tolerant to Michigan isolates of halo blight [caused by *Pseudomonas syringae* pv. *phaseolicola* (Burkholder) Young et al.], but is susceptible to Michigan isolates of root rot [primarily *Fusarium solani* (Mart.) Sacc. f. sp. *phaseoli* (Burkholder) W.C. Snyder & H.N. Hans.], common blight [caused by *Xanthomonas phaseoli* (Smith) Dowson] and white mold. Newport has shown no tolerance to white mold [caused by *Sclerotinia sclerotiorum* (Lib.) de Bary], in spite of the avoidance afforded by its erect plant architecture.

Newport has an ovoid seed, averaging 22 g 100 seed⁻¹ and ranges from 19 to 24 g 100 seed⁻¹. The seed is slightly larger but similar in color and shape to Seafarer. Dry seed color is brighter than Mayflower. In canning trials, Newport has been subjectively rated by a team of panelists as satisfactory in cooking quality. Newport scored 3.0 on a five-point hedonic scale (where 5 is best). This evaluation is based on whole-bean integrity (no splitting or clumping), uniformity of size (uniform water uptake), color (no after darkening), and clear brine (no starch extruded into canning liquid). Under processing, Newport does not differ from other commercial cultivars for cooked color, texture, hydration, and drained weight ratios.

Newport navy bean has been released as a public nonexclusive variety, with a research fee to be assessed on each hundredweight unit of certified seed sold. Variety protection has been obtained under the Plant Variety Protection Act, Public Law 91-577, with the option that Newport may be sold for seed by name only under the certified class. Breeder seed is maintained under the Plant Variety Protection Act, Public Law 91-577, with the option that Newport may be sold for seed by name only under the certified class. Breeder seed is maintained at the Michigan Agricultural Experiment station, East Lansing, MI 48824, in co-operation with the Michigan Foundation Seed Association.

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References and Notes

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Registration of ‘Otal’ Barley

‘Otal’ spring barley (*Hordeum vulgare* L.) (Reg. no. CV-251, PI 562644), was developed cooperatively by the Alaska Agricultural and Forestry Experiment Station and the USDA-ARS. It was released for commercial production by the Alaska Agricultural and Forestry Experiment Station in April 1981 and by Agriculture Canada in May 1981 (1). Prior to release, Otal was tested as experimental line Alaska Accession 711-67-18-57 in the USA, and NRG B77-10 and BT655 in Canada. It is listed as Cl 15853 in the U.S. National Plant Germplasm System and PGR 1977 in the Canadian National Collection.

Otal was developed from a cross between ‘Otra’ and 1514-64. Otra is an early-maturing cultivar developed by the Hankki Plant Breeding Institute in Finland, and 1514-64 is an early-maturing selection obtained from the Weibullsholm Plant Breeding Institute in Sweden. The pedigree of 1514-64 is ‘Maja’/3/‘Hanna’/‘Svan
hals’/‘Opal’/4/‘Tammi’/5/‘Morgenrot’. Single-plant selections were made in the F₂ through F₅ generations, and the resulting F₆ line was tested in Alaska and Canada from 1975 to 1980. Breeder seed was obtained from a bulk of 400 F₁₀ plants.

Otal is considered a feed barley, and does not meet U.S. or Canadian malting barley standards. It has historically been an important cultivar in Alaska and the Peace River region of Alberta and British Columbia, and currently is the most widely grown barley variety in those regions. It is listed in the Canadian malting barley standards. It has historically been an important cultivar in Alaska and the Peace River region of Alberta and British Columbia, and currently is the most widely grown barley variety in those regions. It is listed in the Canadian malting barley standards. It has historically been an important cultivar in Alaska and the Peace River region of Alberta and British Columbia, and currently is the most widely grown barley variety in those regions. It is listed in the Canadian malting barley standards. It has historically been an important cultivar in Alaska and the Peace River region of Alberta and British Columbia, and currently is the most widely grown barley variety in those regions. It is listed in the Canadian malting barley standards. It has historically been an important cultivar in Alaska and the Peace River region of Alberta and British Columbia, and currently is the most widely grown barley variety in those regions. It is listed in the Canadian malting barley standards. It has historically been an important cultivar in Alaska and the Peace River region of Alberta and British Columbia, and currently is the most widely grown barley variety in those regions.

Otal is susceptible to the common diseases of barley in Alaska and northwestern Canada, including barley leaf blight (*Rhynchosporium secalis* (Oudem.) J.J. Davis), net blotch (caused by *Pyrenophora teres* Drechs.), various barley smuts (*Ustilago* spp.), and common root rot (caused by *Ustilago* spp.).

Spikes of Otal are six-rowed, medium length, lax to medium density, with kernels overlapping at the tip. Lemma is smooth and rough, and glumes are about half the length of the lemma. Glume awns are rough and variable in length. Kernels are midsize, with yellow aleurone. Rachilla is mid-long with short hairs. Barbs are mostly absent on lateral veins, and lemma is wrinkled. Basal marking is an incomplete horseshoe depression.

Breeder seed of Otal is maintained by the Agriculture and Forestry Experiment Station, Palmer, AK, and can be obtained from the corresponding author.

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