4 P. vulgaris genotypes were compared at 3 sowing dates during 1 season (April-June 1976) and 4 sowing dates during a 2nd season (Nov. 1976-Jan. 1977). Yield declined with delay in sowing in both seasons, but in the 2nd season yields were lower at the 1st sowing and declined less rapidly. Canadian Wonder was the most stable-yielding genotype and had the highest mean seed yield though it may have been inferior to other genotypes at the 2 most favourable sowings. Its stability was attributed to drought escape and good field resistance to drought and disease. Mexican 142 was the least stable genotype. A black-seeded landrace yielded well in dry conditions in spite of its long duration. The most important components determining sowing date effects on yield were numbers of pods/plant and seeds/pod. Canadian Wonder had markedly more stable numbers of pods than any other genotype. Cooler temp. in July and Aug. retarded crop development in the 1st season. For 1 sowing of the 2nd season, flowering was retarded by 7-10 days in all genotypes and this was apparently an effect of water shortage. No effect of water was apparent on the time taken from flowering to maturity. ADDITIONAL ABSTRACT: Four cvs (Canadian Wonder, Mwezi Moja, Mexican 142 and Black) were compared at 3 planting dates (April to June, 1976) during one season and at 4 planting dates during a second season (November, 1976, to January, 1977). Yield declined with delay in planting in both seasons but in the second season yields were lower at the first planting and declined less rapidly. Canadian Wonder had the most stable number of pods and had the highest mean yield. Its stability was attributed to good drought and disease resistance. Mexican 142 was the least stable. Black also yielded well in dry conditions. Cooler temperatures in July and August retarded crop development in the first season. For one planting of the second season, flowering was retarded by 7-10 days in all cvs and this was apparently because of water shortage. No effect of water was apparent on the time taken from flowering to maturity.