

Abstract

Lipophorin was isolated from the hemolymph by KBr density gradient ultracentrifugation. Apolipophorin-III (apoLp-III) was isolated from low-density lipophorin (LDLp). High-density lipophorin (HDLp) ($M_r \sim 620,000$) consisted of two apoproteins, apoLp-I ($M_r \sim 224,000$) and apoLp-II ($M_r \sim 81,000$). Isolated apoLp-III ($M_r \sim 20,000$) had two isoforms in non-denaturing gels. Injection of adipokinetic hormone-I resulted in the formation of LDLp in both locust phases. Lipid content of HDLp was estimated at 48.4% and 51.8% for solitary and gregarious locusts, respectively. In LDLp, lipids constituted 59.8% and 57.1% for gregarious and solitary locusts, respectively. The results suggest that the gregarious locusts were more efficient in the conversion of HDLp to LDLp.