Abstract
The mineralogy of anthrosol from Copou greenhouse – Iasi is dominated by clay minerals that appears in a variety of types and occurrence forms, and has specific variations on profile. Amorphous clay minerals are subordinate to the crystalline, and their share is higher than in case of ordinary soils. Smectites, illlites and kaolinite are representative clay minerals, and subordinate may appear: halloysite, hydromicas, glauconite etc. Carbonates are limited as type, but very varied as occurrence forms. Are dominant the crystalline carbonates, calcite has the major share and subordinated may appear: dolomite, siderite and a variety of basic carbonates (generally amorphous). Iron oxides and oxy-hydroxides have relative low contents, the crystalline varieties are mainly represented by magnetite, and those amorphous by hematite, göethite and lymonite. The total content of organic matter is higher (compared with ordinary soils), and its dynamic has a particular character. Non-humic organic compounds have unexpectedly high contents and include a wide variety of compounds. In humus composition, dominants are huminic acids, but the fulvic acids are unexpectedly high. On profile, the fulvic acids contents increased to values comparable with huminic acids content – case of bottom horizons. Correlated with these variations the humus character is changed: from mull type humus – top horizons, to mull-calcic humus, and then moder type – bottom horizons.

Key words: hortic anthrosol from protected area, pedogeochemistry, pedogeochemical segregation, frangipane