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The invention relates to a process for obtaining the sodium hyaluronate, the hyaluronic acid and the protein-hyaluronic acid complex that may be used in the food, pharmaceutical and cosmetic industries.

Summary of the invention consists in that the process includes washing of the hen, cock combs with water at the temperature of 10… 15°C during 5…6 hours, comminution and dehydration thereof in acetone or 96% ethanol containing 1% $CHCl_3$, in the ratio of 1:3, afterwards they are left for 6…24 hours at the temperature of 0…4°C, then the solvent is separated and it is carried out the additional dehydration and acetone degreasing by boiling during 2 hours, the obtained sediment is dried and subjected to extraction with aqueous solution of 1 M NaCl in two stages: the I-st stage in cold at 4…10°C and the II-nd stage at heating up to 50…60°C, at the same time in the I-st stage it is carried out the thrice extraction in the ratio of 1:20, it is separated the sediment from the extract, then it is carried out the hyaluronic acid sedimentation from the extract with 96% ethanol in the ratio of 1:3, the sediment is redissolved and there are removed the proteins out of it by heating and cooling at pH 5,0…5,5, it is added $CHCl_3$ in the ratio of 1:1, it is separated the aqueous phase, it is treated with 96% ethanol in the ratio of 1:3, it is separated the formed sodium hyaluronate sediment with a protein content of at most 1%, and the hyaluronic acid is obtained by acidulation with HCl of the aqueous sodium hyaluronate solution; in the II-nd stage the sediment, obtained in the I-st stage, is extracted in the ratio of 1:3, then it is settled with acetone, obtaining a protein-hyaluronic acid complex with a protein content of 65%.

Claims: 1
Fig.: 2