Parsley (Petroselinum crispum (Mill.) Nyman ex A. W. Hill) is a widely cultivated herb that is used extensively for garnishing and seasoning foods, and for production of an essential oil. Fresh parsley is one of the most popular green herbs. The mature seed is steam distilled to produce parsley seed oil, and parsley herb oil comes from the plant bearing immature seeds. Parsley herb oil has a flavor more like the fresh leaves and is in greater demand than seed oil, which is often distilled from aged seed of low germinability (2). The root may also be harvested for use as a medicinal herb.

Parsley is a hardy biennial, flowering and producing seed the second year. The plant prefers well-drained fertile soil, and is easy to grow once established. The plant may be harvested several times during the season for fresh or dried leaf. Curled and flat leaf types are available, as are cultivars developed for root production. For oil production, the entire plant is harvested when the seeds have formed but are not yet mature. The stage of seed maturity influences the characteristics of parsley herb oil.

Parsley cv. 'Moss Curled' was hand sown in the field on May 14, 1998, at the Western Agricultural Research Center, Corvallis, MT. Parsley was sown at 1.5 lb/acre. Six-row plots were 8 ft long with 1.5 ft between rows, with four replications. No harvest was made the first year. In 1999, the entire plant top bearing nearly mature seeds was cut on August 26 and distilled immediately. Border rows were not included.
Parsley plants formed a healthy rosette the first year and no winter mortality was observed. Plant growth and seed production were excellent the second year. Oil production was high, with 69.5 (+ SE 8.0) lb oil per acre from 9,355 lb (+ SE 668) lb dry matter. Yields of parsley herb oil from the WARC are comparable to those reported by Guenther (1), as oil yield on a fresh weight basis was 0.26%, which agrees with the 0.25% reported for French parsley herb oil. However, small plot yields may be higher than those from commercial production. Note that a low seeding rate was used because of the hand sowing method; the conventional seeding rate is 5.5 lb/a.

References:
