The carrot is distinguished for the great amount of vitamins, minerals and fiber, and have requirement in nutrients, presenting fast development and short vegetative cycle. The objective of this work was to evaluate the effect of different periods of incorporation of *Crotalaria spectabilis* L. as green fertilization, the agronomic performance and soluble solid content of carrots (*Daucus carota* L.) Brasilia cultivar. The experiment was designed with randomized block, 8 treatments (t) and 4 repetitions: T0 - without fertilization (WF); T1 - Conventional fertilization (CF) with NPK 04-14-08 (dosage 285g/m²); T2, T4 and T6 - WF and 15, 45 and 75 days of incorporation, respectively; T3, T5 and T7 - CF and 15, 45 and 75 days of incorporation, respectively. It was carried through the evaluation of the diameter (RD), length (RL) and weight of the root (RW), length of the aerial part (LAP) and content of soluble solids (SS) to the hundredth day. The results had been submitted to the test of Tukey 5% of probability. The T0 presented significantly lower values of RD, RL and RW, however with higher soluble solids than the other treatments (9.25° Brix). Treatment T1 presented the higher agronomic performance with significantly higher values of RL and RW, and didn’t differ in the soluble solids content of T0 (9.13° Brix). The T3 presented significantly higher values of RD and LPA, however with lower soluble solid contents (7.88° Brix). The different periods of incorporation of crotalaria had influenced on the agronomic performance and soluble solid content of carrots.