Response to Reviewer 1

Regarding the point “are the samples typical enough to represent the vegetables in the area?” As a result of the availability of suitable climatic conditions in the southern region, the cultivation of vegetables is concentrated in this area, so the collection of samples from the southern region can be representative of the whole kingdom of Saudi Arabia.

Regarding the point “is that the rain season of the area?” Saudi Arabia’s southwest region is an important agricultural area due to its fertile ground, suitable climate, and torrential rain throughout the year. The water supply in Saudi Arabia, and specifically the lack of water has always been the major constraint on agriculture and the determining factor on where cultivation occurred. The kingdom has no lakes or rivers. Rainfall is slight and irregular over most of the country. Only in the southwest, in the mountains of 'Asir' close to the Yemen border and accounting for three percent of the land area, was rainfall sufficient to support regular crops. This region plus the southern 'Tihamah’ coastal plains sustained subsistence farming. Cropping in the rest of the country was scattered and dependent on irrigation. Along the western coast and in the western highlands, groundwater from wells and springs provided adequate water for self-supporting farms and, to some extent, for commercial production. Rain falls in winter every year in Saudi Arabia but with an average of maximum 100mm except in the Southern area of the country. The region of Asir along the Western coast is influenced by the Indian Ocean monsoons, usually occurring between October and March. An average of 300 millimeters of rainfall occurs during this period, that is about 60 percent of the annual precipitation. For the rest of the country, rainfall is very low and erratic.

Regarding the point “why analyze the samples collecting in those months?” “Samples collecting from March to September” seems not that clear to me”, “may the pesticide content be varied by the weather or season?” The period between March and September was set as the period in which samples are collected and does not necessarily related to the specific season as most of the collected vegetables are cultivated under greenhouses. We have also defined this period to be sufficient for most of the year, as it is a harvesting period for most vegetables, where most of vegetables under study are cultivated throughout the year, with the exception of some whose seeds are planted between September and November. Accordingly, we suggest that the pesticide content will not much vary through seasons.

Regarding the point “are the samples typical enough to represent the vegetables in the area? “, we will target large number in upcoming study and the number of 211 samples included in this study may be adequate according to southwest region consumption and can give us a realistic indication of vegetables quality cultivated in this region.