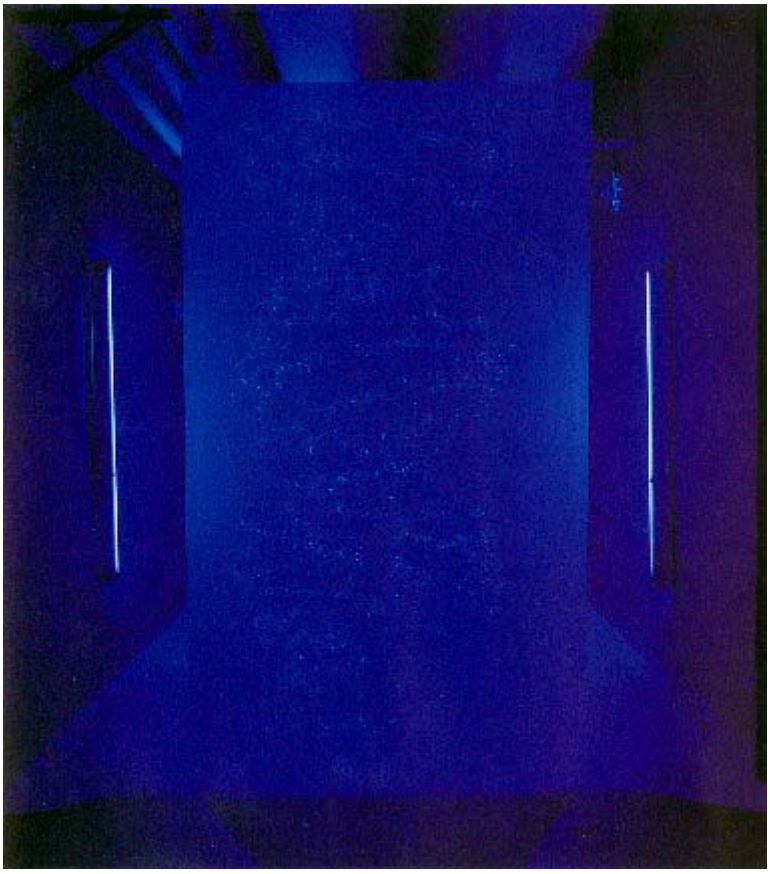
**GENETIX**
**NIKI NICKL**



For the understanding of my work, I would first like to explain a few concepts. By genetics, I mean genetics in the classical sense, crossbreeding experiments and analysis, as opposed to gene technology — the actual term for biochemical manipulation, intervention in hereditary material. The starting-point of this manipulation is the gene, the universal information carrier of all living things, where most characteristics are stored. A gene consists of a combination of DNA, as I can see on my acrylic glass plate.

Why can I only view the DNA on my plate under ultraviolet light? This method of seeing represents an analogy to science. In molecular biology, DNA is made visible by dying it with a fluorescent pigment on a carrier substance, a milky white gel. Of course, this does not reveal a double helix - a series of dashes that can only be interpreted by scientists. Under normal light, only a blue front can be seen on the carrier material, the white gel. Hence the choice of the colour blue for the dots on the front side, which are bunched together in some places, but do not seem to follow any particular system. They could be seen as a planetary system. Only black light reveals their complicated structure and grouping. It becomes obvious how the many small individual pieces form a complex whole and how a system can only function through integration and feedback: as in the small, so in the big. Microcosm—macrocosm. Every living thing, whether plant, animal or human, has its origin in the very same DNA. They differ in their genes.

Which leads to the second part of my work, the KLONING KIT. A Kloning Kit is a commercially available buffer and enzyme set, practically a construction kit for cloning. Cloning is a process in which a gene is inserted into an organism (at this stage, nothing more

complex than bacteria) to artificially create identical organisms with new, identical characteristics. This gene technology procedure contains one of the fundamental dangers of gene manipulation: a standardizing and industrializing of life with a view to commercial exploitation, the latter certainly not bringing about an improvement in quality but rather the opposite (normalized apple sizes mean a greater loss of flavour). Many scientists are not informing themselves about this problem or are avoiding it out of pure scientific interest. Science for its own sake. This is why my visualization is in the form of a game. Games abstract reality; they transport the player, the scientist, into the unreal. For me this head game symbolizes the careless, absent, dubious way scientists deal with life. They give their subjects an abstract character by using a reductionist method to penetrate down to molecular level, but they lose sight of the overall context and in the end they find themselves operating on models of reality.

Now for the third part of my work: a slide projection with the title HARD NUMBER ONE — this refers to a hybrid variety of Canadian wheat. A short explanation of the chosen title: restriction enzymes are proteins that divide genes (DNA) at specific positions to put them back together later. They are, in other words, an indispensable tool of gene technology, allowing new combinations of genes, the alteration of characteristics, to a large extent for industrial purposes. (improved resistance against insecticides).

HARD NUMBER ONE deals with reality and projection. This happens with the aid of a card — the ace. An image from chemistry, the symbol of a measuring cylinder, and a plastic ear of corn. The work is further divided into projection; projected shadow on the one hand and on the other, real solid objects (poster, measuring cylinder, ear of corn), real shadows. Some questions this work raises for me:

What justification does a gene technician see in the way of improving — or rescuing — the world in the production of a plant that cannot reproduce, or that can withstand higher doses of pesticide?

How does reality look after the multiple sowing of hybrid seeds?

What does the farmer get out of leached soil, in comparison to what a chemical concern gains from putting its seeds on the market every year? Who holds the ace?

Photo: Mathias Herrmann