We also show that resource flows can lessen the effects of patch size on α and β diversity. Resource flows increase the mean α diversity of the meta-ecosystem and decrease its β diversity through changes in productivity. This is because flows of resources homogenise the productivity of small and large patches. The exchange of resources between unproductive small patches and productive large patches results in the abundant allocation of resources to small patches, making them more productive than if they were isolated. Conversely, due to the scarcity of resources allocated to large patches, their productivity is decreased compared to the scenario when they would be isolated. Because we think that there should be a concave relationship between biodiversity and productivity, a decrease in the variance in productivity causes two things. First, it increases α diversity because of Jensen's inequality. Second, it decreases the differences in biodiversity between the two patches, decreasing β diversity. Therefore, resource flow can lessen the effects of patch size on biodiversity through changes in productivity.