

研究报告

群落结构特征参数对葡萄园节肢动物群落作用的比较

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摘要 利用主成分分析法,对葡萄园节肢动物群落、植食类亚群落、捕食类亚群落的特征参数进行分析.结果表明,葡萄园节肢动物群落、植食类亚群落、捕食类亚群落特征向量矩阵中第1主分量综合指标贡献率依次为66.70%、73.39%和54.17%.节肢动物群落的总个体数 N 、Hill多样性指数 N_1 、Hill多样性指数 N_2 和McIntosh指数 D_{mc} 的标准回归系数绝对值较大,对群落贡献大;植食类亚群落的 N 、 N_2 、 N_1 和物种数 S 的标准回归系数绝对值较大,对植食类亚群落贡献大;捕食类亚群落的 N_2 、 N_1 、Shannon-Wiener多样性指数 H' 和丰富度 R 的标准回归系数绝对值较大,对捕食类亚群落贡献大.综合分析,多样性指数 N_1 和 N_2 对3种类型群落贡献较大.

关键词 [结构特征](#) [葡萄园](#) [节肢动物群落](#) [植食类亚群落](#) [捕食类亚群落](#)

分类号

Structural characteristics of arthropod community in grapery

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Abstract

By the method of principal component analysis, this paper analyzed the characteristic parameters of arthropod community and its phytophagous and predacious sub-communities in grapery. The results showed that in the first principal component, the contribution of arthropod community, phytophagous sub-community and predacious sub-community was 66.70%, 73.39% and 54.17%, respectively. For arthropod community, the absolute values of normalized regressive coefficients of individuals' number N , Hill diversity index N_1 , Hill diversity index N_2 and McIntosh index D_{mc} were larger, indicating their greater contribution on the community. For phytophagous sub-community, N , N_1 , N_2 , N and S (total species) had greater contribution; while for predacious sub-community, the greater contribution was made by N_1 , N_2 , Shannon-Wiener diversity index H' and abundance R . Synthetically, N_2 and N_1 had greater contribution on the arthropod community and its phytophagous and predacious sub-communities in grapery, comparing with other characteristic parameters.

Key words [Structural characteristics](#) [Grapery](#) [Arthropod community](#) [Phytophagous sub-community](#) [Predacious sub-community](#)

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