals.
最大的優點在於優越的更換動物。
- Top quality boars to work on your farm or for sale.
您的農場將擁有最高品質的公豬為您服務或供銷售。
- Selected gilts to replace your older sows and make excellent females to inseminate with more frozen semen from Deerpark Pedigree Pigs.
精選的新母豬取代您的老母豬。產生優等母豬利用Deerpark公司的冷凍精液施行人工授精。

Deerpark Results for 2004 at Central Pig Test Station:

Deerpark 2004年在中央豬隻檢定站之結果

Average Start Weight 平均始重	33.70 Kgs.(公斤)
Average End Weight 平均終重	118.50 Kgs.(公斤)
Age at end weight 終重時豬齡	157 Days(天)
% Lean 瘦肉率	61.12
Food Conversion 飼料轉換	2.03
Average daily food intake 平均每日進食量	2.31 Kgs.(公斤)
Average Daily Gain 平均每日增重	1.120

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Top Results from Frozen Semen !
冷凍精液帶來的理想成果 !

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IMPROVING GENETICS WITH FROZEN SEMEN 以冷凍精液改善基因

Thank you to my
excellent
Interpreter and to
you all for your
Attention!

謝謝辛苦的口譯員
也謝謝大家的聆聽



SEMEN FREEZING – APPROVED BY RBST & BPA

精液冷凍法 – 已獲得RBST和BPA核准

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