Rend (1981) has outlined the main reasons for the use of F.I. semen: a) the genetic improvement of livestock of nuclear and commercial line; b) assistance in maintaining high health status; c) facilitation of batch freezing; d) spermatozoa and convenience compared with natural service; e) exchange of genetic material between countries. However, a major problem has been the comparatively short life of the semen. Using diluents such as IVT and Kiel reasonable conception rates only last for about 60 hours (Taylors, 1976). SOH-diluted has been developed to extend this semen life to at least six days and is now used commercially in three countries in Europe (Belgium, Spain, UK). There have also been trials in other countries, but there are few reports in the literature and some of these draw misleading conclusions.

Pommeren-Perenina Czunya (1979) compared SOH-diluted with Kiel at days 1 and 2 after collection. SOH-diluted had a higher freezing rate but lower numbers of spermatozoa. However, SOH-diluted was also used at day 3-5 with freezing rates of 57.2, 63.6 and 59.3 respectively.

Svensson (1977) reported two trials: the first, freezing rates and numbers of spermatozoa alive for IVT diluent. For days 1-3 were 65.1 and 10.9, respectively, and for SOH-diluted for days 5-6 were 44.8 and 9.1. In the second trial, the freezing rate for IVT over days 1-3 was 63.1 while for SOH-diluted on days 1-3, and the freezing rates were 88.0, 82.0 and 80.0 respectively. On the basis of these latter figures, we totally refute Svensson's claim that SOH-diluted does not maintain good spermatogenesis up to 5-6 days

Pommeren-Perenina Czunya (1979) reported successful conception rates, based on the non-return rate at 54 days, in mares given inseminated with B1 or SOH-diluted. B1 diluent used on days 0 (day of collection) 6 gave a mean conception rate of 71.0, while SOH-diluted used on days 3-5 gave a mean of 64.5. Based on these results, the authors stated that "contrary to the claims made SOH-diluted does not maintain the fertility of spermatozoa for an extended period of time."

We refute this statement on the basis of the reported results. It is also worth noting that the trial was conducted with SOH-diluted that had been stored for 6 months prior to use whereas the B1 diluent was probably freshly prepared.

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<table>
<thead>
<tr>
<th>Country</th>
<th>Date</th>
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<th>Number of records</th>
<th>Results</th>
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<td>56.7</td>
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<tr>
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<td>5</td>
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<td>50.2</td>
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<td>1976</td>
<td>5</td>
<td>103</td>
<td>51.2</td>
</tr>
</tbody>
</table>

The presented results suggest that SOH-diluted has displayed a high level of semen fertility when used in the first 3-5 days and probably considerably further, though the latter is questionable commercial value.

Selected references: