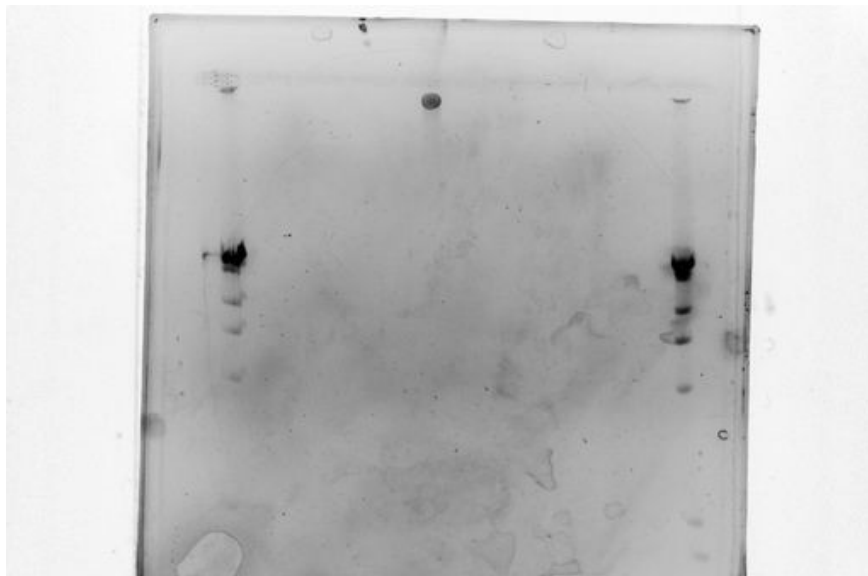
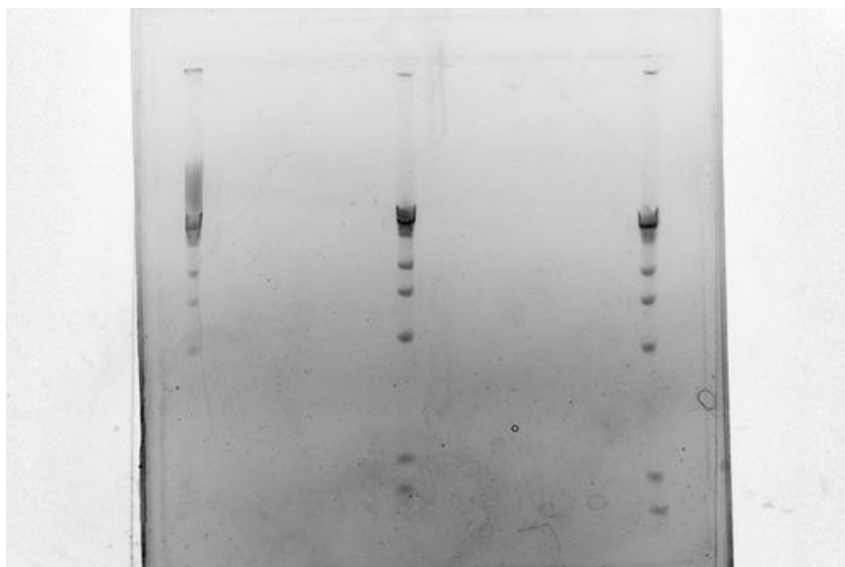


Improved electrophoresis Czech patent Nr. 306 860

Picture 1 - The original method, just a pulse electrophoresis as usual

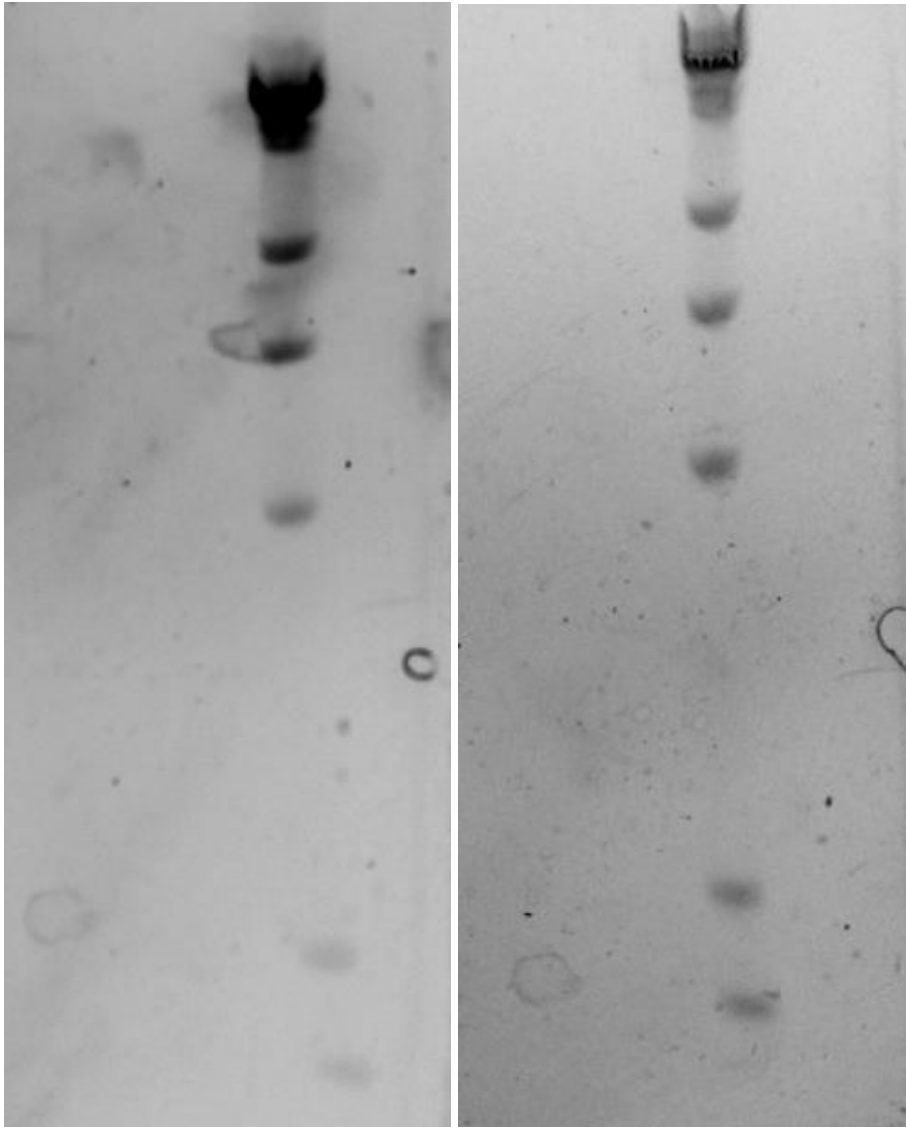


Picture 2 - The improved method



At both pictures are shown results of electrophoresis process of the same biological material. The gel used is the same as well. The duration and all other major parameters (voltage, current, number of pulses, sequence of pulse duration, etc.) are unchanged too. Even the electrophoretic device and its electrodes remain the same. But there is an improvement. As you can see on the Pic. 2 (the improved method) the background is much more clear than on the Pic. 1 (the original method). Also the bands at Pic. 2 are better visible and more focused in comparison with Pic. 1.

The above images cut outs are shown here, the improvement is very well visible:

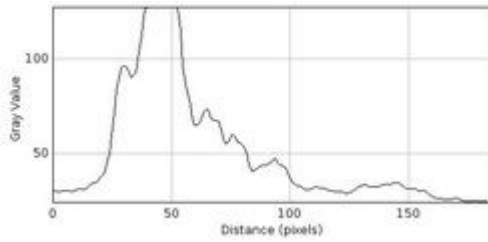


The lowermost two bands on the right cut out (the improved method) are much better visible. Also at right picture there is almost no leakage on the the track, and bands are sharp and better separated.

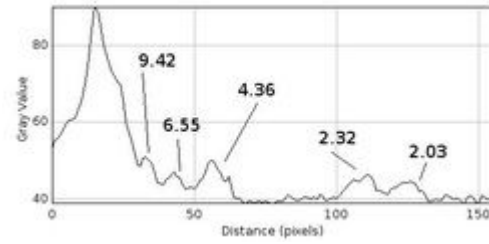
You can verify all these on the related densitograms on the next page.

Leftmost sample

Original method

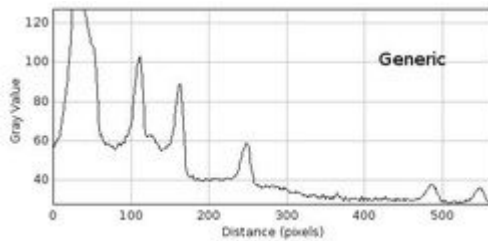


Improved method

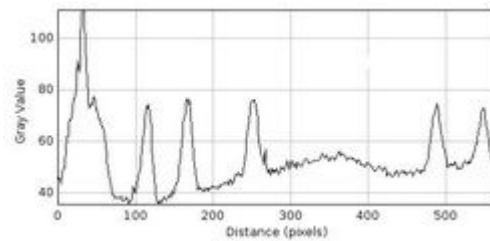


Rightmost sample

Original method



Improved method



... principle of the improvement is pulse lengths are not precisely regular but sequence of pulses is more complicated. But the difference from a normal regular pulse sequence is not too big - possibly any existing electrophoresis devices can be easily reworked for adopting this method. Often even an external device can be used for this with no need for any modification of the existing device...