RESEARCH REPORT ON THE USED MATERIALS OF THE WORK GRASS JUST GRASS BY K.M. BEDNARSKI

materials: synthetic red balls, wood, barbed wire;

peat was not identified

sample	Methods	instruments	others	results
RED BALLS	Identification was made using following: burn test 2 fiber morphology examination with use of biological microscope 3) fiber solubility in chemical reagents: conc. nitric acid, conc. sulfuric acid, conc. hydrochloric acid	Photomicrographs were made with use of both stereoscopic microscope (Nikon SMZ-1000) an biological microscope (Nikon Eclipse E400) connected with a Nikon Coolpix 8400 digital camera	The results was compared with a polish standard: PN-72/P-04604 Methods of textile examination. fiber identification. For more information on the fiber it is recommended to use additional (instrumental analysis) tests and to observe a cross section of fibers	It is most probably a **poliacrylonitrile fiber.**

sample	Methods and Instruments	others	results
WOOD OF THE BOX	Microscopic characteristics: Transversal wood section was viewed with use of stereoscopic microscope (PZO Mst 130, maximum magnification 100x). *Coniferous wood structure was revealed.* Radial and tangential section were examined with means of biological microscope (Carl Zeiss Jena, maximum magnification 640x). Sections were cut with a razor blade and mounted in glycerin on microscope slide.	Macroscopic characteristics: Softwood of white color.	Radial section: *Longitudinal tracheids generally with uniseriate, rarely biseriate pits. Rays heterocellular. Ray tracheids present.* Tangential section: *Average ray height 10 to 15 cells, rarely up to 25 cells. Resin canals present.* **Conclusion**. Microscopic examination proved the wood sample belongs to ***genus picea*** (**spruce**).

sample	methods	instruments	others	results
MATERIAL COVERED THE WIRE	Infrared spectroscopy, as all forms of spectroscopy, depends on interaction of molecules or atoms with electromagnetic radiation. IR spectra contain so many peaks, the possibility that two different compounds will have the same IR spectrum is exceedingly small. IR spectrum has been called the „ fingerprint" of a molecule.	FTIR spectrum was recorded on a Biorad FTIR Spectrometer FTS165.	Analogous spectrum was founded in Atlas der Polymer und Kunstoffanalyse Hummel / Scholl p. 41	Analyzed resin is: **Polyvinyl chloride, plasticized with phthalate ester**

sample	Methods and instruments	others	results
METAL	Research of the metal sample using spectrometer RTG MINIPAL		Detect the presence of the following chemical elements: **Zn, Fe, Ca**