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**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE**

Exhibit C

**OBJECTIVE DESCRIPTION OF VARIETY
WHITE CLOVER (*Trifolium repens* L.)**

NAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME
ADDRESS (Street and No. or RD No., City, State, Zip Code and Country)		FOR OFFICIAL USE ONLY
		PVPO NUMBER

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (i.e., 0 9 9 or 0 9) when the number is either 99 or less or 9 or less. Characteristics described, including numerical measurements, should represent those which are typical for the variety. Measured data should be for spaced plants. Any recognized color fan, e.g. Royal Horticultural Colour Chart, may be used to determine plant color; designate system used: _____ . Give location of test area _____. Ranges of values are valuable and may be included with additional description elsewhere in the application.

Note: For single plant data a minimum of 100 plants is suggested.

1. Type:

1 = Small 2 = Intermediate 3 = Large (Ladino) 4 = Other (Specify) _____

STANDARD VARIETIES

1 = Louisiana S-1 2 = Regal 3 = Pilgrim 4 = Merit

2. MATURITY:

% Plants flowering in seedling year

Time of flower (50% of plants in bloom): (from spring growth in non-seedling year)

Days Earlier Than Standard Variety

Days Later Than Standard Variety

3. GROWTH HABIT:

1 = Prostrate (Grasslands Huia) 2 = Erect (Regal)

1 = Lax (Regal) 2 = Dense (Grasslands Huia)

Plant Height (from soil level to top of flowering head at 50% flowering):

cm Tall cm Shorter Than Standard Variety

cm Taller Than Standard Variety

Plant Width (average of 2 horizontal measurements of leaf spread at top of plant at 50% flowering of 2nd year):

cm Wide cm Narrower Than Standard Variety

cm Wider Than Standard Variety

4. LEAF: (Central leaflet of 3rd leaf from tip of rapidly growing stolon – usually in summer months)

<input type="text"/> <input type="text"/> <input type="text"/>	% plants cyanophoric (Pacric Acid Test)		
<input type="text"/> <input type="text"/>	mm Leaflet Width	<input type="text"/> <input type="text"/>	mm Narrower Than <input type="checkbox"/> Standard Variety
		<input type="text"/> <input type="text"/>	mm Wider Than <input type="checkbox"/> Standard Variety
<input type="text"/> <input type="text"/>	mm Leaflet Length	<input type="text"/> <input type="text"/>	mm Shorter Than <input type="checkbox"/> Standard Variety
		<input type="text"/> <input type="text"/>	mm Longer Than <input type="checkbox"/> Standard Variety
<input type="text"/> <input type="text"/>	mm Petiole Width	<input type="text"/> <input type="text"/>	mm Narrower Than <input type="checkbox"/> Standard Variety
		<input type="text"/> <input type="text"/>	mm Wider Than <input type="checkbox"/> Standard Variety
<input type="text"/> <input type="text"/>	mm Petiole Length	<input type="text"/> <input type="text"/>	mm Shorter Than <input type="checkbox"/> Standard Variety
		<input type="text"/> <input type="text"/>	mm Longer Than <input type="checkbox"/> Standard Variety

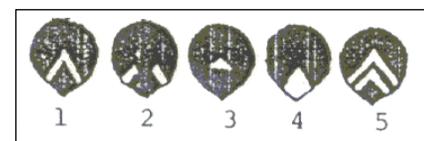
Color: 1 = Light Green (Regal) 2 = Medium Green (Merit) 3 = Dark Green (S-184) 4 = Other (Specify) _____

White Leaf Marking (at 50% flowering: Note categories below allow for increasingly detailed description of the same data.

The diagram illustrates the terms: 1 = Full V 2 = Broken V 3 = V-point 4 = Filled V 5 = Double V

Presence of mark: Of total plants, give percentage of marked and unmarked plants (Total = 100%)

<input type="text"/> <input type="text"/> <input type="text"/>	% Absent	<input type="text"/> <input type="text"/> <input type="text"/>	% Marked
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Presence of mark: of total plants, give percentage having each shape (Total = % marked above)

<input type="text"/> <input type="text"/> <input type="text"/>	% Full V	<input type="text"/> <input type="text"/> <input type="text"/>	% Broken V	<input type="text"/> <input type="text"/> <input type="text"/>	% V-point
<input type="text"/> <input type="text"/> <input type="text"/>	% Filled V	<input type="text"/> <input type="text"/> <input type="text"/>	% Double V	<input type="text"/> <input type="text"/> <input type="text"/>	% Other (Specify) _____

Anthocyanic (Red) Leaf Marking (Some leaves of plants examined should have developed at temperatures of 10° C or less):

Of total plants give percentage marked (red flecking, red midrib, or red leaf) and unmarked (Total = 100%)

<input type="text"/> <input type="text"/> <input type="text"/>	% Absent	<input type="text"/> <input type="text"/> <input type="text"/>	% Marked
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5. STOLON: (Give widest diameter of stolon at point of attachment of leaf measured above 3rd node from tip)

<input type="text"/> <input type="text"/>	mm Diameter	<input type="text"/> <input type="text"/>	mm Narrower Than <input type="checkbox"/> Standard Variety
		<input type="text"/> <input type="text"/>	mm Wider Than <input type="checkbox"/> Standard Variety

6. FLOWERING HEAD: (at 50% flowering of variety)

<input type="text"/> <input type="text"/>	Heads/Plant	<input type="text"/> <input type="text"/>	no. Greater Than <input type="checkbox"/> Standard Variety
		<input type="text"/> <input type="text"/>	no. Fewer Than <input type="checkbox"/> Standard Variety

7. DISEASE AND PEST RESISTANCE: (0 = Not Tested 1 = Susceptible 2 = Resistant)

If variety is claimed to be resistant or to show intermediate reaction, substantiating test scores should be attached clearly identifying disease, application variety, check varieties, location of test and range and direction of test scores.

A. Stolon and Root Rots

- Fusarium spp*
 Rhizoctonia spp
 Colletorichum spp
 Leptodiscus spp
 Cervularia spp
 Sclerotium rolfsii
 Sclerotium trifoliorum

B. Viruses

- Alfalfa Mosaic
 White clover mosaic
 Clover yellow mosaic
 Clover yellow vein mosaic
 Red clover vein mosaic
 Peanut stunt
 Other (Specify) _____

C. Nematodes

- Root knot
 Sting
 Meadow
 Clover cyst

D. Insects

- Lygus bugs (*Lygus spp*)
 Spider mites (*Tetranychus spp*)
 Clover seed weevil (*Miccotrogus picirostris*)
 Ladino clover seed midge (*Dasineura gentneri*)
 Clover head weevil (*Hypera meles*)
 Clover leaf weevil (*H. punctata*)
 Lesser clover leaf weevil (*H. nigrirostris*)
 Alfalfa weevil (*H. postica*)
 Meadow spittle bugs (*Philaenus spumarius*)
 Clover root curculio (*Sitonia hispidula*)
 Potato leafhopper (*Empoasca fabae*)
 Other (Specify) _____

8. Indicate the variety most closely resembling the application variety for the following:

CHARACTER	VARIETY	CHARACTER	VARIETY
Leaflet shape		Seed color	
Cutting recovery		Late season growth	
Winter hardiness		Persistence	

Brewbaker, J. L. and H. L. Carnahan. 1956. Leaf marking alleles in white clover. Uniform nomenclature. Journ. Heredity 47:103-104

Hawkins, R. P 1959. Botanical characters for the classification and identification of varieties of white clover. J. Nat. Inst. Agr. Bot. 8:675-682.

I.S.T.A. (Herbage) Variety Committee, 1972. Draft paper on tests for identification and trueness to cultivar. Proc. Int. seed Test. Assoc. 37:443-495