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(71) Applicants (for all designated States except US): **COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION** [AU/AU]; Limestone Avenue, Campbell, Australian Capital Territory 2612 (AU). **AUSTRALIAN CAPITAL VENTURES LIMITED** [AU/AU]; 71 Constitution Avenue, Campbell, Australian Capital Territory 2612 (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LI, Zhongyi** [CN/AU]; 10 Mortlock Circuit, Kaleen, Australian Capital Territory 2617 (AU). **MORELL, Matthew Kennedy** [AU/AU]; 13 Wolgal Place, Aranda, Australian Capital Territory 2614 (AU).

(74) Agents: **HUTCHISON, Jane** et al.; c/- Davies Collison Cave, 15/1 Nicholson Street, Melbourne, Victoria 3000 (AU).

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(54) Title: BARLEY AND USES THEREOF

(57) Abstract: The invention provides barley grain comprising a reduced level or activity of starch synthase Ha protein and a starch content of at least 41% (w/w) and methods of producing, identifying and using same. The grain may comprise an amylase content of at least 50%, a β -glucan content of 5-9% (w/w) or greater than 9% (w/w), and/or a fructan content of 3-11% (w/w). The fructan may comprise a degree of polymerization from about 3 to about 12. For example, the plant and grain comprises a *sex6-292* allele and/or an *amol* mutation. A food or beverage product, and methods of producing a food or beverage product, comprising obtaining or producing the subject grain and processing the grain to produce the product. Also contemplated are methods of improving one or more indicators of health in a mammal comprising administering a composition comprising the subject barley grain or a product comprising same.



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