

## DNA FINGERPRINTS OF FAMILIES FROM BEJSCE/SOUTH-EAST POLAND

T. Dobosz\*, P. Koziol, K. Sawicki, M. Szczepaniak, J. Jagielski, C. Vogt, S. Szymaniec

\* Institute of Forensic Medicine, Wrocław, Poland

### *Introduction*

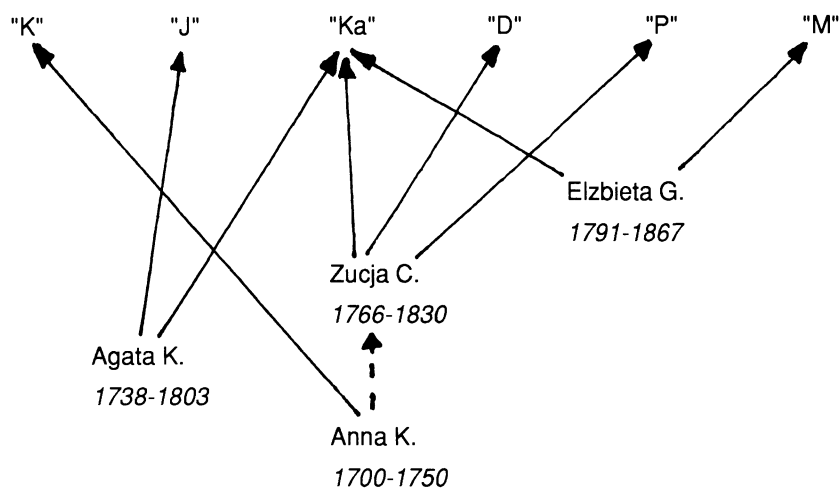
The paper is a preliminary report on DNA studies in population of Bejsce/Kazimierza Wielka district, Kielce province, South-East Poland. This population is very good known, because family data from church registers are preserved from 1550, completely from 1679. The data have been used for reconstruction of family pedigrees and relationships. The additional informations about Bejsce and its population are presented by Sawicki et al. (4). DNA samples from 17 families numbering 95 persons were prepared using the salt precipitation method and tested after digestion with Hinf I and Hae III using BIOTEST B.E.S.T. Probe MZ 1.3. Additionally, the blots were reprobred with the oligonucleotide probe (CAC)<sub>5</sub>. The study shows that almost all families from Bejsce are related, contemporary or in the past.

### *Material and methods*

The preliminary studies were started with 17 families (95 persons), but the ultimate results were obtained only for 6 families (31 persons). The blood samples were collected in 1989 by cubical vein puncture. The samples of about 5 to 20 ml were immediately mixed with sodium citrate and stored at -18° C for almost 2 years. DNA was prepared by phenol method (Kunkel et al., 3) and after digestion by restriction enzymes tested electrophoretically on agarose gels. For (CAC)<sub>5</sub>, gels were dried. The hybridisation were performed using the Epplen and Zischler method (2) with P<sup>32</sup> labelled probe. The hybridisation with MZ 1.3 were performed according to Biotest method (1), with nylon membrane Southern capillary blots.

### *Results and discussion*

The figure shows the results of investigation of 6 families. The study has shown that almost all tested families are related, contemporary or in the past. We intend to test the whole population of Bejsce (about 200 families with 1000 members) for obtaining the final results.



**Fig.** Genealogy of tested families (female ancestors)

### References

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3. Kunkel L., Smith K., Boyer S., Borgaonkar D., Watchel S., Miller O., Brew W., Jones H., Rory J. 1977. Proc. Natl. Acad. Sci. USA, 74: 1245
4. Sawicki K. Parish of Bejsce as a source of unique material for population genetic study. 1991. Adv. in Forensic Haemogen. Vol. 4 (in press)